Report of the Committee on

Building Code

Technical Correlating Committee (BLD-AAC)

Jerry Wooldridge, *Chair*
Reedy Creek Improvement District, FL [E]

Wayne G. Carson, *Secretary*
Carson Associates, Inc., VA [SE]

Diane D. Matthews, *Recording Secretary*
NFPA, MA

Jim S. Armstrong, Swiss Re New Markets, OH [I]
Brian D. Black, Eastern Paralyzed Veterans Association, NY [C]
Robert Bourke, Lynn Fire Department, MA [E]
Rep. International Fire Marshals Association
Ronald Burton, National Association of Home Builders, DC [U]
George Capko, Jr., FM Global, MA [I]
David S. Collins, The Preview Group, Inc., OH [SE]
Rep. American Institute of Architects
Robert F. Elliott, American Hotel & Lodging Association, DC [U]
Russell P. Fleming, National Fire Sprinkler Association, NY [M]
Dave Frable, U.S. General Services Administration, IL [U]
Sam W. Francis, American Forest & Paper Association, PA [M]
Ronald O. Hamburger, EQE International, CA [E]
Rep. National Institute of Building Sciences/FEMA
Raymond N. Hansen, U.S. Air Force, FL [U]
Howard Hopper, Underwriters Laboratories Inc., CA [RT]
William K. Hopple, Simplex Time Recorder Company, CA [M]
Rep. National Electrical Manufacturers Association
Roland J. Huggins, American Fire Sprinkler Association, Inc., TX [IM]
Thomas W. Jaeger, Gage-Babcock & Associates Inc., VA [U]
Rep. American Health Care Association
Joseph M. Jardin, New York City Fire Department, NY [C]
Rep. NFPA Fire Service Section
Jerry W. Jones, Lousiana Department of Public Safety, LA [E]
Rep. National Conference of States on Building Codes & Standards Inc.
John E. Kampmeyer, Triad Fire Protection Engineering Corporation, PA [SE]
Rep. National Society of Professional Engineers
Kenneth E. Lauziere, U.S. Office of the Architect of the Capitol, DC [E]
Harry W. (Hank) Martin, American Iron and Steel Institute, CA [M]
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Michael T. Newman, Johnson & Johnson, NJ [U]
Rep. NFPA Industrial Fire Protection Section
Ronald G. Nickson, National Multi Housing Council, DC [U]
Jack M. Rhody, Kentucky Department of Housing, Builiding & Construction, KY [E]
Earl Russell, City of Las Vegas, NV [E]
Jim Schwager, Portland Bureau of Fire, Rescue and Emergency Services, OR [E]
Lester Snyder, American Bridge Facilites Company, FL [IM]
Rep. Associated General Contractors of America
Emile W. J. Troup, National Council of Structural Engineers Associations, MA [SE]

Alternates

Carl F. Baldassarra, Schirmer Engineering Corporation, IL [U]
(Alt. to R. F. Elliott)
Ned M. Cleland, Blue Ridge Design, Inc., VA [SE]
(Alt. to E. W. Troup)
Kathleen M. Hadden, Bank of New York, NY [U]
(Alt. to M. T. Newman)
John C. Harrington, FM Global, MA [I]
(Alt. to G. Capko)
Kenneth E. Isman, National Fire Sprinkler Association, NY [M]
(Alt. to R. P. Fleming)
Gerald H. Jones, Kansas City, MO [E]
(Alt. to R. O. Hamburger)
Mark Kluver, Portland Cement Association, CA [M]
(Alt. to J. J. Messersmith)
William E. Koffel, Koffel Associates, Inc., MD [IM]
(Alt. to L. Snyder)
Thomas M. Moses, Reedy Creek Improvement District, FL [E]
(Alt. to J. Wooldridge)
Dennis L. Pitts, American Forest & Paper Association, TX [M]
(Alt. to S. W. Francis)
Jeffrey M. Shapiro, International Code Consultants, TX [U]
(Alt. to R. G. Nickson)
Joseph A. Simone, U.S. Navy, DC [U]
(Alt. to R. N. Hansen)
John Taecker, Underwriters Laboratories Inc., CA [RT]
(Alt. to H. Hopper)
Daniel M. Troxell, Washington, DC Fire Department, MD [C]
(Alt. to J. M. Jardin)
John F. Viola, HFP Sprinkler Inc., MA [IM]
(Alt. to R. J. Huggins)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to H. W. Martin)

Nonvoting

Rick Breezee, Metropolitan Airport Commission, MN [E]
Rep. Building Officials Code Committee
Joseph A. Brewer, III, State of Oregon, OR [E]
Rep. TC on Materials
Lawrence G. Perry, Building Owners & Managers Association International., MD [U]
Rep. TC Building Systems
James R. Quiter, The RJA Group, Inc., CA [SE]
Rep. Safety to Life Committee
Peter J. Gore Willse, Industrial Risk Insurers, CT [I]
Rep. TC Structures and Construction

Staff Liaison: **Robert E. Solomon**

Committee Scope: This committee shall have primary responsibility for documents or portions of documents on the design and construction of every building or structure, including structural design methods and techniques, as well as the design of integrated building systems for health, safety, comfort, and convenience.

Technical Committee on

Assembly Occupancies and Membrane Structures (SAF-AXM)

Ralph Gerdes, *Chair*
Ralph Gerdes Consultants, LLC, IN [SE]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

Stanton M. Alexander, North American Testing Company, FL [M]
Weston E. Bacon, Jr., Bacon Hedland Management, Inc., IL [U]
Rep. International Association of Exposition Management
Scott R. Bartlett, Simplex Time Recorder Company, MA [M]
Rep. National Electrical Manufacturers Association

William Conner, Schuler & Shook Inc., IL, SE
Rep. American Society of Theater Consultants
Bhola Dhume, City of New Orleans, LA [E]
Robert D. Fiedler, Bureau of Fire Prevention, NE [E]
William E. Fitch, Omega Point Laboratories Inc., TX [RT]
Brad Gessner, 22nd District Agricultural Association, CA [U]
Rep. International Association of Assembly Managers, Inc.
Vern L. Martindale, Church of Jesus Christ of Latter-day Saints, UT [U]
Daniel M. McGee, American Iron and Steel Institute, NJ [M]
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Gregory R. Miller, Code Consultants, Inc., MO [U]
Rep. National Association of Theatre Owners
Jake Pauls, Jake Pauls Consulting Services in Building Use and Safety, MD [SE]
Ed Roether, HOK Sport, MO [U]
Philip R. Sherman, P. R. Sherman Inc., NH [SE]
Henry Teague, Rosser International, GA [SE]
Daniel R. Victor, Interkal, Inc., MI [M]
Rep. National School Supply & Equipment Association
P**aul L. Wertheimer,** Crowd Management Strategies, IL [SE]

Alternates

Gene Boecker, Code Consultants, Inc., MO [U]
(Alt. to G. Miller)
David Cook, Ralph Gerdes Consultants, IN [SE]
(Alt. to R. Gerdes)
Don Hancock, Int'l Association of Assembly Managers, TX [U]
(Alt. to B. Gessner)
Jonathan Humble, American Iron and Steel Institute, CT [M]
(Alt. to D. McGee)
Gene A. LaValle, Interlogix, GA [M]
(Alt. to S. R. Bartlett)
David J. May, Church of Jesus Christ of Latter-day Saints, UT [U]
(Alt. to V. L. Martindale)

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the nonemergency and emergency movement of people in assembly occupancies, tents, and membrane structures.

Technical Committee on

Board and Care Facilities (SAF-BCF)

James K. Lathrop, *Chair*
Koffel Associates, Inc., CT [SE]

Gregory E. Harrington, *Nonvoting Secretary*
NFPA, MA

Gregory J. Austin, Gentex Corporation, MI [M]
Rep. National Electrical Manufacturers Association
James R. Bell, Marriott International, Inc., DC [U]
Rep. American Hotel & Motel Association
Warren D. Bonisch, Schirmer Engineering Corporation, TX [SE]
Harry L. Bradley, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Mary Ellen Early, Florida Association of Homes for the Aging (FAHA), FL [U]
Rep. American Association of Homes for the Aging
Philip C. Favro, Philip C. Favro & Associates, CA [SE]
Thomas W. Gardner, Gage-Babcock & Associates, VA [U]
Rep. American Health Care Association
Norman E. Groner, Santa Cruz, CA [SE]
Laura A. Hoffman, Nashville Tennessee Fire Department, TN [E]
Kenneth E. Isman, National Fire Sprinkler Association, NY [M]
Philip R. Jose, U.S. Department of Veterans Affairs, NY [U]
David Ray Kiely, Sullivan Arc, NY [U]
Rep. American Network of Community Options and Resources
Bernard M. Levin, Rockville, MD [SE]
Paul E. Patty, Underwriters Laboratories Inc., IL [RT],
Francis G. Reuer, U.S. Department of Health & Human Services, CO [E]

Alternates

Kerry M. Bell, Underwriters Laboratories Inc., IL [RT],
(Alt. to P. E. Patty)
Gene B. Endthoff, National Fire Sprinkler Association, IL [M]
(Alt. to K. E. Isman)
Joni Fritz, American Network of Community Options and Resources, VA [U]
(Alt. to D. R. Kiely)
Harold E. Nelson, Hughes Associates, Inc., VA [SE]
(Alt to B M Levin)
Daniel J. Schoeps, U.S. Department of Veterans Affairs, DC [U]
(Alt to P Jose)
James F. Woodford, Simplex Time Recorder Company, MA [M]
(Alt to G Austin)
Mayer D. Zimmerman, U.S. Department of Health and Human Services, MD [E]
(Alt. to F. G. Reuer)

Staff Liaison: **Gregory E. Harrington**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people, in residential board and care facilities.

Technical Committee on

Building Materials (BLD-MAT)

Joseph A. Brewer, III, *Chair*
State of Oregon, OR [E]
Rep. National Conference of States on Building Codes & Standards Inc.,

Bonnie E. Manley, *Nonvoting Secretary*
NFPA, MA

Stanton M. Alexander, North American Testing Company, FL [U]
Jesse J. Beitel, Hughes Associates, Inc., MD [SE]
Donald W. Belles, Koffel Associates, Inc., TN [M]
Rep. Glazing Industry Code Committee
Richard L. P. Custer, Custer Powell, Inc., MA [SE]
William E. Fitch, Omega Point Laboratories Inc., TX [RT]
Kenneth A. Ford, National Association of Home Builders, DC [U]
Rep. National Association of Home Builders
Michael Gardner, Gypsum Association, DC [M]
Ralph Gerdes, Ralph Gerdes Consultants, LLC, IN [SE]
Rep. American Institute of Architects
Jeffrey H. Greenwald, National Concrete Masonry Association, VA [M]
Rep. National Concrete Masonry Association
Alfred J. Hogan, Reedy Creek Improvement District, FL [E]
Lee Jones, Association of the Wall & Ceiling Industries - International, VA [IM]
Harry Martin, American Iron and Steel Institute, CA [M]
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Dennis L. Pitts, American Forest & Paper Association, TX [M]
John A. Rickard, Pi Architects & Engineers, Inc., TX [SE]
John Stevenson, John Stevenson Architect, Inc., CA [SE]
Rep. American Institute of Architects
Kip David Thomas, Lotawana Fire Protection District, MO [E]

Rimas Veitas, Veitas & Veitas Engineers, Inc., MA [SE]
Rep. National Council of Structural Engineers Association
Peter J. Gore Willse, Industrial Risk Insurers, CT [I]

Alternates

Karl D. Houser, E-B-L Fire Engineering, MD [IM]
(Alt. to L. G. Jones)
Mark Kluver, Portland Cement Association, CA [M]
(Alt. to J. J. Messersmith)
William E. Koffel, Koffel Associates, Inc., MD [M]
(Alt. to D. W. Belles)
John V. Loscheider, Loscheider Engineering Company, WA [SE]
(Alt. to R. Veitas)
Ed Sutton, National Association of Home Builders, DC [U]
(Alt. to K. A. Ford)
David P. Tyree, American Forest & Paper Association, CO [M]
(Alt. to D. Pitts)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to H. Martin)

Staff Liaison: **Bonnie E. Manley**

Committee Scope: This Committee shall have primary responsibility for documents on the application of various building materials that are used in the construction of buildings, structures, and related facilities.

Technical Committee on

Building Service and Fire Protection Equipment (SAF-BSF)

Richard L. Klinker, *Chair*
Klinker & Association Inc., MD [SE]

Gregory E. Harrington, *Nonvoting Secretary*
NFPA, MA

Harry L. Bradley, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Pat D. Brock, Oklahoma State University, OK [SE]
Phillip A. Brown, American Fire Sprinkler Association, Inc., TX [IM]
Rep. American Fire Sprinkler Association, Inc.
Paul M. Donga, Boston Fire Department, MA [E]
Edward A. Donoghue, Edward A. Donoghue Associates, Inc., NY [M]
Rep. National Elevator Industry Inc
Dale A. Harshbarger, Hebron Fire Protection District, KY [E]
Kenneth E. Isman, National Fire Sprinkler Association, NY [M]
Rep. National Fire Sprinkler Association
Joseph M. Jardin, New York City Fire Department, NY, C
Rep. NFPA Fire Service Sectio
Ignacy A. Kapalczynski, Connecticut Department of Public Safety, CT [E]
Ronald Kirby, Simplex Time Recorder Company, MA [M]
Rep. National Electrical Manufacturers Association
David P. Klein, U.S. Department of Veterans Affairs, MD [U]
Roger L. McDaniel, Florida Department of Corrections, FL [U]
L. L. (Larry) Neibauer, Automatic Fire Alarm Association, FL [M]
Richard R. Osman, Schirmer Engineering Corporation, IL [SE]
Dinesh K. Patel, Department of the Navy, CA [U]
Martin H. Reiss, The RJA Group, Inc., MA [SE]
James Tizzano, Township of Old Bridge, NJ [E]
William A. Webb, Performance Technology Consulting, Limited, IL [SE]
Carl Dewayne Wren, Austin Fire Department, TX [E]

Alternates

Ronald S. Berger, Low Voltage Systems Technology, NJ [M]
(Alt. to L. L. Neibauer)
Lisa Marie Bossert, Schirmer Engineering Corporation, NC [SE]
(Alt. to R. R. Osman)
James D. Brown, Oklahoma State Universtiy, OK [SE]
(Alt. to P. D. Brock)
Tariq Bsharat, National Fire Sprinkler Association, NY [M]
(Alt. to K. E. Isman)
Davie J. Camp, Dover Elevator Systems, Inc., TN [M]
(Alt. to E. A. Donoghue)
Greg Gottlieb, Hauppauge Fire District, NY, C
(Alt. to J. M. Jardin)
Claudia Hagood, Klinker and Associates, Inc., MD [SE]
(Alt. to R. L. Klinker)
Peter A. Larrimer, U.S. Department of Veterans Affairs, PA [U]
(Alt. to D. P. Klein)
Gene A. LaValle, Interlogix, GA [M]
(Alt. to R. Kirby)
Randolph W. Tucker, The RJA Group, Inc., TX [SE]
(Alt. to M. H. Reiss)
Joseph E. Wiehagen, National Association of Home Builders, MD [IM]
(Voting Alt. to NAHB Rep.)

Staff Liaison: **Gregory E. Harrington**

Committee Scope: This Committee shall have primary responsibility for documents on the application of fire protection systems including detection, alarm and suppression, and the life safety impact of various building systems.

Technical Committee on

Detention and Correctional Occupancies (SAF-DET)

Thomas W. Jaeger, *Chair*
Gage-Babcock & Associates Inc., VA [SE]

Ron Coté, Nonvoting *Secretary*
NFPA, MA

James R. Ambrose, Code Consultants, Inc., MO [SE]
David L. Bondor, St. Paul Fire & Marine, TX [I]
Rep. American Society of Safety Engineers
Robbie D. Church, U.S. Bureau of Prisons, DC [U]
Michael DiMascio, Solutions Engineering Inc., MA [SE]
Randy Gaw, Correctional Service of Canada, ON [E]
David A. Gilda, Builders Hardware Manufacturers Association, CT [M]
Patrick G. Gordon, Philadelphia Prison System, PA [U]
Larry Harrison, Illinois Office of State Fire Marshals, IL [E]
Kenneth E. Isman, National Fire Sprinkler Association, NY [M]
William E. Koffel, Koffel Associates, Inc., MD [SE]
Roger L. McDaniel, Florida Department of Corrections, FL [U]
E. Eugene Miller, Washington, DC [SE]
Jerry Nealy, Cumulus Fibres, Inc., NC [M]
Rep. Institutional Bedding Manufacturers Association
Robert R. Perry, Robert Perry Associates, Inc., IL [M]
Rep. Door & Hardware Institute
Steven E. Rawson, Simplex Time Recorder Company, MA [M]
Rep. National Electrical Manufacturers Association
Kenneth J. Schwartz, Schirmer Engineering Corporation, IL [SE]
Wayne S. Smith, Texas State Fire Marshal, TX [E]
Rep. International Fire Marshals Association

Alternates

Peter J. Collins, U.S. Federal Bureau of Prisons, DC [U]
(Alt. to R. D. Church)
A. Larry Iseminger, Jr., Maryland State Fire Marshals Office, MD [E]
(Alt to W S Smith)
Alfred J. Longhitano, Gage-Babcock & Associates Inc., NY [SE]
(Alt. to T. W. Jaeger)
Richard R. McDaniel, Office of the Illinois State Fire Marshal, IL [E]
(Alt. to L. Harrison)
Michael Tierney, Builders Harware Manufacturers Association, CT [M]
(Alt. to D. Gilda)
Ralph R. Winter, Code Consultants, Inc., MO [SE]
(Alt. to J. R. Ambrose)

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people in detention and correctional occupancies.

Technical Committee on

Educational and Day-Care Occupancies (SAF-END)

Catherine L. Stashak, *Chair*
Schirmer Engineering Corporation, IL [SE]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

Scott R. Bartlett, Simplex Time Recorder Company, MA [M]
Samuel S. Dannaway, S. S. Dannaway Associates, Inc., HI [SE]
Victor L. Dubrowski, Code Consultants, Inc., MO [SE]
Stephen E. Duffin, Zurich Services Corporation, IL [I]
Gene B. Endthoff, National Fire Sprinkler Association, IL [M]
Douglas R. Freels, Performance Design Technologies, TN [SE]
Vern L. Martindale, Church of Jesus Christ of Latter-day Saints, UT [U]
Erin A. M. Oneisom, U.S. Air Force, AE [U]
Michael L. Sinsigalli, Windsor Locks Fire Department, CT [E]
Aleksy L. Szachnowicz, Prince George's County Government Board of Education, MD [E]
Robert T. Trotter, Franklin Fire Department, TN [E]
Ralph J. Warburton, University of Miami, FL [SE]
Kenneth Wood, Office of the Illinois State Fire Marshal, IL [E]

Alternates

Kevin Kelly, National Fire Sprinkler Association, NY [M]
(Alt. to G. B. Endthoff)
Amy J. McGarry, Code Consultants, Inc., MO [SE]
(Alt. to V. L. Dubrowski)
Roger B. Rudy, Performance Design Technologies, LLC, TN [SE]
(Alt. to D. R. Freels)

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people in educational occupancies and day-care occupancies.

Technical Committee on

Fire Protection Features (SAF-FIR)

John W. McCormick, *Chair*
Code Consultants, Inc., MO [SE]

Walter P. Sterling, *Nonvoting Secretary*
NFPA, MA

Carl F. Baldassarra, Schirmer Engineering Corporation, IL [SE]
John F. Bender, Maryland Office of State Fire Marshal, MD [E]
Rep. International Fire Marshals Association
Robert M. Berhinig, Underwriters Laboratories Inc., IL [RT]
Edward K. Budnick, Hughes Associates, Inc., MD [SE]
Gregory J. Cahanin, St. Petersburg, FL [U]
Rep. Louisiana State Firemen's Association
Raman B. Chauhan, National Research Council, ON [RT]
Charles Clark, Brick Industry Association, VA [M]
Eric H. Cote, The RJA Group, Inc., MA [SE]
Thomas G. Daly, Hilton Hotels Corporation, CA [U]
Rep. NFPA Lodging Industry Section
Brian L. Eklow, Conti Group, Safety & Loss Prevention, IL [I]
Gene B. Endthoff, National Fire Sprinkler Association, IL [M]
Sam Francis, American Forest & Paper Association, PA [M]
Ralph Gerdes, Ralph Gerdes Consultants, LLC, IN [SE]
Donald Murray Goff, Hillsborough County Fire Rescue, FL [E]
Rep. Florida Fire Marshals Association
Miles J. Haber, Monument Construction Inc., MD [U]
Rep. National Association of Home Builders
Dale D. Hasty, Siemens Cerberus Division, MO [M]
Rep. Fire Suppression Systems Association
Wayne D. Holmes, HSB Professional Loss Control, CT [I]
Jonathan Humble, American Iron and Steel Institute, CT [M]
Ignacy A. Kapalczynski, Connecticut Department of Public Safety , CT [E]
Marshall A. Klein, Marshall A. Klein & Associates, Inc., MD [SE]
William E. Koffel, Koffel Associates, Inc., MD [M]
Rep. Glazing Industry Code Committee
Vickie Lovell, Intecode Incorporated (ICI), FL [M]
Rep. Air Movement and Control Assn/Int'l FireStop Council
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Kathleen Taraba, Rolling Plains Construction, Inc., CO [IM]
Rep. Firestop Contractors International Association
Kenneth Wood, Office of the Illinois State Fire Marshal, IL [E]

Alternates

Robert H. Barker, American Fiber Manufacturers Association, DC [M]
(Voting Alt. to AFIMA Rep.)
Donald W. Belles, Koffel Associates, Inc., TN [M]
(Alt. to W. E. Koffel)
Joseph A. Brooks, Air Movement and Control Association International, Inc., IL [M]
(Alt. to V. Lovell)
David Cook, Ralph Gerdes Consultants, IN [SE]
(Alt. to R. Gerdes)
John F. Devlin, Schirmer Engineering Corporation, VA [SE]
(Alt. to C. F. Baldassarra)
Jack Gump, HSB Professional Loss Control, TN [I]
(Alt. to W. D. Holmes)
Daniel J. Harrington, CGU Insurance, NY [I]
(Voting Alt. to AISG)
Mark Kluver, Portland Cement Association, CA [M]
(Alt. to J. J. Messersmith)

David A. Lewis, Code Consultants, Inc., MO [SE]
(Alt. to J. W. McCormick)
Jeffrey A. Maddox, The RJA Group, Inc., CA [SE]
(Alt. to E. Cote)
Eric Rosenbaum, Hughes Associates, Inc., MD [SE]
(Alt. to E. K. Budnick)
David P. Tyree, American Forest & Paper Association, CO [M]
(Alt. to S. W. Francis)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to J. Humble)

Nonvoting

Michael Earl Dillon, Dillon Consulting Engineers, Inc., CA
Rep. TC on Air Conditioning

Staff Liaison: **Walter P. Sterling**

Committee Scope: This Committee shall have primary responsibility for documents on construction compartmentation, including the performance of assemblies, openings, and penetrations, as related to the protection of life and property from fire and other circumstances capable of producing similar consequences.

Technical Committee on

Fundamentals (SAF-FUN)

Morgan J. Hurley, *Chair*
Society of Fire Protection Engineers, MD [U]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

Thomas H. Allen, Smoke Guard Corporation, ID [U]
Rep. American Institute of Architects
Wayne G. Carson, Carson Associates, Inc., VA [SE]
Barbara Ebstein, Vinick Associates, Inc., CT [U]
Rep. American Society of Interior Designers
Gregory W. Gallagher, NYS Department of State, NY [E]
Ben Greene, City of Englewood, CO [E]
Norman E. Groner, Santa Cruz, CA [SE]
Howard Hopper, Underwriters Laboratories Inc., CA [RT],
David P. Klein, U.S. Department of Veterans Affairs, MD [U]
James A. Landmesser, U.S. Department of Energy, TN [E]
James K. Lathrop, Koffel Associates, Inc., CT [SE]
David H. MacKinnon, Canadian Steel Construction Council, ON [M]
Rep. American Iron and Steel Institute
Richard A. Morris, National Association of Home Builders, DC [U]
Rep. National Association of Home Builders
Stephen V. Skalko, Portland Cement Association, GA [M]
Jeffrey B. Stone, American Forest & Paper Association, FL [M]
Rep. American Forest & Paper Association
David W. Stroup, US National Institute of Standards and Technology, MD [RT]
Amal Tamim, W.R. Grace & Company-Conn, MA [M]
John M. Watts, Jr., Fire Safety Institute, VT [SE]
Jay Woodward, International Conference of Building Officials, MO [E]

Alternates

Eugene A. Cable, U.S. Department of Veterans Affairs, NY [U]
(Alt. to D. P. Klein)
Robert J. Eugene, Underwriters Laboratories Inc., WA [RT]
(Alt. to H. Hopper)
Mark Kluver, Portland Cement Association, CA [M]
(Alt. to S. V. Skalko)
Kimberly A. Marks, The Marks Design Group, Inc., TX [U]
(Alt. to B. Ebstein)
Rodney A. McPhee, Canadian Wood Council, Canada [M]
(Alt. to J. B. Stone)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to D. H. MacKinnon)

Nonvoting

Carol A. Caldwell, Caldwell Consulting, Limited, New Zealand
Pichaya Chantranuwat, Fusion Consultants Company, Limited, Thailand [SE]

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on the basic goals, objectives, performance requirements, and definitions for protection of human life and property from fire, earthquake, flood, wind, and other circumstances capable of producing similar consequences and on the nonemergency and emergency movement of people.

Technical Committee on

Furnishings and Contents (SAF-FUR)

William E. Fitch, *Chair*
Omega Point Laboratories Inc., TX [RT]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

Patty K. Adair, American Textile Manufacturers Institute, DC [M]
Alastair J. M. Aikman, National Research Council of Canada, Canada [RT],
Stephen E. Apesos, The Becker Group, LTD, MD [SE]
Vytenis Babrauskas, Fire Science and Technology Inc., WA [SE]
John A. Blair, The Dupont Company, DE [M]
Lisa Bonneville, Bonneville Design, MA [U]
Rep. American Society of Interior Designers
Eugene A. Cable, U.S. Department of Veterans Affairs, NY [U]
Frederic B. Clarke, Benjamin Clarke Associates, Inc., VA [SE]
Paul Dillon, Southern Polytechnic State University, GA [M]
Marcelo M. Hirschler, GBH International, CA [SE]
E. Ken McIntosh, Carpet and Rug Institute, GA [M]
T. Hugh Talley, Hugh Talley Company, TN [M]
Rep. American Furniture Manufacturers Association
James J. Urban, Underwriters Laboratories Inc., IL [RT]

Alternates

Donald W. Belles, Koffel Associates, Inc., TN [M]
(Alt. to E. K. McIntosh)
Raman B. Chauhan, National Research Council, Canada [RT]
(Alt. to J. M. Aikman)
Thomas J. Ohlemiller, National Institute of Standards and Technology, MD [RT]
(Voting Alt. to US NIST Rep.)
James V. Ryan, Potomac, MD [SE]
(Alt. to F. B. Clarke)
Shelley Siegel, Accessible Interiors' Network, Inc., FL [U]
(Alt. to L. Bonneville)

Nonvoting

Hammad Malik, U.S. Consumer Product Safety Commission, MD [C]
(Alt. to USCPSC Rep.)

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on limiting the impact of furnishings and building contents effect on protection of human life and property from fire and other circumstances capable of producing similar consequences and on the emergency movement of people.

Technical Committee on

Health Care Occupancies (SAF-HEA)

Daniel J. O'Connor, *Chair*
Schirmer Engineering Corporation, IL [SE]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

James R. Ambrose, Code Consultants, Inc., MO [SE]
William N. Brooks, Eichleay Engineers, Inc., PA [SE]
Kenneth E. Bush, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Wayne G. Carson, Carson Associates, Inc., VA [SE]
Michael Crowley, The RJA Group, Inc., TX [SE]
Douglas S. Erickson, American Society for Healthcare Engineering, VI [U]
Rep. American Society for Healthcare Engineering
Kenneth S. Faulstich, U.S. Department of Veterans Affairs , DC [U]
John E. Fishbeck, Joint Commission on Accreditation of Healthcare Organizations, IL [E]
Curt Fogel, Vaaler Insurance, Inc., ND [I]
Antonio Freire, Axa Courtage, France [I]
Thomas W. Jaeger, Gage-Babcock & Associates Inc., VA [U]
Rep. American Health Care Association
Ronald K. Mengel, System Sensor, IL [M]
Rep. National Electrical Manufacturers Association
John I. Mills, Beery, Rio & Associates, VA [SE]
Kirby W. Perry, Kirby W Perry Architects & Associates Inc., TX [SE]
Rep. American Institute of Architects
Peter P. Petresky, PA Department of Health, PA [E]
Rep. Association of Health Facility Survey Agencies
Brian Prediger, U.S. Army, MD [U]
Thomas A. Salamone, Health Care & Life Safety Concepts, NY [I]
Rep. Kemper Insurance Companies
David M. Sine, David M Sine & Associates, TX [U]
Rep. National Association of Psychiatric Health Systems
Richard D. Strub, Life Care Centers of America, TN [U]
Rep. NFPA Health Care Section
Mayer D. Zimmerman, U.S. Department of Health and Human Services, MD [E]

Alternates

James H. Antell, The RJA Group, Inc., IL [SE]
(Alt to M Crowley)
John F. Deubler, Schirmer Engineering Corporation, VA [SE]
(Alt. to D. G. O'Connor)
Lori Drexler, Code Consultants, Inc., MO [SE]
(Alt. to J. R. Ambrose)
J. Richard Fruth, Hayes Large Architects, PA, SE
(Alt to K Perry)
Thomas W. Gardner, Gage-Babcock & Associates, VA [SE]
(Alt. to T. W. Jaeger)
William E. Koffel, Koffel Associates, Inc., MD [U]
(Alt. to D. S. Erickson)
Steven J. Nolin, Simplex Time Recorder Company, MA [M]
(Alt. to R. K. Mengel)
Edward M. Shedlock, U.S. Department of Veterans Affairs, FL [U]
(Alt to K Faulstich)
John S. Taylor, St. Vincent's Hospital, AL [U]
(Alt. to R. D. Strub)

Nonvoting

Pichaya Chantranuwat, Fusion Consultants Company, Limited, Thailand [SE]

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people, in health care occupancies.

Technical Committee on

Industrial, Storage, and Miscellaneous Occupancies (SAF-IND)

Wayne D. Holmes, *Chair*
SB Professional Loss Control, CT [I]

Walter P. Sterling, *Nonvoting Secretary*
NFPA, MA

Donald C. Birchler, FP&C Consultants Inc., MO [SE]
Howard M. Bucci, U.S. DOE -Fluor Daniel Hanford, WA [U]
John E. Echternacht, Firesafety Consultants, TX [SE]
John F. Farney, Jr., Sargent & Lundy Engineers, IL [SE]
Larry N. Garrett, Delphi Automotive Systems Corporation, IN [U]
Rep. NFPA Industrial Fire Protection Section
James Golinveaux, Tyco Fire Products, RI [M]
Rep. American Fire Sprinkler Association, Inc.
Dale A. Harshbarger, Hebron Fire Protection District, KY [E]
Bruce W. Hisley, National Fire Academy, MD [E]
Rep. International Fire Marshals Association
Jonathan Humble, American Iron and Steel Institute, CT [M]
Rep. American Iron and Steel Institute
Marshall A. Klein, Marshall A. Klein & Associates, Inc., MD [U]
Rep. Automotive Oil Change Association
Neal W. Krantz, National Time & Signal Corporation, MI [M]
Rep. National Electrical Manufacturers Association
Patrick A. McLaughlin, McLaughlin & Associates, CA [U]
Rep. Semiconductor Industry Association
Henry Rohwer, Siemens Westinghouse, FL [U]
Jeffrey M. Shapiro, International Code Consultants, TX [M]
Rep. The Chlorine Institute
Stephen V. Skalko, Portland Cement Association, GA [M]
Robert L. Smith, Jr., Westinghouse Savannah River Company, SC [U]
Michael J. Stelzer, ABB Lummus Global, Inc., TX, SE
Rep. American Society of Safety Engineers
David C. Tabar, The Sherwin-Williams Company, OH [U]
Gregory W. Thomas, Liberty Mutual Group, CT [I]
Rep. Alliance of American Insurers
Robert Bruce Wallace, Royal Insurance Company, CA [I]
Rep. American Insurance Services Group
Carl Dewayne Wren, Austin Fire Department, TX [E]

Alternates

Jack Gump, HSB Professional Loss Control, TN [I]
(Alt. to W. D. Holmes)
Roland J. Huggins, American Fire Sprinkler Association, Inc., TX [M]
(Alt. to J. Golinveaux)
Mark Kluver, Portland Cement Association, CA [M]
(Alt to S. V. Skalko)
William E. Koffel, Koffel Associates, Inc., MD [U]
(Alt. to P. A. McLaughlin)
Michael E. Lyden, The Chlorine Institute, Inc., DC [M]
(Alt. to J. M. Shapiro)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to J. Humble)

Nonvoting

Glen E. Gardner, U.S. Occupational Safety & Health Admin, DC

Staff Liaison: **Walter P. Sterling**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people, in industrial and storage occupancies, special structures, windowless and underground buildings, and high-rise buildings.

Technical Committee on

Means of Egress (SAF-MEA)

William E. Koffel, *Chair*
Koffel Associates, Inc., MD [SE]

Ron Coté, *Nonvoting Secretary*
NFPA, MA

Alastair J. M. Aikman, National Research Council of Canada, Canada [RT],
John L. Barrios, Department Business and Community Services, FL [E]
Rep. Southern Building Code Congress Intl Inc/International Code Council, Inc.
John L. Bryan, Frederick, MD [SE]
Kenneth E. Bush, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Davie J. Camp, Dover Elevator Systems, Inc., TN [M]
Rep. National Elevator Industry Inc
David A. de Vries, American Society of Safety Engineers, IL [U]
Rep. American Society of Safety Engineers
Steven Di Pilla, ACE USA Risk Control Services, NJ [I]
Joshua W. Elvove, U.S. Dept of Veterans Affairs (VA) , CO [U]
Gene B. Endthoff, National Fire Sprinkler Association, IL [M]
Philip C. Favro, Philip C. Favro & Associates, CA [SE]
Edward L. Fixen, Schirmer Engineering Corporation, CA [SE]
Dave Frable, U.S. General Services Administration, IL [U]
David A. Gilda, Builders Hardware Manufacturers Association, CT [M]
Rita C. Guest, Carson Guest, Inc., GA [U]
Rep. American Society of Interior Designers
Billy G. Helton, Lithonia Emergency Systems, GA [M]
Rep. National Electrical Manufacturers Association
Lawrence J. McGinty, U.S. Central Intelligence Agency, DC [U]
Wayne Menuz, Underwriters Laboratories Inc., CA [RT]
Jake Pauls, Jake Pauls Consulting Services in Building Use and Safety, MD [SE]
Robert R. Perry, Robert Perry Associates Inc., IL [M]
Rep. Door & Hardware Institute
Eric Rosenbaum, Hughes Associates, Inc., MD [SE]
John A. Sharry, Lawrence Livermore National Laboratory, CA [U]
Leslie Strull, The RJA Group, Inc., IL [SE]
Michael D. Tomy, Heery International Inc., GA, SE
Rep. American Institute of Architects
Joseph H. Versteeg, Versteeg Associates, CT [E]
Rep. Fairfield CT Fire Marshal's Office
David L. Wismer, Department of Licenses & Inspections, PA [E]
Jay Woodward, International Conference of Building Officials, MO [E]

Alternates

John R. Battles, Southern Building Code Congress International, AL [E]
(Alt. to J. L. Barrios)
Charles H. Berry, Baltimore VA Medical Center, MD [U]
(Alt to J W Elvove)
Warren D. Bonisch, Schirmer Engineering Corporation, TX [SE]
(Alt. to E. L. Fixen)
Raman B. Chauhan, National Research Council, Canada [RT],
(Alt. to A. J. M. Aikman)
Edward A. Donoghue, Edward A. Donoghue Associates, Inc., NY [M]
(Alt. to D. J. Camp)
Barbara Ebstein, Vinick Associates, Inc., CT [U]
(Alt. to R. Guest)
Miles J. Haber, Monument Construction Inc., MD [U]
(Voting Alt. to NAHB Rep.)
James K. Lathrop, Koffel Associates, Inc., CT [SE]
(Alt to W E Koffel)
R. T. Leicht, Delaware Fire Marshal's Office, DE [E]
(Alt. to K. Bush)
James A. Milke, University of Maryland, MD [SE]
(Alt to J L Bryan)
Ronald H. Minter, Thomas & Betts, TN [M]
(Alt. to B. G. Helton)
Harold E. Nelson, Hughes Associates, Inc., VA [SE]
(Alt. to E. R. Rosenbaum)
James R. Quiter, Arup Fire [SE]
(Alt to L Strull)
Roy W. Schwarzenberg, Central Intelligence Agency, DC [U]
(Alt. to L. J. McGinty)
Michael S. Shulman, Underwriters Laboratories Inc., CA [RT],
(Alt. to W. Menuz)
Michael Tierney, Builders Harware Manufacturers Association, CT [M]
(Alt. to D. Gilda)

Nonvoting

Pichaya Chantranuwat, Fusion Consultants Company, Limited, Thailand [SE]

Staff Liaison: **Ron Coté**

Committee Scope: This Committee shall have primary responsibility for documents on the general requirements for safe egress for protection of human life from fire and other circumstances capable of producing similar consequences and on the nonemergency and emergency movement of people.

Technical Committee on

Mercantile and Business Occupancies (SAF-MER)

Ed Schultz, *Chair*
Code Consultants, Inc., MO [SE]

Walter P. Sterling, *Nonvoting Secretary*
NFPA, MA

David M. Banwarth, David M. Banwarth Associates, LLC, MD [SE]
E. Joseph Bocci, US Department of the Treasury, DC [U]
Kenneth E. Bush, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Douglas S. Erickson, American Society for Healthcare Engineering, VI [U]
Rep. American Society for Healthcare Engineering
Sam Francis, American Forest & Paper Association, PA [M]
Douglas R. Freels, Performance Design Technologies, TN [SE]
Daniel J. Gauvin, Simplex Time Recorder Company, MA [M]
Rep. National Electrical Manufacturers Association
Darrell W. Harguth, Fire Equipment Manufacturers' Association,Inc., CA {M]
Rep. Fire Equipment Manufacturers' Association
William Hiotaky, The Taubman Company, MI [U]
Wayne D. Holmes, HSB Professional Loss Control, CT [I]
Jonathan Humble, American Iron and Steel Institute, CT [M]
Brian L. Marburger, Kemper Insurance Companies, IL [I]
Rep. American Insurance Services Group
Richard V. Moon, Insurance Services Office, NY [I]
Lawrence G. Perry, Building Owners & Managers Association International, MD [U]
Sheldon S. Rucinski, Schirmer Engineering Corporation, IL [SE]
David C. Tabar, The Sherwin-Williams Company, OH [U]
Richard P. Thornberry, The Code Consortium, Inc., CA [SE]
William J. Tomes, TVA Fire and Life Safety, GA [U]
Rep. The Home Depot

Alternates

Darryl Thomas Brown, Performance Design Technologies, TN [SE]
(Alt. to D. R. Freels)
Lawrence G. Danielkiewicz, The Taubman Company, MI [U]
(Alt. to W. Hiotaky)
Laura J. Dion, TVA Fire and Life Safety, Inc., WA [U]
(Alt. to W. J. Tomes)
Jack Gump, HSB Professional Loss Control, TN [I]
(Alt. to W. D. Holmes)
Gene A. LaValle, Interlogix, GA [M]
(Alt. to D. J. Gauvin)
Richard R. Osman, Schirmer Engineering Corporation, IL [SE]
(Alt. to S. Rucinski)
Dennis L. Pitts, American Forest & Paper Association, TX [M]
(Alt. to S. W. Francis)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to J. Humble)
Dale Woodin, American Society for Healthcare Engineering, IL [U]
(Alt. to D. Erickson)
Staff Liaison: **Walter P. Sterling**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and for the emergency movement of people, in mercantile and business occupancies.

Technical Committee on

Residential Occupancies (SAF-RES)

Gregory E. Harrington, *Nonvoting Secretary*
NFPA, MA

Warren D. Bonisch, Schirmer Engineering Corporation, TX [SE]
H. Wayne Boyd, U.S. Safety & Engineering Corporation, CA [M]
Harry L. Bradley, Maryland State Fire Marshals Office, MD [E]
Rep. International Fire Marshals Association
Phillip A. Brown, American Fire Sprinkler Association, Inc., TX [IM]
Ronald Burton, National Association of Home Builders, DC, IM,
Peter G. Christie, TAA Limited, MD [SE]
Thomas G. Daly, Hilton Hotels Corporation, CA [U]
Rep. NFPA Lodging Industry Section
Sam Francis, American Forest & Paper Association, PA [M]
Ralph Gerdes, Ralph Gerdes Consultants, LLC, IN [SE]
Kenneth E. Isman, National Fire Sprinkler Association, NY [M]
Marshall A. Klein, Marshall A. Klein & Associates, Inc., MD [SE]
James K. Lathrop, Koffel Associates, Inc., CT [SE]
Gene A. LaValle, Interlogix, GA [M]
Rep. National Electrical Manufacturers Association
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Ronald G. Nickson, National Multi Housing Council, DC [U]
Michael A. O'Hara, The MountainStar Group, MN [SE]
Erin A. M. Oneisom, U.S. Air Force, AE [U]
Peter Puhlick, University of Connecticut, CT [U]
Jim Ray, Marriott International, Inc., DC [U]
Rep. American Hotel & Motel Association
Vincent E. Sbarra, Gage-Babcock & Associates, Inc., NY [SE]
T. Hugh Talley, Hugh Talley Company, TN [M]
Rep. American Furniture Manufacturers Association

Alternates

Carl F. Baldassarra, Schirmer Engineering Corporation, IL [SE]
(Alt. to W. Bonisch)
James R. Bell, Marriott International, Inc., DC [U]
(Alt. to J. V. Ray)
James J. Convery, Gage-Babcock & Associates, VA [SE]
(Alt. to V. E. Sbarra)
David Cook, Ralph Gerdes Consultants, IN [SE]
(Alt. to R. Gerdes)
Greg Gottlieb, Hauppauge Fire District, NY [C]
(Voting Alt. to NFPA/FSS Rep.)
Robert Howe, Vermont Department of Labor & Industry, VT [E]
(Alt to H L Bradley)
Ronald Kirby, Simplex Time Recorder Company, MA [M]
(Alt. to E. A. LaValle)
Mark Kluver, Portland Cement Association, CA [M]
(Alt to J J Messersmith)
Dennis L. Pitts, American Forest & Paper Association, TX [M]
(Alt. to S. W. Francis)
Jeffrey M. Shapiro, International Code Consultants, TX [U]
(Alt. to R. G. Nickson)
Victoria Valentine, National Fire Sprinkler Association, NY [M]
(Alt. to K. E. Isman)

Staff Liaison: **Gregory E. Harrington**

Committee Scope: This Committee shall have primary responsibility for documents on protection of human life and property from fire and other circumstances capable of producing similar consequences, and on the emergency movement of people, in hotels, dormitories, apartments, lodging and rooming houses, and one- and two-family dwellings.

Technical Committee on

Structures and Construction (BLD-STR)

Peter J. Gore Willse, *Chair*
Industrial Risk Insurers, CT [I]

Bonnie E. Manley, *Nonvoting Secretary*
NFPA, MA

Jeffrey J. Brouillard, Simpson Gumpertz & Heger Inc., MA [SE]
Bob Carubia, West Virginia University Hospitals, WV [U]
David S. Collins, The Preview Group, Inc., OH [SE]
Rep. American Institute of Architects
Richard J. Davis, FM Global, MA [I]
James D. Dolan, Virginia Polytechnic Institute, VA [E]
Rep. National Institute of Building Sciences/FEMA
Victor L. Dubrowski, Code Consultants, Inc., MO [SE]
Jeffrey Feid, State Farm Fire & Casualty Company, IL [I]
Satyendra K Ghosh, S. K. Ghosh Associates Inc., IL [SE]
Jeffrey H. Greenwald, National Concrete Masonry Association, VA [M]
Rep. National Concrete Masonry Association
Raymond A. Grill, The RJA Group, Inc., VA [SE]
Joseph T. Holland, III, Hoover Treated Wood Products, FL [M]
Martin Johnson, EQE International, CA [SE]
Rep. National Council of Structural Engineers Association
Harry Martin, American Iron and Steel Institute, CA [M]
Rep. American Iron and Steel Institute
Joseph J. Messersmith, Jr., Portland Cement Association, VA [M]
Rep. Portland Cement Association
Scott G. Nacheman, LZA Technology/Thornton-Tomasetti Engineers,
IL [SE]
Eugene M. Novak, Commonwealth of Massachusetts, MA [E]
Kathleen Reid, Intel Corporation, Kildare, Ireland [U]
Rep. Semiconductor Industry Association
James A. Rossberg, Strucutural Engineering Institute of the ASCE, VA [SE]
Jeffrey Sciaudone, Institute for Business & Home Safety, FL [I]
Ed Sutton, National Association of Home Builders, DC [U]
Rep. National Association of Home Builders
Rebai Tamerhoulet, State of Oregon, OR [E]
David P. Tyree, American Forest & Paper Association, CO [M]
Rep. American Forest & Paper Association
Carl Dewayne Wren, Austin Fire Department, TX [E]

Alternates

Matthew Dodge, CBI Consulting, Inc., MA [SE]
(Alt. to M. W. Johnson)
Susan M. Dowty, S. K. Ghosh Associates Inc., CA [SE]
(Alt. to S. K. Ghosh)
Kenneth A. Ford, National Association of Home Builders, DC [U]
(Alt. to E. Sutton)
Gerald H. Jones, Kansas City, MO [E]
(Alt. to J. D. Dolan)
Mark Kluver, Portland Cement Association, CA [M]
(Alt. to J. J. Messersmith)
William E. Koffel, Koffel Associates, Inc., MD [U]
(Alt. to K. Reid)
Laurence K. Oleck, Jr., The RJA Group, Inc., FL [SE]
(Alt. to R. A. Grill)
Michael L. Perrino, Code Consultants, Inc., MO [SE]
(Alt. to V. L. Dubrowski)
Jeffrey B. Stone, American Forest & Paper Association, FL [M]
(Alt. to D. P. Tyree)
Robert J. Wills, American Iron and Steel Institute, AL [M]
(Alt. to H. Martin)

Staff Liaison: **Bonnie E. Manley**

Committee Scope: This Committee shall have primary responsibility for documents on the selection and design of building construction types, structural design systems and assemblies, construction techniques and methodologies, and for the protection of human life and property from fire and environmental loads.

Technical Committee on

Building Systems (BLD-SYS)

Lawrence G. Perry, *Chair*
Building Owners & Managers Association International, MD [U]

Allan Fraser, *Nonvoting Secretary*
NFPA, MA

Stanton M. Alexander, North American Testing Company, FL [U]
William Ambrefe, City of Beverly, MA [E]
Brian D. Black, Eastern Paralyzed Veterans Association, NY [C]
Elery G. Borton, Reedy Creek Improvement District, FL [E]
Dennis W. Bradshaw, Ralph Gerdes Consultants, LLC, IN [SE]
Sidney L. Cavanaugh, United Association of Journeymen/Apprentices of Plumbing /Pipe Fitters, CA [L]
Edward A. Donoghue, Edward A. Donoghue Associates, Inc., NY [M]
Rep. National Elevator Industry Inc
Joshua W. Elvove, U.S. Dept of Veterans Affairs (VA) , CO [U]
Phil Forner, Allendale Heating Company Inc., MI [IM]
Rep. Air Conditioning Contractors of America
Raymond N. Hansen, U.S. Air Force, FL [E]
Peter Hays, Owens Corning, OH [M]
Rep. North American Insulation Manufacturers Association
A. Hal Key, City of Mesa Fire Department, AZ [E]
David A. Linville, Mercedes Benz US International Inc., AL [U]
Joseph V. McElvaney, Jr., City of Phoenix, AZ [E]
Richard A. Morris, National Association of Home Builders, DC [U]
Rep. National Association of Home Builders
John Munroe, Reid Crowther & Partners Limited, BC [SE]
Mark Murdoch, Roberts Gordon LLC, NY [M]
Jim Pauley, Square D Company, KY [M]
Francis W. Peri, Communications Design Corporation, MD [IM]
Rep. Association of Cabling Professionals
Michael J. Reeser, Santa Rosa Fire Equipment Service Inc., CA [IM]
Rep. California Automatic Fire Alarm Association Inc
John A. Rickard, Pi Architects & Engineers, Inc., TX [SE]
Stephen Rondinelli, The RJA Group, Inc., CO [SE]
Earl Russell, City of Las Vegas, NV [E]
Shelley Siegel, Accessible Interiors' Network, Inc., FL [SE]
Rep. American Society of Interior Designers
Robert Van Becelaere, Ruskin Manufacturing Division, MO [M]
Rep. American Society of Mechanical Engineers
Mark Wales, Mark Wales Consulting, LA [SE]
Rep. American Institute of Architects
William A. Webb, Performance Technology Consulting, Limited, IL [SE]

Alternates

Shane M. Clary, Bay Alarm Company, CA [IM]
(Alt. to M. J. Reeser)
David Cook, Ralph Gerdes Consultants, IN [SE]
(Alt. to D. W. Bradshaw)
Laurence K. Oleck, Jr., The RJA Group, Inc., FL [SE]
(Alt. to S. Rondinelli)
John S. Ritterpusch, National Association of Home Builders, DC [U]
(Alt. to R. A. Morris)
James Owen Ross, James Owen Ross Associates, NC [SE]
(Alt. to S. Siegel)
Clifford Smith, Spectra Performance Group, Limited, OH [M]
(Alt. to P. Hays)
Jack Wells, Pass & Seymour/Legrand, NY [M]
(Alt. to J. Pauley)

Staff Liaison: **Allan Fraser**

Committee Scope: This Committee shall have primary responsibility for documents on the application of various building systems and features that relate to convenience, health, comfort, and access to a building.

These lists represent the membership at the time each Committee was balloted on the text of this edition. Since that time, changes in the membership may have occurred. A key to classifications is found at the front of this book.

The Report of the Committee on **Building Code** is presented for adoption.

The Reports were prepared by the:
- Technical Correlating Committee on Building Code (BLD-AAC)
- Technical Committee on Assembly Occupancies and Membrane Structures (SAF-AXM)
- Technical Committee on Board and Care Facilities (SAF-BCF)
- Technical Committee on Building Materials (BLD-MAT)
- Technical Committee on Building Service and Fire Protection Equipment (SAF-BSF)
- Technical Committee on Detention and Correctional Occupancies (SAF-DET)
- Technical Committee on Educational and Day-Care Occupancies (SAF-END)
- Technical Committee on Fire Protection Features (SAF-FIR)
- Technical Committee on Fundamentals (SAF-FUN)
- Technical Committee on Furnishings and Contents (SAF-FUR)
- Technical Committee on Health Care Occupancies (SAF-HEA)
- Technical Committee on Industrial, Storage, and Miscellaneous Occupancies (SAF-IND)
- Technical Committee on Means of Egress (SAF-MEA)
- Technical Committee on Mercantile and Business Occupancies (SAF-MER)
- Technical Committee on Residential Occupancies (SAF-RES)
- Technical Committee on Structures and Construction (BLD-STR)
- Technical Committee on Building Systems (BLD-SYS)

This Report proposes for adoption, a new document **NFPA 5000, Building Code**, 2002 edition.

This Report has been submitted to letter ballot of the applicable **Building Code Technical Committees**. The results of the balloting, after circulation of any negative votes, can be found in the report.

This Report has also been submitted to letter ballot of the **Technical Correlating Committee on Building Code**, which consists of 31 voting members; of whom 29 voted affirmatively on all items except 1 voted negatively (Mr. Russel) on 5000-906 and 1 abstained (Mr. Frable) on 500-391. Two ballots were not returned (Messrs Black and Burton).

Mr. Frable voted affirmative with the following comments:
On Proposal 5000-1096 (Log #696)
"We agree with the action taken by the Technical Correlating Committee (TCC) that requests the Technical Committee to further study and give consideration to Mr. Perry's Explanation of Negative with respect to the OSHA requirements cited."
On Proposal 5000-1386 (Log #694), 5000-1387 (Log #1165), 5000-1388 (Log #149), 5000-1390 (Log #698)
"We agree with the action taken by the Technical Correlating Committee (TCC) that requests the Technical Committee to further study and give consideration to Messrs. Black, Perry, and Wales Explanation of Negative with respect to the 2000 edition of the UMC in relation to the requirements of Section 3-3.7 of the NFPA Regulations Governing Committee Projects."
On Proposal 5000-1395 (Log #695), 5000-1396 (Log #1164), 5000-1397 (Log #616), and 5000-1399 (Log #700)
"We agree with the action taken by the Technical Correlating Committee (TCC) that requests the Technical Committee to further study and give consideration to Messrs. Black, Perry, and Wales Explanation of Negative with respect to the 2000 edition of the UPC in relation to the requirements of Section 3-3.7 of the NFPA Regulations Governing Committee Projects."

Mr. Shapiro voted affirmative on Proposal 5000-391 (Log #CP1007) with the following comment:
"Although I agree that there is some benefit to advancing this proposal with a favorable recommendation and I ultimately support the TCC recommendation on this item, I must strongly object to basing the TCC action on the notion that a 2/3 margin was achieved in the technical committee ballot process. The 2/3 margin was only achieved after a committee member had become aware of the final ballot tally and recognized that reversing a single vote would change the outcome. Accepting this late "change of heart" as a basis for achieving "consensus" compromises the integrity of NFPA 5000 and the NFPA consensus process.
This is not simply a case of NFPA accepting a ballot vote after the deadline for submittal. Rather, this is a case where an individual was permitted to know the outcome of a committee ballot and then be given the opportunity to change a vote and ultimately the outcome of the item. Such action is unfair and entirely inappropriate in the NFPA process."

Mr. Russell voted negatively on Proposal 5000-906 (Log #1157) stating:
"The Standards Council directive dated 2/8/01 to the Technical Committees and Technical Correlating Committee directed:
'In exceptional circumstances, a TC may reference a publication of another organization in addition to the applicable NFPA document, but only if the TC provides an adequate rationale for why such a reference is necessary. (See Regulations at 3-3.6.2 and 3-3.7 for further information on reference publications.'
The TCC added at our last meeting in Baltimore, 'The NFPA TCC recognizes the importance of including references in some cases to publications of other organizations, if the publication in question is widely used and referenced in the building community. It is our opinion that the rationale needed to justify the inclusion of additional standards and publications need not include a detailed technical comparison between standards, provided the standards have a history of being referenced in building codes and related standards.'
The proposal of the SAF-RES TC does not meet the requirements of the Standards Council or the TCC. I see no justification or compliance to the Standards Committee requirement of "exceptional circumstances". The IRC is not a nationally recognized standard and does not enjoy wide recognition. This is a new publication and its ultimate value has yet to be proven. The IRC is not 'widely used and referenced in the building community'."

Mr. Frable abstained on Proposal 5000-391 (Log #CP1007) for the following reason:
"In the Report on Proposals, it was reported Log #CP1007 did not receive the 2/3 majority of the Technical Committee to pass vote. However, after the due date for ballots to be completed and received, and following the circulation of the final results, NFPA received and accepted a request from a Technical Committee member to change their vote. This action, thereby allowed Log #CP1007 to receive the 2/3 majority of the Technical Committee to pass vote. It is believed that a perception may exist that the Technical Committee member may have had the opportunity to review the results of the voting prior to changing their ballot.
However, we agree with the action taken by the Technical Correlating Committee (TCC) that requests the Technical Committee to further study this important subject of height and area in consideration of the divided vote among Technical Committee members."

(Log #CP2047)
Committee: SAF-FUN

5000- 1 - (Chapter 1): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that the TC:

(1) revise Section 1.7 Units to clarify that inch-pound units will be primary and metric units will appear in parentheses as approximate equivalents.

(2) give consideration to Mr. Lathrop's comment on affirmative, especially with respect to the coordination with Chapter 54 (Existing Buildings), so as to make any needed changes.Further, the TCC directs staff to transmit a request on its behalf to the NFPA Standards Council asking that the first edition of the Building Code be exempted from the NFPA Manual of Style's (MOS) requirement that metric units be primary. While understanding the intent of the NFPA MOS, the TCC notes that in certain areas, in particular the materials chapters, metric units for dimensional criteria have not yet been established.

SUBMITTER: Technical Committee on Fundamentals

RECOMMENDATION: Create a Chapter 1 Administration to read as follows:

Chapter 1
Administration

1.1 *Code* Title. The provisions in the following chapters of this document shall constitute and be known as NFPA 5000, *The NFPA Building Code*, hereinafter referred to as "this *Code*" or "the *Code*."

1.2 Scope. The Code addresses those construction, protection, and occupancy features necessary to minimize danger to life and property.

1.3 Purpose. The purpose of the *Code* is to provide minimum design regulations to safeguard life and limb, health, property, and public welfare by regulating and controlling the permitting, design, construction, quality of materials, use and occupancy, location, and maintenance of all buildings and structures within the jurisdiction and certain equipment specifically regulated herein.

1.4 Application.

1.4.1 Buildings and Structures. The provisions of the *Code* shall apply to the construction, alteration, repair, equipment, use and occupancy, maintenance, relocation, and demolition of every building or structure, or any appurtenances connected or attached to such buildings or structures within the jurisdiction.

1.4.2 Moved Buildings and Structures. The provisions of the *Code* shall apply to buildings and structures moved into or within the jurisdiction.

1.4.3 Existing Buildings and Structures. The provisions of Chapter 54 of this *Code* shall apply to existing buildings and structures provided that the following criteria are met:

(1) No change of occupancy occurs
(2) No alteration, repair or addition is made
(3) The building or structure is not relocated

1.5 Retroactivity. (Reserved)

1.6 Equivalency.

1.6.1 Alternatives Permitted. The provisions of this *Code* shall not be construed to prevent the use of construction systems, materials, methods of design, or interpolations, calculations, evaluations, or similar evidence based upon test data acceptable to the AHJ as alternatives to the standards and provisions set forth in this *Code*. Such alternatives shall be permitted to be offered for approval and their consideration shall be as provided in 1.6.2 through 1.6.7.

1.6.2 Standards. Construction systems, materials, or methods of design referred to in this *Code* shall be considered as standards of quality and strength. New or alternative construction systems, materials, or methods of design shall be at least equal to and meet the intent of these standards for the corresponding use intended. Test or prototype installations of new materials, methods, or systems shall be permitted for scientific and development purposes.

1.6.3 Systems, Materials and Methods. Any person desiring to use construction systems, materials, or methods of design not specifically mentioned in this *Code* shall file with the AHJ a request for permission to use such systems, materials, or methods. Where alternative construction systems or materials are requested, the request must be submitted, together with proof in writing, in support of claims to support the sufficiency of such construction systems or materials. If a test installation is proposed, a description of the location and purpose of test also shall be submitted.

1.6.4 Structural Units. Where a building or part thereof is a structural unit, the integral parts of which have been built or assembled prior to incorporation into the building, such building or part thereof shall conform to the requirements of this *Code*. Materials and assemblies shall be tested and certified in accordance with the provisions of this section. Inspections shall be made by the AHJ as required in this *Code* for the materials and types of construction used in the prefabricated assemblies. The inspection shall be permitted to be waived during prefabrication if the approved agency certifies to the compliance of the construction with this Code and supplies evidence of such compliance in writing by a professional engineer, a registered architect, or an approved agency or laboratory.

1.6.5 Approval. The AHJ shall approve such alternative construction systems, materials, or methods of design when it is clear that the standards of this *Code* are at least equaled. If, in the opinion of the AHJ, the standards of this *Code* shall not be equaled by the alternative requested, approval for permanent work shall be refused. Consideration shall be given to test or prototype installations.

1.6.6 Tests.

1.6.6.1 Whenever there is insufficient evidence of compliance with the requirements of this *Code* or evidence that any material or method of construction does not conform to the requirements of this *Code*, or to substantiate claims for alternative construction systems, materials, or methods of construction, the AHJ shall be permitted to require tests for proof of compliance to be made by an approved agency at the expense of the owner or his/her agent.

1.6.6.2 Test methods shall be as specified by this *Code* for the material in question. If there are not appropriate test methods specified in this *Code*, the AHJ is authorized to accept an applicable test procedure from another recognized source.

1.6.6.3 Copies of the results of all such tests shall be retained for a period of not less than two years after the acceptance of the building or structure.

1.6.7 Appeal. Any person whose request for use of alternative systems and materials or methods of design has been refused by the AHJ shall be permitted to appeal to the Board of Appeals.

1.7 Units.

1.7.1 SI Units. Metric units in this *Code* are in accordance with the modernized metric system known as the International System of Units (SI).

1.7.2 Primary Values. The SI value for a measurement, and the equivalent inch-pound value given in parentheses, shall each be acceptable for use as primary units for satisfying the requirements of this *Code*.

1.8 Enforcement.

1.8.1 Organization.

1.8.1.1 Creation of Building Department. There is hereby created in the jurisdiction the Department of Building and Safety that shall be under the control of the director of building and safety, who shall also bear the title of authority having jurisdiction.

1.8.1.2 Delegation of Authority. The AHJ is hereby empowered to delegate authority and assignments to subordinate employees working under his/her authority. Such employees shall have the authority to carry out the duties and assignments as delegated by the AHJ.

1.8.1.3 Reports and Records.

1.8.1.3.1 The AHJ shall submit a report to the administrative authority of the jurisdiction, not less than once a year, covering the work of the department during the preceding period.

1.8.1.3.2 The AHJ shall keep a permanent record, accurate account of all fees and other monies collected and received under this *Code*, the names of the persons on whose account the same were paid, the date and amount thereof, together with the location of the building or premises to which they relate.

1.8.1.4 Right of Entry.

1.8.1.4.1 Whenever necessary to make an inspection to enforce any of the provisions of this *Code*, or whenever the AHJ or his/her authorized representative has reason to believe that there exists in any building, or upon any premises, a condition that makes such building or premises unsafe as defined in 1.8.6.3.1 of this *Code*, the AHJ or his/her authorized representative shall be authorized to enter such building or premises at reasonable times to inspect the same, or to perform any duty imposed on the AHJ by this *Code*; provided that, if such building or premises be occupied, the official shall first present proper credentials and request entry; and if such building or premises be unoccupied, the official shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry. If such entry is refused, the AHJ or his/her authorized representative shall have recourse to remedy provided by law to secure entry.
1.8.1.4.2 No owner or occupant or other person having charge, care, or control of any building or premises shall fail or neglect, after proper request made as herein provided, to permit entry therein by the AHJ or his/her authorized representative for the purpose of inspection and examination as provided by this *Code*. Any person violating this subsection shall be guilty of misdemeanor as provided under any and all state and local statutes.
1.8.1.5 Stop-Work Orders. Whenever any work is being done contrary to provisions of this *Code*, the AHJ is hereby authorized to order such work stopped. Such work shall immediately stop until authorized by the AHJ to proceed.
1.8.1.6 Unlawful Occupancy. Whenever any building or part thereof is being used or occupied contrary to the provisions of this *Code*, the AHJ is hereby authorized to order such use or occupancy discontinued and the building or part thereof vacated. Such order shall be in writing, served on the person(s) using or causing to be used such building or parts thereof. Within a 30-day period after receipt of notice or order, such building or part thereof shall be made to comply with the requirements of this *Code*; however, in the event of an emergency, 1.8.6.3.7 and 1.8.6.3.8 shall apply.
1.8.1.7 Concealed Work. The AHJ is hereby authorized to order parts of any building or structure to be exposed for inspection when the building or part thereof is in an unsafe or dangerous condition, or when there is willful or negligent concealment of a violation of this *Code*.
1.8.2 Approvals by Other Authorities Having Jurisdiction. The AHJ shall have the authority to require that the laws, rules, and regulations of all other regulatory agencies having jurisdiction shall be met before a building permit is issued to an applicant. The AHJ shall have the authority to require evidence in writing to show that other regulatory agencies having jurisdiction over the design, construction, alteration, repair, equipment, maintenance, and relocation of buildings and structures in the jurisdiction have approved the proposed construction. The AHJ shall not be held responsible for enforcement of the regulations of such other regulatory agencies unless he/she is specifically authorized to enforce that agency's regulations.
1.8.3 Board of Appeals.
1.8.3.1 Creation of Board of Appeals.
1.8.3.1.1 There is hereby established a board to be designated the Board of Appeals, consisting of at least five members qualified by training and experience to rule on matters relating to building, who shall be appointed by the chief appointing authority of the jurisdiction. The board shall select one of its members to serve as chair, and the AHJ shall be an ex officio member without vote and shall act as secretary to the board.
1.8.3.1.2 Whenever the AHJ shall reject or refuse to approve the manner of proposed construction, and to assist in determining the suitability of alternative materials and methods of construction, the owner of such building or structure or his/her duly authorized agent shall be permitted to request an appeal from the decision of the AHJ by means of the Board of Appeals.
1.8.3.2 Term of Office. The chief appointing authority of the jurisdiction shall appoint one member of the Board of Appeals for a term of one year, two members for a term of two years, and two members for a term of three years, and thereafter, they shall be appointed for a term of three years. The chief appointing authority shall fill vacancies for an unexpired term. Absence of a member from three consecutive meetings of the board, unless excused, shall render such member liable for immediate removal from office by the chief appointing authority.
1.8.3.3 Quorum. Two-thirds but not less than four members of the Board of Appeals shall constitute a quorum. In varying the application of any provision of this *Code*, or in modifying an order of the AHJ, a majority vote shall be required.
1.8.3.4 Meetings and Records. Meetings of the board shall be held at the call of the chair and at such other times as the board determines. All hearings before the board shall be open to the public. The board shall keep minutes of its proceedings showing the vote of each member on every question, or if the member is absent or fails to vote, indicating such actions. The Board shall also keep records of its examinations and other official actions. Minutes and records of the board shall be public records.
1.8.3.5 Procedures. The board shall establish rules and regulations for its own procedures consistent with the provisions of this *Code*.
1.8.3.6 Appeals. An appeal of the decision of the AHJ shall be filed within 30 days from the date of the decision being appealed by filing with the AHJ and the Board of Appeals a notice of appeal, specifying the grounds thereof. In the case of a building or structure that, in the opinion of the AHJ, is unsafe or dangerous, the AHJ shall be permitted to limit the time for such appeal to a shorter period. The AHJ shall forthwith transmit to the board all the papers on which action appealed from was taken and shall schedule a public hearing thereon.
1.8.3.7 Authority of the Board.
1.8.3.7.1 When appealed to and after such public hearing, the specific requirements of this Code shall be permitted to be modified by the board to allow alternative arrangements that will secure as nearly equivalent building safety as practical.
1.8.3.7.2 The board shall be permitted to grant modifications, through the procedures outlined for equivalency in Section 1.6 of this *Code*, to encourage the development of new technologies, methods, and materials.
1.8.3.7.3 A decision of the board to modify the application of any provision of this *Code*, or to modify an order of the AHJ, shall be in writing and shall specify the manner in which such variation or modification is made, the conditions upon which it is made, and the reasons therefor.
1.8.3.8 Decisions.
1.8.3.8.1 The board shall reach a decision on every matter before it without unreasonable or unnecessary delay. Every decision of the Board shall be entered in the minutes of such meeting. Every decision shall be promptly filed in the office of the AHJ and shall be open for public inspection. A certified copy shall be sent by mail or messenger to the appellant and a copy shall be publicly posted in the office of the AHJ for two weeks after filing. The decision of the Board shall be final, subject to such remedy as any aggrieved party might have through legal, equity, or other avenues of appeal or petition.
1.8.3.8.2 If a decision of the Board reverses or modifies a refusal, order, or disallowance of the AHJ, or varies the application of any provision of this *Code*, the AHJ shall take action immediately in accordance with such decision.
1.8.4 Liability.
1.8.4.1 Any officer, employee, or member of the Board of Appeals charged with the enforcement or interpretation of this *Code*, acting for the applicable governing body in the discharge of his/her duties, shall not thereby render himself/herself personally liable. Further, all such persons shall be relieved from all personal liability for any damage they accrue to persons or property as a result of any act required or permitted in the discharge of their duties. Any suit brought against any officer or employee because of such act performed in the course of enforcement of any provision of this *Code* shall be defended by the legal counsel of the jurisdiction until the termination of the proceedings.
1.8.4.2 This *Code* shall not be construed to relieve from or lessen the responsibility of any person owning, operating, or controlling any

building or structure for any damages to persons or property caused by defects. Further, the *Code* enforcement agency or its parent jurisdiction shall not be held as assuming any such liability by reason of the inspections authorized by this *Code* or any permits or certificates issued under this *Code*.

1.8.5 Violations and Penalties. Any person, firm, corporation, or agent who shall violate a provision of this *Code*, or fail to comply therewith, or with any of the requirements thereof, or who shall erect, construct, alter, demolish, or relocate any structure, or has erected, constructed, altered, repaired, relocated, or demolished a building or structure in violation of a detailed statement or drawing submitted and approved thereunder, shall be guilty of a misdemeanor as provided under all applicable local, state, and federal laws as recognized by the jurisdiction.

1.8.6 Compliance of Buildings and Structures.

1.8.6.1 Alterations or Change of Occupancy. Buildings or structures to which additions, alterations, repairs, or changes of occupancy are proposed or intended shall be made to comply with all requirements for new buildings or structures of like area, height, type of construction or occupancy classification. (See also 4.6.5, 4.6.6 and 4.6.10.)

1.8.6.2 Maintenance of Buildings and Property.

1.8.6.2.1 Buildings. The requirements contained in this *Code* for maintenance of buildings shall apply to all buildings and structures in existence on the date of enactment of this *Code* and those hereafter erected. All buildings and structures and all parts thereof shall be maintained in a safe condition, and all devices and safeguards required by this *Code* shall be maintained in operating condition. This section shall not be construed as permitting the removal or nonmaintenance of existing devices or safeguards, unless authorized by the AHJ.

1.8.6.2.2 Property. No debris shall remain on any property or sidewalk or street contiguous thereto, resulting from fire, windstorm, flood, or demolition or partial demolition of any building; nor shall any equipment, excess building materials, storage shed, or debris remain upon any such property, sidewalk, or street upon completion of any new building upon such lot; nor shall any equipment, materials, tool shed, or debris be stored on any vacant or partly vacant lot, except as provided in the land use regulations of the jurisdiction.

1.8.6.2.3 Existing Installations. Buildings in existence at the time of the adoption of this *Code* shall be permitted to have their existing use or occupancy continued if such use or occupancy was legal at the time of the adoption of this *Code*, provided such continued use is not dangerous to life and the existing building or structure is in compliance with Chapter 54 of this *Code*.

1.8.6.3 Unsafe Buildings and Fire Hazards.

1.8.6.3.1 Descriptions.

1.8.6.3.1.1 Unsafe Building Described. All buildings shall be considered unsafe buildings that are, or that hereafter become

(1) unsanitary

(2) deficient in exit facilities

(3) a hazard from fire or natural or man-made threats

(4) dangerous to human life or public welfare by reason of illegal or improper use, occupancy, or maintenance

(5) noncompliant with the provisions of applicable codes

(6) substantially damaged by fire or explosion or other natural or man-made cause

(7) incomplete buildings for which building permits have expired.

The falling away, hanging loose, or loosening of any siding, block, or other building material, structural member, appurtenance, or part thereof of a building, the deterioration of the structure or structural parts of a building, a partially destroyed building or any part of a building when caused by deterioration or overstressing, shall be considered unsafe. The existence of unsanitary conditions by reason of inadequate or malfunctioning sanitary facilities or waste disposal systems shall be considered unsafe.

1.8.6.3.1.2 Building as a Fire Hazard Described. A building shall be deemed to be a fire hazard and unsafe when:

(1) vacant and unguarded and open to unauthorized entry at door or window

(2) there is an accumulation of combustible dust, debris, or materials therein deemed to be a hazard by the AHJ

(3) the building does not provide the exits or fire protection required herein for the most recent occupancy

(4) electrical or mechanical installations or systems create a hazardous condition.

1.8.6.3.2 Authority of the AHJ Regarding Unsafe Buildings or Buildings That Are a Fire Hazard. All buildings deemed to be unsafe or to be a fire hazard by the AHJ based on 1.8.6.3.1 are hereby declared to be public nuisances and shall be demolished and removed from the premises concerned or shall be made safe and sanitary in a manner acceptable to the AHJ and as provided in this section and other applicable laws, rules and regulations of the jurisdiction.

1.8.6.3.3 Inspection of Unsafe Buildings. The AHJ, on his/her own initiative or as a result of reports filed with the Department of Building and Safety, shall examine or cause to be examined every building appearing to be or reported to be unsafe, and if such is found to be an unsafe building as defined in 1.8.6.3.1, the AHJ shall post the property on which the building is located and shall furnish the owner of such building with a written Notice of Violation. The manner of posting and furnishing written notice shall be as provided in 1.8.6.3.4 and 1.8.6.3.5 inclusive.

1.8.6.3.4 Notice of Violation. At least 14 days prior to posting a noncomplying building, the AHJ shall give the owner of the premises written notice by certified mail, addressed to the owner's last known address. If proof of service by certified mail is not completed by signed return receipt, a copy of the written notice shall be affixed to the structure concerned and such procedure shall be considered proper service, and the time for compliance stipulated in the notice shall commence with the date such notice is so affixed. This written notice shall state the defects that constitute a violation of this *Code* and prescribe the action to be taken by the owner of the building to comply with the *Code* and the time within which compliance must be accomplished. Such time shall be reasonable under the circumstances of the case, subject to reasonable extension when requested in writing, for reasons that the AHJ considers as justifying an extension of time. All extensions of time shall be by written approval of the AHJ. In addition, this written notice shall explain the right of appeal of the decision of the AHJ to the Board of Appeals, and shall state that unless there is compliance with the instructions in the notice of violation, or an appeal is filed, that a public hearing before the Board of Appeals will be initiated by the AHJ after the time period for compliance has expired.

1.8.6.3.5 Recording of Notice of Violation.

1.8.6.3.5.1 If the owner of the property has not complied with the requirements as stated in the notice of violation within the time specified, the AHJ shall file an appropriate instrument in the office of the clerk of the Circuit Court, to be recorded in the public records of the jurisdiction in which the violation occurred, indicating that violations of this *Code*, and of 1.8.6.3.4 thereof, exist upon the property involved.

1.8.6.3.5.2 The recording of such notice shall constitute legal notice to all concerned, as well as any subsequent purchasers, transferees, grantees, mortgagees, lessees, and all persons claiming or acquiring interest in the property.

1.8.6.3.5.3 When violation specified in the notice of violation has been corrected and the filing fees incurred have been paid, the AHJ shall file a certificate attesting that the violation has been corrected.

1.8.6.3.6 Posting Notice of Violation. The AHJ shall post a signed notice in a conspicuous location on the building that has been determined to be unsafe, but not before 14 days after the notice of violation provided in 1.8.6.3.4 has been served. The posted notice shall be dated and shall read as follows: "UNSAFE BUILDING — This building is unsafe based on the provisions of 1.12.3 of the Building Code. This building shall be vacated and shall not be occupied. Action to repair or remove this building shall be taken by the owner as prescribed by written notice previously served. THIS NOTICE

SHALL NOT BE REMOVED EXCEPT BY THE AUTHORITY HAVING JURISDICTION."

1.8.6.3.7 Emergency Action.

1.8.6.3.7.1 When, in the opinion of the AHJ, there is actual or immediate danger of the failure or collapse of a building, or when there is a health, natural or man-made hazard, or fire hazard, the AHJ is authorized to order the occupants to vacate, temporarily close for use or occupancy the rights-of-way thereto, sidewalks, streets, or adjacent buildings, or nearby areas, and institute such other temporary safeguards, including securing and posting of the building as the AHJ deems to be necessary under the circumstances. The AHJ is hereby authorized to employ the necessary labor and materials to perform the required work as expeditiously as possible. The AHJ shall promptly notify the local emergency services (fire, police, EMS) of buildings posted as unsafe and ordered to be vacated. The AHJ shall also notify the emergency services when unsafe conditions have been remedied and the building is safe for occupancy and use.

1.8.6.3.7.2 Costs incurred in the performance of such emergency work shall be paid by the governmental AHJ. Upon recording in the public records of the county in which such emergency work was completed, a certificate, executed by the AHJ, certifying the amount expended and the reasons therefor, the cost shall become a lien against the property on which such emergency work was required.

1.8.6.3.8 Appeal and Review. The owner of, or anyone having an interest in, a building that has been determined to be unsafe, concerning which a notice of violation has been served by the AHJ as stated in the notice of violation, shall be permitted to appeal to the Board of Appeals and such appeal shall be filed in accordance with the provisions of 1.8.3.6 and 1.8.3.7 prior to the expiration of the time allowed for compliance specified in such notice. In no case shall the appeal period be less than 15 days.

1.8.7 Building Permits, Plans and Specifications, and Inspections.

1.8.7.1 Permits.

1.8.7.1.1 Permits Required.

1.8.7.1.1.1 No person, firm, or corporation shall erect, construct, enlarge, alter, repair, relocate, improve, convert, or demolish any building, structure, or part thereof in jurisdiction, or cause the same to be done, without first obtaining from the AHJ a separate building permit for the work to be accomplished for each such building, structure or temporary structure. Permits shall not be required for the following:

(1) Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

(2) Temporary motion picture, television and theater stage sets and scenery.

(3) Window awnings supported by an exterior wall for one and two family residential use.

(4) One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 ft^2 (7.5 m^2).

(5) Fences not over 6 feet high.

(6) Movable cases, counters and partitions not over 6 ft (1830 mm) in height.

1.8.7.1.1.2 Separate permits shall be required for plumbing, air conditioning, heating and ventilating systems, elevators, escalators and transporting assemblies, gas, sprinkler, roofing, electrical, and show/ride installations.

1.8.7.1.1.3 A previously issued lawful permit shall be valid on the terms of the *Code* under which it was issued, provided that no such permit shall be subject to the limitations specified in this section.

1.8.7.1.2 Other Jurisdictions. Permits required for work to be accomplished under the jurisdiction of other departments shall be issued only on presentation of written proof of compliance with 1.8.2 of this *Code*.

1.8.7.2 Applications.

1.8.7.2.1 Application Required. To obtain a permit, the applicant shall first file an application therefor in writing on a form supplied for that purpose by the Department of Building and Safety. Such application shall include the following:

(1) Identify and describe the work to be covered by the permit for which application is made

(2) Describe the land on which the proposed work is to be done, by lot, block, tract, and street address or similar description that will locate specifically the proposed building or work

(3) Show the use or occupancy of all parts of the building

(4) Be accompanied by plans and specifications as required in 1.8.7.3

(5) State the valuation of the proposed work

(6) Be signed by the permittee or his/her authorized agent, who may be required to submit evidence to indicate such authority

(7) Provide other information as required by the AHJ.

1.8.7.2.2 Surveyors Certificate Required. Application for permit for new construction and additions shall be accompanied by a registered land surveyor's certificate and plan in duplicate on which shall be indicated clearly the property corner stakes, property line dimensions, existing structures and their location, existing rights-of-way, sidewalks, easements, street zoning and property zoning of record, critical elevations and building setbacks required by law, general block plan, and other pertinent survey data. The AHJ shall be granted authority to waive the requirements for such survey when property line stakes are known to be in place, and when the work contemplated is minor and is clearly within building lines.

1.8.7.2.3 For Relocation of Buildings. Application for permit for relocating a building within the Jurisdiction shall be submitted in the form that the AHJ requests. The application shall be accompanied by plans or other data that, in the opinion of the AHJ, are necessary to show compliance with this *Code* and the zoning and other regulations of the Jurisdiction. A physical examination of the structure shall be made by the AHJ before they issue a permit for relocation. *(See also 1.8.7.6.)*

1.8.7.2.4 For Demolition of Buildings and Structures. Application for permits for the work of demolition of buildings or structures shall be accepted only from qualified persons or firms to do the work. Qualifications of persons or firms to demolish the building or structure shall be in accordance with a special ordinance of the jurisdiction providing for qualification and certification of construction tradespeople.

1.8.7.2.5 Site Plan Requirement.

1.8.7.2.5.1 Prior to the commencement of any construction on a development parcel with the jurisdiction, the applicant shall provide the manager of planning and development with a site plan for the entire development parcel at a suitable scale depending on the size of the development parcel. A development parcel shall be defined as the land containing a proposed project, exclusive of lands designated as conservation on the land use map of the jurisdiction and/or public road rights-of-way contained within the proposed project.

1.8.7.2.5.2 The minimum criteria for inclusion in a site plan application shall be as follows:

(1) Name of project

(2) Statement of the intended use of the site

(3) Legal description of the development parcel

(4) Size in acres of the proposed development

(5) Evidence that the soil conditions are suitable for the proposed development

(6) The amount of impervious surface within the development parcel

1.8.7.2.5.3 The minimum contents of a site plan shall be as follows:

(1) The footprints of all structures, including the square footage and/or number of rooms as appropriate

(2) The total acreage within the development parcel

(3) The location and size of all storm-water management facilities within the development parcel

(4) The location and number of all required parking spaces to serve the development, with the required number of handicapped spaces being specifically designated

(5) The location and size of the open space within each development.

(6) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as

appropriate, location of pedestrian facilities both existing and proposed, and size and location of proposed or existing fire lanes and fire department access

(7) The limits of the 100-year floodplain as determined by consultation with the FEMA floodplain design guidelines

(8) The most landward limits of either the regional water management district, the state department of environmental regulation, or the Army Corps of Engineers (ACOE) wetland jurisdictions

(9) The location of proposed and/or existing and types of landscaped and hardscape areas

(10) The identification of the accessible route between all facilities required to be accessible in accordance with this Code.

(11) The location of all utilities, power, gas, and fire protection water service mains and hydrants.

1.8.7.3 Plans and Specifications.

1.8.7.3.1 Plans and Specifications Required.

1.8.7.3.1.1 Each application for a permit shall be accompanied by two sets of plans, specifications, and calculations when required by the AHJ.

1.8.7.3.1.2 The AHJ shall be allowed to issue a permit without plans, specifications, and calculations for small or finish work, but in every case where work is of a structural nature, plans, details, and calculations shall be submitted for review and approval.

1.8.7.3.1.3 The construction documents shall be prepared by a registered design professional where required by statutes of the jurisdiction where the construction site is located.

1.8.7.3.1.4 Plans shall be drawn to scale identified by name of designer and owner on every sheet, and shall be mechanically reproduced prints on substantial paper or cloth. A plot plan shall show all occupied and unoccupied parts of the lot or lots. The use, name, and occupancy of all parts of the building shall be shown including all foundations, wall sections, floor plans, elevations, and structural details. Mechanical, plumbing, electrical, fire sprinkler, and alarm details shall be shown on the plans and representing the designs for those disciplines, along with such other information to show clearly the nature, character, and location of the proposed work.

1.8.7.3.1.5 Plans for all buildings shall indicate required fire resistance–rated construction and how required structural and fire resistance integrity will be maintained where a penetration of a required fire-resistant wall, floor, or partition will be made for electrical, gas, mechanical, plumbing and communication conduits, pipes, and systems and also indicate in sufficient detail how the fire integrity will be maintained where required fire-resistant floors intersect the exterior walls.

1.13.3.1.6 For high-rise buildings, covered mall buildings, and buildings containing atriums, the construction documents shall include a description of fire protection systems in the building. This description shall include the basic concepts used for suppression, alarm, notification, egress, smoke control, and other related systems, as well as the coordination of those systems. Upon completion of the project, a copy of the approved documentation shall be maintained at the site.

1.8.7.3.2 Examination of Plans.

1.8.7.3.2.1 The AHJ shall examine all plans and applications for permits and amendments thereto for their compliance with this *Code*. If the applications or the plans do not conform to the requirements of all pertinent laws, the AHJ shall reject such application for a building permit in writing, stating the reasons therefor. Plans that are rejected shall be returned for corrections. If, upon examination, the application, plans, and specifications are found to comply with the requirements of this *Code*, the plans shall be signed by the AHJ or their deputy and shall be stamped APPROVED.

1.8.7.3.2.2 When practical difficulties are involved in carrying out the requirements of this *Code*, the AHJ shall be permitted grant modifications for individual cases. This shall require first a finding that a special individual reason makes strict compliance impractical and second that the modification is in conformance with the intent and purpose of the *Code*. Fire protection and structural integrity shall not be lessened.

1.8.7.3.2.3 Upon approval of the AHJ of a plan to segment the construction into more than one permit, drawings shall be submitted for each permit phase. All work in any permit phase shall be at the complete risk of the contractor and owner. Upon approval of the drawings, specifications, and calculations of that phase, a permit shall be issued for that phase.

1.8.7.3.3 Partial Approval.

1.8.7.3.3.1 Pending the completion of checking of plans and specifications, and on payment of the fee required, the AHJ at their discretion shall be permitted to authorize the issuance of a temporary permit for site preparation, excavation, construction, foundation, structural, and/or show/ride installations. The holder of such temporary permit shall proceed at his/her own risk and without assurance that a completion permit will be granted.

1.8.7.3.3.2 Whenever there is a delay in approval of plans under similar special circumstances, the AHJ shall be allowed to permit the builder to place tool sheds, materials, batterboards, and construction equipment on the site prior to actual construction or to permit exploratory uncovering of concealed structural elements of existing buildings for design information, pending completion of plans for proposed alterations.

1.8.7.3.3.3 Upon approval by the AHJ of a plan to segment the construction into more than one permit, drawings and permits shall be submitted for each phase. All work in any phase shall be at the complete risk of the contractor and owner. Upon approval of the drawings, specifications, and calculations of that phase, a permit shall be issued for that phase.

1.8.7.3.3.4 The drawings for each phase shall be complete in themselves so that review and inspection can properly be made. Preliminary plans of the total building shall be submitted in enough detail with the working drawings so that proper evaluation can be made. Areas and items not included in the phase to be permitted shall be shown as not included.

1.8.7.3.4 Approved Plans.

1.8.7.3.4.1 The AHJ shall retain one set of the approved plans, specifications, and computations. The other set shall be kept at the building site, open to inspection at all times when the offices of the jurisdiction are open.

1.8.7.3.4.2 After permit issuance, all changes and deviations from the approved plans shall be submitted to the AHJ for approval.

1.8.7.3.4.3 Approved plans and amendments thereto that are retained by the AHJ shall become public record, provided, however, that they shall be considered as confidential records of their author, that they shall be open to the public only for inspection, and that the AHJ shall permit bona fide owners or designers employed by such owners to inspect the plans when not available from their author. Upon written application, the AHJ shall allow the plans to be copied by the owner in the event of the author's death or inability of the author to supply copies of the plans.

1.8.7.3.4.4 At the time a certificate of occupancy is issued, an updated set of plans and specifications shall be submitted and a permit fee shall be paid to reflect increased costs.

1.8.7.3.5 Multi-Tenant Buildings. Buildings that are to be completed in phases due to occupancy by tenants shall be permitted for completion by owner to a rough-in status. The individual tenant area shall then have a permit issued and, upon completion of all work, a certificate of occupancy shall be issued for that area only. The AHJ shall approve the certificate of occupancy by stages before starting construction and shall be permitted to require special conditions to provide safety during the completion.

Buildings that will later be occupied by multiple tenants (lessees) shall be permitted to have certain areas constructed to an unfinished "rough-in" condition without affecting the certificate of occupancy issued for the finished portions of the buildings. Future construction to accommodate individual tenants shall be approved upon submittals of acceptable plans and specifications for permit purposes. Certificates of occupancy shall be granted on a case-by-case basis when code compliance has been achieved.

Construction in individual tenant areas shall require special safety and fire protection measures to assure the safety of the building occupants during construction operations.

1.8.7.4 Permit Fees.

1.8.7.4.1 Fee Required. Any person requiring a building permit, in addition to filing an application therefore and before such permit is issued, shall pay such permit fee and plan check fee as required by the jurisdiction.

1.8.7.4.2 Basis of Permit Fee. The AHJ shall be permitted to require an estimate of cost and other descriptive data as a basis for determining the permit fee. Permit fee shall be based on contract or selling price of installation or alterations and shall include electrical, plumbing, mechanical, sprinkler, elevator, and owner-furnished equipment.

1.8.7.4.3 Temporary Structures. A special building permit for a limited time shall be obtained before the erection of temporary structures such as construction sheds, seats, canopies, tents, and fences used in construction work or for temporary purposes such as reviewing stands. Such structures shall be completely removed upon the expiration of the time limit stated in the permit.

1.8.7.5 Conditions of Permit.

1.8.7.5.1 Permit Card. When plans, specifications, and application for permit have been approved and the required fee has been paid, the AHJ will issue a permit for the work. With each permit, the AHJ shall issue a weather-resistant permit card bearing the legal description of the property, the nature of the work being done, the names of the owner and builder or contractor and other pertinent information. The permit card shall be posted and maintained in legible condition in a conspicuous place within 200 feet (60 m) of the construction area during the entire time period the work authorized by the permit is in progress.

1.8.7.5.2 Compliance With Code.

1.8.7.5.2.1 Issuing or granting of a permit or approval of plans and specifications by the AHJ shall not be construed to be a permit for, or an approval of, any violations of any of the provisions of this *Code*. No permit presuming to give authority to violate or cancel any of the provisions of this *Code* shall be valid, except insofar as the use of work that it authorizes is lawful.

1.8.7.5.2.2 When plans and specifications have been approved, the issuance of a permit shall not prevent the AHJ from thereafter requiring correction of errors in such plans and specifications, or from preventing building operations being carried on thereunder in violation of this *Code* or of any other regulations of the jurisdiction applicable thereto. Compliance with this *Code* is the responsibility of the owner or his/her authorized agent.

1.8.7.5.3 Time Limitation.

1.8.7.5.3.1 Permits shall expire if the work authorized by such permit is not commenced within six months from the date of the permit, or if, after commencing, the work is suspended or abandoned for a period of six months at any time during construction operations. The AHJ shall be permitted to extend such permit for a period of 90 days from the date of expiration if the work has not commenced, or for a period of 90 days from the date of the last recorded inspection if written application for such extension is received and approved by the AHJ prior to the date of expiration of the initial permit, and provided that the proposed work complies with all requirements of the code in effect at the time of such renewal.

1.8.7.5.3.2 A previously issued lawful permit shall be valid on the terms of the code under which it was issued, provided, however, that such permit shall be subject to the limitations specified in this section.

1.8.7.5.3.3 Before work for which a building permit has become void can be recommended, a new permit shall be required. The work for which the new permit is issued shall conform to the provisions of this *Code* at the time of reissuance of the permit. The fee shall be based on amount of work remaining to be done.

1.8.7.5.4 Revocation of Permit.

1.8.7.5.4.1 The AHJ shall be hereby granted authority to revoke a permit or approval issued under the provisions of this *Code* when any false statement or misrepresentation of fact is made in the application or on the plans on which the permit or approval was based.

1.8.7.5.4.2 Whenever the work for which a permit has been issued is not being performed in conformity with plans, specifications, or descriptions, or approved plans are not being kept at the site, the AHJ shall notify the contractor or owner or his/her agent in writing that the permit is suspended. Written notice shall be mailed or given to the permit holder or their agent, and it shall be unlawful for any person or persons to perform any work in or about the building or structure, except work required for correction of the violations. If, in the judgment of the AHJ, there is imminent danger that requires immediate action, the permit can be revoked or suspended verbally and written notice shall be served later.

1.8.7.5.4.3 When a permit has been suspended it shall not be reinstated until all violations have been corrected. Written notice of reinstatement shall be given to the permit holder when requested.

1.8.7.6 Inspection.

1.8.7.6.1 Inspection Required.

1.8.7.6.1.1 Before issuing a permit, the AHJ shall be permitted to inspect any building or structure for which an application has been received for a permit to enlarge, alter, repair, relocate, demolish, or change the occupancy thereof. The AHJ shall inspect all buildings and structures from time to time during the work for which a permit was issued and on completion of the work. The AHJ shall cause to be kept a record of every inspection and of all violations of this *Code* and of the correction and disposition of such violations.

1.8.7.6.1.2 Before a building permit is issued for moving a building or structure within or into the jurisdiction, such building or structure shall be inspected by the AHJ. The AHJ shall ascertain that the building being relocated complies with the requirements of this *Code* and all other applicable laws or regulations of the jurisdiction.

1.8.7.6.1.3 All construction or work for which a permit is required shall be subject to mandatory inspections by the AHJ as prescribed in 1.8.7.6.2, and certain types of construction shall have special engineering inspections as specified in 1.8.7.6.3 and Chapter 38. Prior to issuance of a certificate of occupancy, a final inspection shall be made by the AHJ of all construction or work for which a permit has been issued.

1.8.7.6.1.4 When considered necessary by the AHJ, they shall make an inspection of materials or assemblies at the place of manufacture or fabrication. A record shall be maintained of every such inspection and of all violations of this *Code* noted during the inspection.

1.8.7.6.1.5 The AHJ shall make or cause to be made the inspections required in this section. Written reports of inspectors employed by approved inspection services shall be permitted, provided that after investigation the AHJ is satisfied as to the qualifications and reliability of the inspection service. No certificate called for by any of these requirements shall be based on such reports, unless the reports are in writing and are certified by the officer of the agency who made the inspection. Reports issued by inspection services engaged by owner, designer, or contractor of a building shall be promptly forwarded to the AHJ for their information and records.

1.8.7.6.1.6 Work requiring a building permit shall not be commenced until the permit holder or his/her agent shall have posted the building permit card in accordance with the requirements of 1.8.7.1.1. This permit card shall be maintained in such position by the permit holder until the certificate of occupancy has been issued by the AHJ.

1.8.7.6.2 Mandatory Inspections.

1.8.7.6.2.1 Work requiring mandatory inspections shall not be covered or concealed in any manner without first obtaining the approval of the AHJ.

1.8.7.6.2.2 Work shall not be done on any part of a building or structure beyond the stage of work indicated in each of the successive mandatory inspections until inspection has been completed and written approval has been given by the AHJ or their deputy.

1.8.7.6.2.3 The permit holder or their agent shall notify the AHJ of the time when that stage of construction will be ready for inspection. The AHJ shall then make such called inspection and other inspection as necessary, and they shall either approve in writing on the permit card that part of the construction as completed or shall notify the

permit holder or their agent specifically wherein the work fails to comply with the provisions of this *Code*.

Inspections shall be conducted as follows for each building element:

(a) *Foundations*. When the excavation for footings is complete, footing forms, and required anchorage and reinforcing steel are in place, but before concrete is placed.

(b) *Reinforcing Steel (lower stresses)*. After all reinforcing steel is in place, and slab, soffit, beam, girder, column and joist forms on one side of wall forms are in place and are braced, but before the concrete is placed and reshoring after concrete placement.

(c)* *Lowest Floor*. For buildings and structures located wholly or partly within the flood hazard area established by section 100.3.2, to be made by person(s) qualified to complete the elevation certificate required by sections 100.6.1.3 and 100.6.2.3. The certificate shall be submitted to the AHJ immediately after the floor level is set.

(d) *Framing*. To be made at each floor level and after all floor, wall and roof framing, and fire blocking are complete, welds and clip connections are made and all pipes, chimneys, vents, ductwork, rough plumbing, and rough electrical work are in.

(e) *Insulation*. To be made before lathing, wallboard, or other finishes are applied.

(f) *Lathing and Wallboard*. When supports, backing, lath, and/or wallboard are in place and ready for plaster and other finish work and all plastering materials are delivered on the job, but before any finish is applied and before wallboard joints and fasteners are taped and finished.

(g) *Roofing*. After anchor sheet or sheets are on and secured and before installation of capsheet or other finish course.

(h) *Masonry*. After units are set and reinforcing steel is placed and prior to grouting.

(i) Structural Steel. When structural steel members and required connections are complete, but before concealing any members or connections.

(j) *Plumbing and Gas Systems*. To be made in accordance with the requirements of the *Uniform Plumbing Code* and NFPA 54, *National Fuel Gas Code*.

(k) *Electrical Systems*. To be made in accordance with the requirements of NFPA 70, *National Electrical Code®*.

(l) *Heating and Ventilating Systems*. To be made in accordance with the requirements of the *Uniform Mechanical Code*, and NFPA 90A, *Standard for the Installation of Air-Conditioning and Ventilating Systems*.

(m) *Fire Protection Systems*. To be in accordance with applicable standards.

(n) *Special Inspections*. To be made immediately after completion and at such intervals during the progress of the work as required by the AHJ, and as follows:

(1) *Elevators, Escalators, Transporting Assemblies and Amusement Rides*. To be made in accordance with the requirements of ASME A17.1, *Safety Code for Elevators and Escalators*.

(2) *Swimming Pools*. To be made in accordance with the requirements of this *Code*.

(3) *Signs*. To be made in accordance with the requirements of this *Code*.

(4) *Stairways*. To be made in accordance with of 12.2.2.3.5 and 12.2.2.3.6 of this *Code* before the installation of carpeting and after installation of carpeting provided that measurements made after installation of carpeting shall be made to the uncompressed, walking surface of the carpet.

(o) *Other Inspections*. To be made as the AHJ, owner, or contractor reasonably requests. Prefabricated assemblies are permitted to be inspected at the place of manufacture.

(p) *Final Inspection*. To be made when the building or structure is completed and is ready for use or occupancy.

1.8.7.6.2.4 Requests for final inspections shall be made to the office of the AHJ, and reasonable time shall be allowed for such inspection to be made. Rejection or refusal to approve the work for reasons of incompleteness, violation of the provisions of this *Code*, or inadequacy of the construction shall nullify the request for final inspection. The work shall be made to comply with the *Code*, and the request for inspection shall be repeated as required herein.

1.8.7.6.3 Inspection Reports. The AHJ shall keep a record of all inspections made, results, plans filed, surveys made, and certificates of occupancy issued.

1.8.7.7 Cleanup of Site. Upon completion of the proposed work, the permit holder shall clear the site of rubbish, debris, construction sheds, or materials of construction. In the event that there has been damage to public property, or that rubbish, debris, construction sheds, or materials of construction have been left at the site, the AHJ shall refuse to make final inspection and shall notify the permit holder to correct the condition of violation within five days. For failure to comply with such notice after such period of five days, the permit holder shall be subject to the penalties specified herein. The AHJ shall have the cleanup work done and the public property restored in accordance with the applicable requirements of Chapter 4, in which event the costs shall become a lien against the property on which the permit was issued.

1.8.7.8 Certificate of Occupancy.

1.8.7.8.1 Certificate Required.

1.8.7.8.1.1 No building hereafter erected, altered, enlarged, or relocated or where a change of occupancy has been made, shall be used in whole or in part until a certificate of occupancy has been issued by the AHJ certifying that the building and occupancy are in accordance with the provisions of this *Code* and all other laws and regulations applying thereto. When the building or part thereof complies with the provisions of all pertinent laws and regulations, the AHJ shall issue the certificate of occupancy for the building or part thereof. A certificate of occupancy for places of assembly shall indicate thereon and make record of the number of persons for which such certificate is issued. In all manufacturing, commercial, storage, or warehouse occupancies, the design live loads shall be plainly posted.

1.8.7.8.1.2 Any building altered and/or enlarged, when in the opinion of the AHJ, is in compliance with this *Code*, the owner shall be issued a letter affirming compliance in lieu of a certificate of occupancy.

1.8.7.8.2 Existing Occupancy. The authorized occupancy of any structure existing on the date of adoption of this Code shall be permitted to continue without change, except as is specifically covered in this Code, or as is deemed necessary by the AHJ for the general safety and welfare of the occupants and public.

1.8.7.8.3 Revocation of Certificate. The AHJ shall revoke a certificate of occupancy for any building occupied in whole or in part for any use not authorized in this *Code*, or in other laws and regulations of the jurisdiction, or that is changed in occupancy to a classification not complying with this *Code*, or for any building where the live load is imposed on any floor, or where the number of persons permitted to assemble therein or thereon exceed those authorized in said certificate of occupancy. Continued use of the building or structure after the revocation of said certificate shall be in violation of this *Code*.

1.8.7.8.4 Temporary Certificate of Occupancy. A temporary certificate of occupancy shall be permitted to be issued by the AHJ for the use of parts of a building prior to completion of the entire building.

1.8.7.8.5 Connection of Services. It shall be unlawful for a public service corporation or agency to begin utility service to a building or structure, except temporary service for use during building construction and/or testing operations, until a certificate of occupancy has been issued.

Chapter 1 Annex

A.1.8.7.6.2.3(c) In order to complete the elevation certificate, additional subsequent inspections may be required to determine the lowest elevation of machinery or equipment servicing the building, adjacent grade elevations, and floor opening information.

SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for all the material that is to appear in a new document. This proposal makes clear the SAF-FUN committee's choice of what is to be

contained in Chapter 1 on administration. The draft incorporates the actions taken on the proposals on Chapter 1; includes editorial changes; and reflects changes made by the committee so as to be appropriate for the building code.

The major technical change made is the deletion of percentage of work or dollar value triggers at which the provisions on the Code apply. Generalized thresholds, as provided in Chapter 4, are adequate.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

COMMENT ON AFFIRMATIVE:

LATHROP: 1.4.3 is not coordinated with Chapter 54. As written it makes no sense in light of the rewrite of Chapter 54.

1.6.2 Change title to "Standard~~s~~ of Quality and Strength" as written it makes no sense and will make electronic searches misleading.

1.6.3 Change title to "~~Systems, Materials and Methods~~ Equivalency Request." Similar to 1.6.2.

1.8.3.2 is still based on a five person appeals board which the committee rejected. Suggest wording like "...shall make the first appointments to the Board of Appeals on a staggered basis for on-, two- and three-year terms, and thereafter, they shall be appointed for a term of three years."

1.8.3.7.2 delete "~~to encourage the development of new technologies, methods, and materials~~" This is commentary and should be deleted or moved to the annex.

1.8.6.3.1.1(2) change "exit" to "means of egress." This makes no sense with the three part definition of means of egress.

1.8.6.3.1.2(3) change "exit" to "means of egress." Same as 1.8.6.3.1.1.

(Log #CP1105)
Committee: BLD-MAT

5000- 2 - (Chapter 1): Accept

TCC NOTE: The TCC directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that the TC review the action and revise/relocate the material as needed for clarity.

SUBMITTER: Technical Committee Materials

RECOMMENDATION: Delete charging statement throughout all Materials Chapters:

"Where the requirements of the referenced standards differ from the requirements of this chapter, the requirements of this chapter shall apply."

Move this statement to Chapter 1.

"Where the requirements of the referenced standards differ from the requirements of this code, the requirements of this code shall apply."

SUBSTANTIATION: This lanugage sets the fundamental order of presidence for chapters within the Code as well as the referenced documents.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

NOT RETURNED: 1 Thomas

(Log #867)
Committee: SAF-FUN

5000- 3 - (1-1): Accept in Principle

SUBMITTER: David S. Collins, The Preview Group, Inc./Rep. The American Institute of Architect

RECOMMENDATION: Revise as follows:

1.1 Title. The provisions in the following chapters and sections of this volume, ~~together with the annexes,~~ shall constitute and be known as The NFPA Building Code, hereinafter referred to as the Code.

SUBSTANTIATION: The Annexes are not a part of the code unless they are specifically adopted as part of the code.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-1 (Log #CP2047).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #605)
Committee: SAF-FUN

5000- 4 - (1-5.1): Accept in Principle

SUBMITTER: Kenneth E. Isman, National Fire Sprinkler Association

RECOMMENDATION: Add text to read as follows:

1.5.1 Mission Continuity. It shall also be the purpose of this Code to maintain a reasonable degree of assurance that the building will be able to fulfill its mission, even after a fire event.

A-1.5.1 Over and above the issues of life and property loss within a building, the loss of a building can have a devastating effect on an entire community. Through the proper use and enforcement of the Code, the community can make sure that the buildings where they work, live, learn and play will continue to exist for the good of the community. If any of these buildings are lost, the community suffers. Therefore, the Code is necessary to ensure that the buildings are not lost.

SUBSTANTIATION: The loss of any single building can be devastating to a community. Philadelphia learned this after the fire a 1 Meridian Plaza. Businesses that had been in that building moved out of state, costing the city millions in taxes. Service businesses (restaurants, laundries, travel agencies) that existed in the downtown area around that building lost billions in revenue because the people working in that building never came back.

The Code needs to specifically state that one of its objectives is mission continuity. This fundamental assumption goes into the requirements in the prescriptive part of the Code for buildings like schools, but it is frequently missing when performance based alternatives are considered.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-221 (Log #CP2054) on Chapter 4.

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #674)
Committee: SAF-FUN

5000- 5 - (1-6.1): Reject

SUBMITTER: Philip A. Cocker, Los Angeles County Fire Dept.

RECOMMENDATION: Add second paragraph to Section 1.6.1 to read as follows:

For buildings or structures located in areas that might be threatened by wildfire, see NFPA 299, Standard for Protection of Life and Property from Wildfire for certain building requirements.

SUBSTANTIATION: The scope of NFPA 5000 could be interpreted to mean that all building and structure requirements are addressed. Certain roofing, siding and protection requirements unique to the wildland environment and found in NFPA 299, should be referenced.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The submitter's material is not a scope issue; also it presents nonmandatory language.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #601)
Committee: SAF-FUN

5000- 6 - (1-6.2): Reject
TCC NOTE: The Technical Correlating Committee (TCC) notes that the reference in the Committee Statement should be to 4.5.5 and 4.5.6.
SUBMITTER: David B. Hattis, Building Technology Inc./Rep. U.S. Department of Housing & Urban Development
RECOMMENDATION: Revise text as follows:
1.6.2 Additions, Alternations, and Repairs. Additions, alternations, repairs, and changes of use or occupancy in all buildings and structures shall comply with the provisions of Chapter 54 ~~for new buildings and structures, except as otherwise provided in 1.12.1~~ of this Code.
SUBSTANTIATION: For consistency with the proposal for a new Chapter 54, based on the NARRP.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The action on Proposal 5000-1 (Log #CP2047) deletes draft paragraph 1.6.2. The subject is adequately covered by 4.6.5 and 4.6.6.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #622)
Committee: SAF-FUN

5000- 7 - (1-6.4 and Chapter 3): Reject
TCC NOTE: The Technical Correlating Committee (TCC) recommends that this proposal be formally referred to the NFPA TCC on Manufactured Housing. This TCC has primary responsibility for manufactured home installation and siting criteria.
SUBMITTER: Christopher P. Jones, Reston, VA
RECOMMENDATION: Add text to read as follows:
1.6.4 Manufactured Housing. The foundation, elevation, anchorage and installation of new and replacement manufactured housing, located wholly or partly within flood hazard areas established by Section 100.3.2, shall comply with the flood-related provisions of this Code.
3.3.X Manufactured Home. A structure, transportable in one or more sections, built on a chassis and designed to be used as a dwelling with or without a permanent foundation, when installed on a site and connected to the required utilities. Manufactured homes are constructed to the Federal Manufactured Home Construction and Safety Standards and rules and regulations promulgated by the U.S. Department of Housing and Urban Development. For all matters related to flood resistant design and construction, the term "Manufactured Home": also includes mobile homes, park trailers, travel trailers and similar transportable structures that are placed on a site for 180 consecutive days or longer.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations for the foundation, elevation, anchoring, and installation requirements for manufactured homes in flood hazard areas. Changes to both, Chapter 1 and Chapter 3 should be considered together for this item. Note that the proposed definition for "manufactured home" was taken from NFPA 501 (2000), and modified slightly to reflect the NFIP requirements.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's subject is not a scope issue. The proposed definition conflicts with the "preferred NFPA definition" contained in NFPA 501.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #2)
Committee: SAF-FUN

5000- 8 - (1-7.1): Reject
SUBMITTER: William A. Webb, Performance Technology Consulting, Ltd.**RECOMMENDATION**: Add the following:
The Director shall be a registered architect or a professional engineer.
SUBSTANTIATION: This is to establish a qualification level for the Director which is at least equal to those of the designers whose work the Director will be reviewing and approving.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Inadequate substantiation for the change. The issue should be the responsibility of the AHJ to decide.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #284)
Committee: SAF-FUN

5000- 9 - (1-7.2): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise 1.7.2 to read as follows:
1.7.2 Delegation of authority. The AHJ is hereby empowered ~~shall have the power~~ to delegate authority ~~powers~~ and assignments to subordinate employees working under his/her authority. Such employees shall have the authority to carry out the duties and assignments ~~powers~~ as delegated by the AHJ.
SUBSTANTIATION: The proposed wording more clearly sates that the AHJ is empowered to delegate authority and assignments upon adoption of the Code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #624)
Committee: SAF-FUN

5000- 10 - (1-7.3.3): Reject
TCC NOTE: The Technical Correlating Committee (TCC) notes that the reference in the Committee Statement should be to 1.8.7.6.3.
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Add text to read as follows:
1.7.3.3 The AHJ shall keep permanent public records of permit applications received, permits issued, inspection reports prepared, flood hazard certificates, variance requests and variances granted for buildings and structures located in flood hazard areas established by Section 100.3.2.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject is adequately covered by 1.13.3.4.3 and 1.13.6.3. The submitter's proposed requirement is too

emcompassing. It would impose on the AHJ an unreasonable burden which the submitter has not adequately substantiated.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #285)
Committee: SAF-FUN

5000- 11 - (1-7.4.1): Reject
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: In the first sentence after the second use of the word "representative" and before the word "authorized", delete the words "shall be" and insert the words "is/are".
SUBSTANTIATION: The words "shall be" are not needed. The AHJ or his representative is authorized upon adoption of the Code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Use of "shall be" is appropriate Code language.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #404)
Committee: SAF-FUN

5000- 12 - (1-7.4.2): Reject
SUBMITTER: Rick Breezee
RECOMMENDATION: Delete the following text:
~~1.7.4.2 No owner or occupant or other person having charge, care, or control of any building or premises shall fail or neglect, after proper request made as herein provided, to permit entry therein by the AHJ or his/her authorized representative for the purpose of inspection and examination as provided by this Code. Any person violating this subsection shall be guilty of misdemeanor as provided under any and all state and local statutes.~~
SUBSTANTIATION: This section is redundant. These provisions are addressed in Section 1.7.4.1. If both sections remain, they could diverge in future code development. Eliminating the redundancy eliminates potential conflicts in the future.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The paragraph provides a penalty that 1.7.4.1 does not; thus, the paragraphs are not redundant.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #286)
Committee: SAF-FUN

5000- 13 - (1-7.5): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: In the first sentence after the term "AHJ" and before the word "order", delete the word "shall" and insert the words "is hereby authorized to".
SUBSTANTIATION: The AHJ should not be mandated by the word "shall" to stop work. The AHJ may be able to obtain compliance by other action. If there is no alternative solution, the AHJ "is authorized" to stop work.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #405)
Committee: SAF-FUN

5000- 14 - (1-7.5): Accept
SUBMITTER: Rick Breezee
RECOMMENDATION: Revise text to read as follows:
1.7.5 Stop-Work Orders. Whenever any ~~building~~ work is being done contrary to provisions of this Code, ~~or is being done in an unsafe or dangerous manner,~~ the AHJ shall order such work stopped. ~~Such violations shall be permitted to be corrected by notice in writing served on the person(s) engaged in doing or causing~~ Such work ~~to be done, and such persons~~ shall immediately stop ~~the work~~ until authorized by the AHJ to proceed.
SUBSTANTIATION: The current provisions regulate workplace safety. The Building Code should not be regulating workplace safety. Additionally, correction of violations is already addressed in the Code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #287)
Committee: SAF-FUN

5000- 15 - (1-7.6): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: In the first sentence after the term "AHJ" and before the word "order", delete the word "shall" and insert the words "is hereby authorized to".
SUBSTANTIATION: The AHJ should not be mandated to issue such an order by use of the word "shall". The AHJ may be able to obtain compliance by other action. If there is no alternative solution, the AHJ "is authorized" to issue the needed order.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #288)
Committee: SAF-FUN

5000- 16 - (1-7.7): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: After the term "AHJ" and before the word "to", delete the words "shall be permitted" and insert the words "is hereby authorized".
SUBSTANTIATION: The revision more clearly states that the AHJ is authorized to act upon adoption of the Code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #406)
Committee: SAF-FUN

5000- 17 - (1-7.7 and 1.13.6.2.1): Reject
SUBMITTER: Rick Breezee
RECOMMENDATION: Revise text to read as follows:
~~1.7.7 Concealed Work. The AHJ shall be permitted to order parts of the structural frame of any building or structure to be exposed for inspection when the building or part thereof is in an unsafe or dangerous condition, or when there is willful or negligent concealment of a violation of this Code.~~
Also:

1.13.6.2.1 Work requiring mandatory inspections shall not be covered or concealed in any manner without first obtaining the approval of the AHJ.

The AHJ shall be authorized to order any portion of a building or structure to be exposed for inspection when the building or structure, or part thereof, is in violation of this Code.

SUBSTANTIATION: Currently provisions for concealed work appear to be in Sections 1.7.7 and 1.13.6.2.1. This revision consolidates the provisions to Section 1.13.6.2.1. The requirements of Section 1.7.7 were relocated to Section 1.13.6.2.1 and revised to provide clarification.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The two paragraphs are not redundant. Paragraph 1.13.6.2.1 applies with a permit; paragraph 1.7.7 applies at any time.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #521)
Committee: SAF-FUN

5000- 18 - (1-8): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Change "shall" to "shall have the authority to" in the first and second sentences.
SUBSTANTIATION: This section, as written, places an undue burden on the AHJ to check into all other rules and regulations. As rewritten, the section gives the authority, but does not mandate the action.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #809)
Committee: SAF-FUN

5000- 19 - (1-9.1.1): Accept
SUBMITTER: Dick M. Glumac, Glumac International/Rep. Golden Gate Chapter ASHRAE
RECOMMENDATION: Add the words "at least five ...." to read "... the Board of Appeals consisting of at least five members ....".
SUBSTANTIATION: Some authorities having jurisdiction have more than five. For instance, here in San Francisco we have 1 Architect, 1 Mechanical Engineer, 1 Contractor, 1 Electrical Engineer , 1 Structural Engineer, and 1 Lay Person.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #810)
Committee: SAF-FUN

5000- 20 - (1-9.3): Accept in Principle
SUBMITTER: Dick M. Glumac, Glumac International/Rep. Golden Gate Chapter ASHRAE
RECOMMENDATION: We propose the quorum to be minimum 2/3 of members.
SUBSTANTIATION: If more than five members composed of the Board of Appeals, then the "super majority" defined as 2/3.
COMMITTEE ACTION: Accept in Principle.
Revise 1.9.3 as follows:

1.9.3 Quorum. ~~Four~~ Two-thirds but not less than four members of the Board of Appeals shall constitute a quorum. In varying the application of any provision of this Code, or in modifying an order of the AHJ, a majority vote shall be required.
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #522)
Committee: SAF-FUN

5000- 21 - (1-9.6): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise text to read:
"An appeal of the decision of the AHJ shall be filed...".
SUBSTANTIATION: As written, this section is unclear whether the Appeal is to the decision of the AHJ, or to the decision of the Board.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #73)
Committee: SAF-FUN

5000- 22 - (1-9.7): Accept in Principle
SUBMITTER: Northcentral Regional Fire Code Dev. Committee
RECOMMENDATION: Replace as follows:
1.9.7 Equivalencies and Alternatives.
1.9.7.1 When appealed to and after such public hearing, the specific requirements of this Code shall be permitted to be modified by the board to allow alternative arrangements that will secure as nearly equivalent building safety as practical, but in no case shall the modification afford less safety than, in the judgment of the board, that which would be provided by compliance with the corresponding provisions contained in this Code.
Delete 1 and 2.
Delete the word "variance" throughout the code.
SUBSTANTIATION: Section 1.5 establishes the code as a minimum design document. Permitting language that would permit a board to vary the code below the minimum established guidelines is against pubic safety. The board should only be granting equivalencies and alternative levels of protection that are at least equal to the minimums set by the code.
COMMITTEE ACTION: Accept in Principle.
Revise 1.9.7 as follows:
1.9.7 ~~Modifications and Variations~~ Authority of the Board.
1.9.7.1 When appealed to and after such public hearing, the specific requirements of this Code shall be permitted to be modified by the board to allow alternative arrangements that will secure as nearly equivalent building safety as practical. ~~the board shall be permitted to vary the application of any provision of this Code to any particular case when in the opinion of the board any of the following conditions exist:~~
~~(1) The enforcement thereof would constitute an injustice and would be contrary to the purpose of this Code or to the public interest~~
~~(2) A variance is required to modify, amend, or reverse the interpretation of the AHJ.~~
1.9.7.2 The board shall be permitted to grant modifications ~~variances,~~ through the procedures outlined for equivalency in Section 1.12.4 of this Code, to encourage the development of new technologies, methods, and materials.

1.9.7.3 A decision of the board to modify ~~vary~~ the application of any provision of this Code, or to modify ~~vary~~ an order of the AHJ, shall be in writing and shall specify the manner in which such variation or modification is made, the conditions upon which it is made, and the reasons therefore.

COMMITTEE STATEMENT: The committee action gvies the board a reasonable degree of authority. The committee action should meet the submitter's intent. The committee found no other occurences of the words "variance" or "variances" in the Code.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #289)
Committee: SAF-FUN

5000- 23 - (1-9.7.3): Reject

SUBMITTER: George M. Lanier, Rome Fire Dept., GA

RECOMMENDATION: Revise text to read as follows:

1.9.7.3 A decision of the board to vary the application of any provision of this Code or to modify an order of the AHJ, shall be in compliance with any applicable state law, rule or regulation, shall be in writing and shall specify the manner in which such variation or modification is made, the conditions upon which it is made, and the revisions therefore.

SUBSTANTIATION: In many instances, local boards fail to recognize that they may be acting in violation of state laws, etc. By adding the proposed wording, the AHJ and the board are reminded that any actions they take cannot be in conflict with applicable state provisions.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Enforcement of state law is not within the scope of the Code.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #625)
Committee: BLD-STR

5000- 24 - (1-9.8): Accept in Principle

TCC NOTE: (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR requesting that the subject of this proposal be revisited now that a draft of Chapter 100 Flood Resistant Design and Construction is available via Proposal 5000-1421 (Log #623).

SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate

RECOMMENDATION: Insert a new Section 1.9.8 (Variances in Flood Hazard Areas) and renumber existing Sections 1.9.8 (Decisions) as 1.9.9.

1.9.8 Variances in Flood Hazard Areas.

1.9.8.1 General. Any person may request a variance to flood-resistant siting, design and construction provisions of this Code, by submission of a written request to the secretary of the board. Such written request shall be transmitted to the board immediately. The board shall consider and render decisions on requests for variances in flood hazard areas established by Section 100.3.2, which would permit construction in a manner otherwise prohibited by the flood-related provisions of this Code.

1.9.8.2 Historic Structures. The board shall be permitted to grant a variance for the repair or rehabilitation of a historic structure, upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure, and upon a determination that the proposed repair or rehabilitation is the minimum necessary to preserve the historic character and design of the structure.

1.9.8.3 Floodways. Within any designated regulatory floodway, the board shall not grant a variance to the provisions of this Code, if the variance would result in an increase in flood levels during the base flood discharge.

1.9.8.4 Conditions for Granting. The board shall be permitted to grant variances only upon:

(1) showing by the applicant of good and sufficient cause,

(2) determination by the board that failure to grant the variance due to the unique physical characteristics of the property would result in exceptional hardship to the applicant,

(3) determination by the board that the granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, nor create nuisances, cause fraud or victimization of the public.

(4) determination by the board that the variance will not conflict with federal, state or local laws, regulations or ordinances,

(5) determination by the board that the variance is the minimum necessary, considering the flood hazard, to afford relief.

(6) written notification to the applicant by the AHJ, that construction of a structure below the base flood elevation will increase risk to life and property, that construction of a structure below the base flood elevation will result in increased premium rates for flood insurance, and that the increased insurance costs will be commensurate with the increased risk.

1.9.8.5 Functionally Dependent Facilities. The board shall be permitted to grant a variance for the construction, substantial improvement, or restoration of substantial damage of a functionally dependent facility, provided the conditions of Sections 1.9.8.4 and 1.9.8.6 are met, along with the following additional conditions:

(1) showing by the applicant that material and methods will be used to minimize flood damages during the design flood,

(2) determination by the board that the work authorized by the variance will create no additional threats to public safety.

1.9.8.6 Considerations. In reviewing requests for variances to the flood-related provisions of this Code, the board shall consider all technical evaluations and relevant factors, including the following:

(1) the danger that materials and debris may be swept onto other lands to the injury of others'

(2) the danger to life and property due to flooding or erosion damage, and the safety of access to the property in times of flood for emergency vehicles,

(3) the susceptibility of the proposed development, its facilities and their contents, to flood damage, and the effects of such damage on present and future owners,

(4) the importance of the services provided by the proposed development to the community,

(5) the availability of alternate locations for the proposed development that are less subject to flooding and flood effects,

(6) the compatibility of the proposed development with existing and anticipated development, and with community comprehensive and floodplain management plans,

(7) the expected heights, velocity, duration, rate of rise, debris and sediment transport of flood waters, and wave action, expected at the site,

(8) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and infrastructure servicing the proposed development.

1.9.~~8~~9 Decisions.

SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.

COMMITTEE ACTION: Accept in Principle.

COMMITTEE STATEMENT: The requirements for Variances in Flood Hazards Areas have been relocated to Annex Z. Also see Committee Action on Proposal 5000-1457 (Log #1208).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 20
NEGATIVE: 1
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF NEGATIVE:
TAMERHOULET: This regulation should not be in the Building Code/Planning and Zoning departments.
EXPLANATION OF ABSTENTION:
SUTTON: • Due to the incomplete or out-of-date condition of the published draft for NFPA 5000, the Technical Committee (TC) on Building Structures and Construction decided to undertake a complete rewrite of its assigned chapters. Adequate time to review the rewritten chapters has not been provided. Several chapters (35, 36, 38, and 39) were introduced and rewritten in their entirety at the TC meeting held recently in Phoenix, AZ. A complete and thorough review of these revised chapters is needed before I could vote in the affirmative. It would be unprofessional to do otherwise.
• Many new and costly provisions have been added to NFPA 5000 that go beyond traditional building code requirements, far exceeding what is needed for public health, safety, and general welfare. Even worse, for many of the changes (for example, hail protection of roof coverings), no standard has been applied in determining whether the requirements are cost effective and affordable when applied to residential construction. Estimates by the Census Bureau have shown that increases of $1,000 to the cost of an average U.S. home prices 300,000 households out of the market for purchasing a new home. New homes constructed to meet current minimum standards for public health and safety contained in the current model building codes are much safer than older homes. Therefore, such increases are pricing perspective home buyers out of safer and more affordable housing.
• NAHB also objects to NFPA's decision to only allow reference to an NFPA standard in NFPA 5000 when one exists. It is unfair to eliminate references to multiple standards from other organizations such as ASTM, ANSI, etc., when deemed equivalent. This decision will not benefit code officials, suppliers, builders, or the public.

(Log #501)
Committee: SAF-FUN

5000- 25 - (1-12.1): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete 1.12.1.1 through 1.12.1.7. Replace with "Additions, alterations, or repairs shall comply with the provisions of this code for new buildings. Portions or systems for the building that are not affected need not comply with the provisions of this code for new construction. Additions shall not cause an existing building to be in violation of this code for height, area, or facilities."
Renumber 1.12.1.8 to 1.12.1.2.
SUBSTANTIATION: This approach was formerly part of several building codes. Most have chosen the approach identified above because the percentage of value approach is unenforceable. Since the existing building provisions of the Life Safety Code are required by this Code, there is no need for this code to require upgrades to new building requirements for the entire building.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal revises the provisions on alterations or changes of occupancy; this should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #602)
Committee: SAF-FUN

5000- 26 - (1-12.1 through 1.12.1.8(b)): Accept in Principle
SUBMITTER: David B. Hattis, Building Technology Inc./Rep. U.S. Department of Housing & Urban Development
RECOMMENDATION: Delete the following text:
~~1.12.1 Alternation of Buildings and Structures.~~
~~(b) Change of occupancy classification or nature of use shall not be constructed to be a change of tenants or ownership where the occupancy classification and nature of use remain the same. When a building or part thereof has been vacant for a period of six months or more, a new certificate of occupancy shall be obtained before tenancy begins.~~
SUBSTANTIATION: Delete the entire section for consistency with the proposal for a new Chapter 54, based on the NARRP.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal revises the provisions on alterations or changes of occupancy and deletes 90% of the material in 1.12.1. This should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #626)
Committee: SAF-FUN

5000- 27 - (1-12.1.1): Reject
TCC NOTE: The Technical Correlating Committee (TCC) directs that each technical committee review the proposals assigned to it on the subject of NFIP flood-resistant design and construction. Each TC is directed to make proper reference to the new section on this subject, Annex Z. See individual TCC notes on proposals that address the subject.Further, the TCC directs that a task group be convened (under the direction of the TCC) to address the subject of flood-resistant design and construction in time to recommend to the TC's appropriate actions that can be taken, at the ROC-preparation meetings, on the proposals and on any public comments received on the subject.
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
1.12.1.1 Compliance with Code. Buildings or structures to which additions, alterations, repairs, or changes of occupancy are proposed or intended shall be made to comply with all requirements for new buildings or structures of like area, height, type of construction or occupancy classification, except as provided in this section.
1.12.1.1.1 Flood Hazard Areas. For buildings and structures, located wholly or partly within the flood hazard area established by Section 100.3.2, and undergoing substantial improvement or restoration of substantial damage, all aspects of the buildings and structures shall be crought into compliance with the requirements for new construction in Chapter 100.
SUBSTANTIATION: Makes code provisions compliant with National Food Insurance Program regulations (administrative requirements) for substantial damage and substantial improvement of buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject should not be addressed in Chapter 1. Each occupancy chapter technical committee has been given language on flood control to consider for its specific occupancy. The decision to impose these requirements should be left to the individual occupancy chapters.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1092)
Committee: SAF-FUN

5000- 28 - (1-12.1.1 through 1.12.1.7): Accept in Principle
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete Sections 1.12.1.1 through 1.12.1.7.
SUBSTANTIATION: The building code should not limit or restrict the community's ability to issue building permits based on the specific case.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #290)
Committee: SAF-FUN

5000- 29 - (1-12.1.6): Reject
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise 1.12.1.6 to read as follows:
1.12.1.6 Value Determination. For the purpose of this section, the value of an existing building shall be determined by the AHJ <u>based on criteria established by the local and or state governing authority</u>.
SUBSTANTIATION: The AHJ is the agent of the governing authority. The AHJ should not be authorized by the Code to establish the values of existing property. That should be the duty of the governing legislative authority of the jurisdiction. Many states have laws that establish criteria. In many instances this is based on state and or local property tax evaluations that are outside the scope of the authority of the AHJ.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The paragraph was deleted by the action on Proposal 5000-1 (Log #CP2047).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #627)
Committee: SAF-FUN

5000- 30 - (1-12.1.6 Exception (New)): Reject
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
1.12.1.6 Value Determination. For the purpose of this section, the value of an existing building or structure shall be determined by the AHJ.
<u>Exception. For the purposes of substantial damage and substantial improvement determinations in flood hazard areas established by section 100.3.2, the value of a building or structure shall be its market value before the damage occurred or its market value before the start of construction of the improvement.</u>
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for "valuations" used in substantial damage and substantial improvement determinations for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The paragraph was deleted by the action on Proposal 5000-1 (Log #CP2047).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #523)
Committee: SAF-FUN

5000- 31 - (1-12.1.8(b)): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise first sentence to read:
"Change of tenants or ownership shall not be construed to be a change of occupancy classification where the nature of use and assigned occupancy classification remain the same."
SUBSTANTIATION: As written, the logic is backwards.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #628)
Committee: SAF-FUN

5000- 32 - (1-12.2.2): Accept
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
1.12.2.2 Property. No debris shall remain on any property or sidewalk or street contiguous thereto, resulting from fire, windstorm, <u>flood,</u> or demolition or partial demolition of any building; nor shall any equipment, excess building materials, storage shed, or debris remain upon any such property, sidewalk, or street upon completion of any new building upon such lot; nor shall any equipment, materials, toolshed, or debris be stored on any vacant or partly vacant lot, except as provided in the land use regulations of the jurisdiction.
SUBSTANTIATION: This proposal treats debris from floods like debris from any other hazard.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #524)
Committee: SAF-FUN

5000- 33 - (1-12.2.3): Accept
TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that the subject of this proposal be revisited now that a draft of Chapter 54 Existing Buildings is available via Proposal 5000-1416 (Log #CP1416).
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add to the end:
"and the existing building and structure is in compliance with Chapter 54 of this Code."

SUBSTANTIATION: As written, this section conflicts with Chapter 54. Either the existing building portion of the Life Safety Code applies (see Chapter 54) or it does not. This decision needs to be made and the code must be clear.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #291)
Committee: SAF-FUN

5000- 34 - (1-12.3.1): Accept in Principle
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise 1.12.3.1 to read as follows:
1.12.3.1 Unsafe Building Defined. All buildings shall be considered unsafe buildings that are, or hereafter become, ~~unsafe~~ unsanitary, or deficient in exit facilities, or that constitute a hazard from fire or ~~windstorm~~ natural or manmade threats, or that otherwise dangerous to human life or public welfare by reason of illegal or improper use, occupancy, or maintenance, or that do not comply with the provisions of applicable codes, or that have been substantially damaged by ~~the elements, acts of God~~ fire or explosion or other natural or manmade cause, or that are incomplete buildings for which building permits have expired. The falling away, hanging loose, or loosening of any siding, block, or other building material, structural member, appurtenance, or part thereof of a building, the deterioration of the structure or structural parts of a building, a partially destroyed building or any part of a building when caused by deterioration or overstressing, shall be considered unsafe. The existence of unsanitary conditions by reason of inadequate or malfunctioning sanitary facilities or waste disposal systems shall be considered unsafe. ~~Buildings which, by reason of illegal or improper use, occupancy, or maintenance, do not conform to provisions of this Code shall be considered unsafe.~~
SUBSTANTIATION: The provisions of 1.12.3.1 need to deal only with the defining of an "unsafe building". The action to be taken by the AHJ to deal with such buildings should be elsewhere. Suggestions are offered in other proposals. Part of original 1.12.3.2.1 are included in the revised text above.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-37 (Log #293) and Proposal 5000-36 (Log #292).
COMMITTEE STATEMENT: The action on the referenced proposals (which are from the same submitter as this proposal) should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #629)
Committee: SAF-FUN

5000- 35 - (1-12.3.1):
TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this proposal be changed from "Accept" to "Accept in Principle". See Proposal 5000-37 (Log #293) where the word 'flood' has been grouped into the 'natural or man-made threats' category."
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
1.12.3.1 Unsafe Building Defined. All buildings shall be considered unsafe buildings that are, or that hereafter become, unsafe, unsanitary, or deficient in exit facilities, or that constitute a hazard from fire, flood or windstorm, or that are otherwise dangerous to human life or public welfare by reason of illegal or improper use, occupancy, or maintenance, or that do not comply with the provisions of applicable codes, or that have been substantially damaged by the elements, acts of God, fire, flood or explosion or other cause, or that are incomplete buildings for which building permits have expired. All such buildings, deemed to be unsafe by the AHJ, are hereby declared to be public nuisances and shall be demolished and removed from the premises concerned or shall be made safe and sanitary in a manner required by the AHJ and as provided in this section or other applicable laws and regulations of the jurisdiction.
SUBSTANTIATION: This proposal recognizes unsafe buildings can be caused by floods.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #292)
Committee: SAF-FUN

5000- 36 - (1-12.3.2): Accept in Principle
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise title 1.12.3.2 to read as follows and insert a new 1.12.3.2.1 based on part of the original 1.12.3.1 to read as follows:
1.12.3.2 Authority of the AHJ Regarding Unsafe Buildings and Buildings Defined as a Fire Hazard.
1.12.3.2.1 All ~~such~~ buildings deemed to be unsafe and to be a fire hazard by the AHJ based on 1.12.3.1 and or 1.12.3.1.1, are hereby declared to be public nuisances and shall be demolished and removed from the premises concerned or shall be made safe and sanitary in a manner ~~required~~ acceptable to the AHJ and as provided in this section and other applicable laws, rules and regulations of the jurisdiction and or the state.
SUBSTANTIATION: This removes text from the definition of "unsafe building" and places it in a separate section as an action provision. This and related changes should make the sections "flow" better for the user.
COMMITTEE ACTION: Accept in Principle.
Revise 1.12.3.2 as follows:
1.12.3.2 ~~Criteria~~ Authority of the AHJ Regarding Unsafe Buildings or Buildings That Are a Fire Hazard. All buildings deemed to be unsafe or to be a fire hazard by the AHJ based on 1.12.3.1 are hereby declared to be public nuisances and shall be demolished and removed from the premises concerned or shall be made safe and sanitary in a manner acceptable to the AHJ and as provided in this section and other applicable laws, rules and regulations of the jurisdiction.
~~1.12.3.2.1 A building shall be deemed to be a fire hazard and unsafe when it is vacant and unguarded and open at door or window, or when there is an unwarranted accumulation of dust, debris, or other combustible materials therein, or when the building does not provide the exits or fire protection required herein for the most recent occupancy, or when the electrical or mechanical installations or systems create a hazardous condition. The falling away, hanging loose, or loosening of any siding, block, brick, or other building material, structural member, appurtenance, or part thereof of a building; the deterioration of the structure or structural parts of a building; a partially destroyed building; any unusual sagging or leaning out of plumb of a building or any part of a building when caused by deterioration or overstressing, all shall be considered unsafe. The existence of unsanitary conditions by reason of inadequate malfunctioning sanitary facilities or waste disposal systems shall be considered unsafe. Buildings which, by reason of illegal or improper use, occupancy, or maintenance, do not conform to provisions of this Code shall be considered unsafe.~~
~~1.12.3.2.2 If the cost of alteration, repair, or replacement of an unsafe building or part thereof exceeds 50 percent of its value, the~~

~~building shall be demolished and removed from the premises. If the cost of alteration, repair, or replacement of an unsafe building or part thereof does not exceed 50 percent of such replacement cost, the building shall be permitted to be repaired and made safe as provided in 1.12.3.4.~~

~~1.12.3.2.3 If the cost of structural repair or structural replacement of an unsafe building or part thereof exceeds 33 percent of the structural value, such building or part thereof shall be demolished and removed from the premises; and if the cost of such structural repairs does not exceed 33 percent of such replacement cost, such building or part thereof shall be permitted to be structurally repaired and made safe, as provided in 1.12.3.4.~~

~~1.12.3.2.4 To determine the value of a building and the cost of alterations, repairs, and replacement, the regulations in 1.13.4 shall apply.~~

COMMITTEE STATEMENT: The committee action should meet the submitter's intent. Proposal 5000-37 (Log #293) from the same submitter is deleting/moving the provisions of 1.12.3.2.1 to the 1.12.3.1's. The percentage of work or dollar value triggers at which these provisions on the Code apply have been deleted (i.e., paragraph 1.12.3.2.2 through 1.12.3.2.4). Generalized thresholds, as provided in Chapter 4, are adequate.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #293)

Committee: SAF-FUN

5000- 37 - (1-12.3.2.1): Accept in Principle

SUBMITTER: George M. Lanier, Rome Fire Dept., GA

RECOMMENDATION: Renumber 1.12.3.2.1 to 1.12.3.1.1 and modify it to read as follows:

1.12.3.1.1 Building as a Fire Hazard Defined. A building shall be deemed to be a fire hazard and unsafe when it is vacant and unguarded and open to unauthorized entry at door and or window, or when there is an ~~unwarranted~~ accumulation of combustible dust, debris, or ~~other combustible~~ materials therein deemed to be a hazard by the AHJ and or the fire authority having jurisdiction or when the building does not provide the exits or fire protection required herein for the most recent occupancy, or when electrical or mechanical installations or systems create a hazardous condition.

SUBSTANTIATION: This provision need to follow the definition of an "unsafe building". This places definitions in a single location. Added text is to help clarify the definition.

COMMITTEE ACTION: Accept in Principle.

Revise the title of 1.12.3 and revise 1.12.3.1 as follows:

1.12.3 Unsafe Buildings and Fire Hazards.

1.12.3.1 Descriptions.

1.12.3.1.1 Unsafe Building Described ~~Defined~~. All buildings shall be considered unsafe buildings that are, or that hereafter become, ~~unsafe,~~

(1) unsanitary~~, or~~

(2) deficient in exit facilities~~, or that constitute a~~

(3) a hazard from fire or ~~windstorm~~ natural or man-made threats~~, or that are otherwise~~

(4) dangerous to human life or public welfare by reason of illegal or improper use, occupancy, or maintenance~~, or that~~

(5) noncompliant ~~do not comply~~ with the provisions of applicable codes~~, or that have been~~

(6) substantially damaged by ~~the elements, acts of God,~~ fire or explosion or other natural or man-made cause~~, or that are~~

(7) incomplete buildings for which building permits have expired.

The falling away, hanging loose, or loosening of any siding, block, or other building material, structural member, appurtenance, or part thereof of a building, the deterioration of the structure or structural parts of a building, a partially destroyed building or any part of a building when caused by deterioration or overstressing, shall be considered unsafe. The existence of unsanitary conditions by reason of inadequate or malfunctioning sanitary facilities or waste disposal systems shall be considered unsafe. ~~All such buildings, deemed to be unsafe by the AHJ, are hereby declared to be public nuisances and shall be demolished and removed from the premises concerned or shall be made safe and sanitary in a manner required by the AHJ and as provided in this section and other applicable laws and regulations of the jurisdiction.~~

1.1.2.3.1.2 Building As a Fire Hazard Described. A building shall be deemed to be a fire hazard and unsafe when:

(1) vacant and unguarded and open to unauthorized entry at door or window

(2) there is an accumulation of combustible dust, debris, or materials therein deemed to be a hazard by the AHJ

(3) the building does not provide the exits or fire protection required herein for the most recent occupancy

(4) electrical or mechanical installations or systems create a hazardous condition.

COMMITTEE STATEMENT: The committee action should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #525)

Committee: SAF-FUN

5000- 38 - (1-12.3.2.2 and 1.12.3.2.3): Accept

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Delete these subsections.

SUBSTANTIATION: The provisions of 1.12.1 apply to repairs. There is no need to repeat or alter those requirements here.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1093)

Committee: SAF-FUN

5000- 39 - (1-12.3.2.3): Accept

SUBMITTER: Kevin Kelly, National Fire Sprinkler Association

RECOMMENDATION: Delete Section 1.12.3.2.3.

SUBSTANTIATION: The building's condition should not restrict or limit the right of the authority having jurisdiction regarding when a building should be demolished or removed.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #630)

Committee: SAF-FUN

5000- 40 - (1-12.3.2.4): Accept in Principle

SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate

RECOMMENDATION: Revise text to read as follows:

1.12.3.2.4 To determine the value of a building and the cost of alterations, repairs, and replacement, the regulations in ~~1.13.4~~ 1.12.1.6 shall apply.

SUBSTANTIATION: Corrects incorrect section reference in text.

COMMITTEE ACTION: Accept in Principle.

No action required.

COMMITTEE STATEMENT: There is no need to correct the reference because the paragraph is being deleted by the committee action on Proposal 5000-36 (Log #292).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #294)
Committee: SAF-FUN

5000- 41 - (1-12.3.6): Accept in Part
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise the second sentence to read as follows:
"The postcard notice shall be dated and shall read substantially as follows: "UNSAFE BUILDING — This building is unsafe, ~~in the opinion of the AHJ, as specified in 1.12.3.1 of the Code,~~ based on the provisions of 1.12.3 of the adopted Building Code. The building shall be vacated and shall not be occupied. Action to repair or remove the building shall be taken by the owner as ~~further~~ prescribed by written notice previously served. THIS NOTICE SHALL NOT BE REMOVED EXCEPT BY THE ~~AHJ~~ AUTHORITY HAVING JURISDICTION. The AHJ shall promptly notify the local emergency services (fire, police, EMS, etc.) of buildings posted as unsafe and ordered to be vacated. The AHJ shall also notify the emergency services when unsafe conditions have been remedied and the building is safe for occupancy and use.
SUBSTANTIATION: The exact wording of the notice may need to be different than shown based on advise of the jurisdiction's legal advisor. That is the reason for using wording "read substantially as follows". The other changes are for the readers of the notice. As initially worded it appeared it was drafted for enforcers to read and not the public. The provision for emergency service notification is to help reduce unnecessary risks to emergency responders and to aid incident commanders in making risk assessments during emergencies.
COMMITTEE ACTION: Accept in Part.
Revise 1.12.3.6 as follows:
1.12.3.6 Posting Notice of Violation. The AHJ shall post a signed notice in a conspicuous location on the building that has been determined to be unsafe, but not before 14 days after the notice of violation provided in 1.12.3.4 has been served. The posted notice shall be dated and shall read as follows:
"UNSAFE BUILDING - This building is unsafe, based on the provisions of 1.12.3 of the Building Code ~~in the opinion of the AHJ, as specified in 1.12.3.1 of the Code.~~ This building shall be vacated and shall not be occupied. Action to repair or remove the building shall be taken by the owner as ~~further~~ prescribed by written notice previously served. THIS NOTICE SHALL NOT BE REMOVED EXCEPT BY THE ~~AHJ~~ AUTHORITY HAVING JURISDICTION."
COMMITTEE STATEMENT: The committee action does much of what the submitter requested. The submitter's last two sentences were not accepted because they are not related to the posting.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #295)
Committee: SAF-FUN

5000- 42 - (1-12.3.7.1): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Reword to read as follows:
"When, in the opinion of the AHJ, there is actual or immediate danger of failure or collapse of a building, or when there is a health, natural or manmade hazard, ~~windstorm,~~ or fire hazard, the AHJ is authorized to ~~shall~~ order the occupants to vacate, temporarily closed for use or occupancy the rights-of-way thereto, sidewalks, streets, or adjacent buildings, or nearby areas, and institute such other temporary safeguards, including securing and posting of the building as the AHJ deems necessary under the circumstances. The AHJ is hereby authorized to ~~shall~~ employ the necessary labor and materials to perform the required work as expeditiously as possible. The AHJ shall promptly notify the local emergency services (fire, police, EMS, etc.) of buildings posted as unsafe and ordered to be vacated. The AHJ shall also notify the emergency services when unsafe conditions have been remedied and the building is safe for occupancy and use."
SUBSTANTIATION: The provision for emergency service notification is to help reduce unnecessary risks to emergency responders and to aid incident commanders in making risk assessments during emergencies.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #296)
Committee: SAF-FUN

5000- 43 - (1-12.4.1): Accept
SUBMITTER: George M. Lanier, Rome Fire Dept., GA
RECOMMENDATION: Revise the first portion of the first sentence to read:
"...Code shall not be construed ~~intended~~ to prevent...".
SUBSTANTIATION: The change should better express the intent of the provision.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #441)
Committee: SAF-FUN

5000- 44 - (1-12.4.3.1): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise text to read as follows:
"Any person desiring to use construction systems, materials, or methods of design not specifically mentioned in this Code shall file with the AHJ a request for permission to use such systems, materials or methods. Where alternative construction systems or materials are requested, the request must be submitted together with proof in writing from an approved agency, in support of claims to support the sufficiency of such construction systems or materials. ~~or methods of design~~..." (No changes to the last sentence in the paragraph).
SUBSTANTIATION: Although approved agencies may render opinions on materials and systems, they do not render opinions on methods of design. The current language would rule out most design equivalencies.
COMMITTEE ACTION: Accept in Principle.
Revise 1.12.4.3.1 as follows:
1.12.4.3.1 Any person desiring to use construction systems, materials, or methods of design not specifically mentioned in this Code shall file with the AHJ a request for permission to use such systems, materials, or methods~~,~~. Where alternative construction systems or materials are requested, the request must be submitted, together with proof in writing ~~from an approved agency,~~ in support of claims to support the sufficiency of such construction systems or materials.~~, materials, or methods of design.~~ If a test installation is proposed, a description of the location and purpose of test also shall be submitted.
COMMITTEE STATEMENT: The committee action accomplishes what the submitter requested. Additionally, it deletes the words "from an approved agency" which are not needed.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #927)
Committee: SAF-FUN

5000- 45 - (1-12.4.4.2): Accept
SUBMITTER: George M. Lanier, Rome Fire Department
RECOMMENDATION: Revise the second sentence to read:
"If there are not appropriate test methods specified in this Code, the authority having jurisdiction ~~shall determine~~ ~~is authorized to accept an applicable~~ ~~the test procedure~~ ~~from another recognized source~~ ~~to be followed.~~
SUBSTANTIATION: The original text implies that the AHJ must select and require the use of a test procedure. The revision authorizes the AHJ to accept test procedure from another, however, the AHJ is not mandated to locate a test and use it.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #526)
Committee: SAF-FUN

5000- 46 - (1-12.4.5): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: In the first sentence, delete everything after "Board of Appeals".
SUBSTANTIATION: Section 1.9.6 describes the appeal process. There is no reason to have different requirements in this section.
COMMITTEE ACTION: Accept in Principle.
Revise 1.12.4.5 as follows:
1.12.4.5 Appeal. Any person whose request for use of alternative systems and materials or methods of design has been refused by the AHJ shall be permitted to appeal to the Board of Appeals ~~by written request to the secretary of the board, and such written request shall be transmitted to the board immediately. The method of appeal shall be as provided in 1.9.6.~~
COMMITTEE STATEMENT: The committee action does what the submitter requested.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #415)
Committee: SAF-FUN

5000- 47 - (1-13.1.1.1): Accept in Principle
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Interior Design Alliance
RECOMMENDATION: Revise text to read as follows:
1.13.1.1.1 No person, firm, or corporation shall erect, construct, enlarge, alter, repair, relocate, improve, convert, or demolish any building, structure, or part thereof in jurisdiction, or cause the same to be done, without first obtaining from the Authority Having Jurisdiction a separate building permit for the work to be accomplished for each such building, structure or temporary structure.
Revise text to read as follows:
Exemption: ~~For general maintenance or repairs that do not change the occupancy or effect the structural integrity of the building, the value of which does not exceed $100 for labor and material as determined by the Authority Having Jurisdiciton, no permit shall be required.~~ Permits shall not be required for the following:
1. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
2. Temporary motion picture, television and theater stage sets and scenery.
3. Window awnings supported by an exterior wall for one and two family residential and Group R-3 use.
4. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet.
5. Fences not over 6 feet high.
6. Movable cases, counters and partitions not over 6 feet in height.
SUBSTANTIATION: Similar exceptions are found in the various model building codes. The NFPA 5000 should include exemptions from permit for these activities which do not alter the safety of the space as governed by this code.
COMMITTEE ACTION: Accept in Principle.
Revise text to read as follows:
1.13.1.1.1 No person, firm, or corporation shall erect, construct, enlarge, alter, repair, relocate, improve, convert, or demolish any building, structure, or part thereof in jurisdiction, or cause the same to be done, without first obtaining from the Authority Having Jurisdiction a separate building permit for the work to be accomplished for each such building, structure or temporary structure. ~~Exception: For general maintenance or repairs that do not change the occupancy or effect the structural integrity of the building, the value of which does not exceed $100 for labor and material as determined by the Authority Having Jurisdiciton, no permit shall be required.~~ Permits shall not be required for the following:
1. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
2. Temporary motion picture, television and theater stage sets and scenery.
3. Window awnings supported by an exterior wall for one and two family residential use.
4. One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 ft2 (7.5 m2).
5. Fences not over 6 feet high.
6. Movable cases, counters and partitions not over 6 ft (1830 mm) in height.
COMMITTEE STATEMENT: The committee action presents an editorial revision to that which the submitter recommended. It also deletes the term "Group R-3" which is not used in the code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #750)
Committee: SAF-FUN

5000- 48 - (1-13.1.1.1): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Number the existing Exception as Exception No. 1 and add a new Exception No. 2 to read as follows:
Exception No. 2: A permit shall not be required to install nonpermanent partial height partitions.
SUBSTANTIATION: Frequent reorganization of typical flexible offices in today's business environment requires almost continuous furniture rearrangement including partial height partitions which are

often used to define work spaces. This proposed new Exception No. 2 is necessary to prevent the need for virtually continuous permit applications which is not practical for such office situations. Further, there is no need for control of this condition by the building department for use of such nonpermanent partitions which can be reviewed by regular fire inspections of the premises. It should also be noted that this exception already exists in several of the model building codes.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-47 (Log #415).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #499)
Committee: SAF-FUN

5000- 49 - (1-13.1.1.1 Exception): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise to read:
Exception: For general maintenance or repairs of systems that do not change the occupancy or affect the structural integrity or life safety systems of the building, no permit shall be required.
SUBSTANTIATION: As written, this paragraph is unenforceable. Building owners will not get permits for every $100 repair. Replacement of toilets, repair of holes in walls, installation of carpet, and many other trivial tasks exceed $100, and need not be permitted. This would be a bureaucratic nightmare.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-47 (Log #415).
COMMITTEE STATEMENT: The action on the referenced proposal deletes the $100 threshold. This should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #163)
Committee: SAF-FUN

5000- 50 - (1-13.1.1.1.1): Accept in Principle in Part
SUBMITTER: Brian F. O'Connor, Baltimore Gas & Electric Company
RECOMMENDATION: Revise text as follows:
Exceptions:
- Sheds or outbuildings less than 250 square feet.
- Minor improvements, renovations, and/or repairs which do not add to or effect the structure of the building. These changes should comply with 1.12.1.4 and not exceed 10% of the value of the building and structure.
- Erection of fencing
- Erection of furniture systems or items that are not defined as a building fixture
- Carpeting, painting, tiling or the installation of millwork
- The installation and/or repair of equipment required for the transmission, distribution, meter or generation related services by public utilities

SUBSTANTIATION: Current codes allow exceptions for changes which are considered minor in nature or needed for the public good (e.g. utility exceptions). Imposition of the rule as originally proposed places an undue burden on the public agencies responsible for the issue and inspection process. Additionally the proposed requirements could delay replacement and/or repair of systems critical to the public health and safety.
COMMITTEE ACTION: Accept in Principle in Part.
See Proposal 5000-47 (Log #415).
COMMITTEE STATEMENT: The action on the referenced proposal should meet some of the submitter's intent. The submitter has not provided adequate substantiation for the 10 percent threshold. Sheds and outbuildings at 250 ft^2 are too large to exempt. Public utilities are outside the scope of the building code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #403)
Committee: SAF-FUN

5000- 51 - (1-13.2.5.3): Accept in Principle
SUBMITTER: Rick Breezee
RECOMMENDATION: Revise text to read as follows:
1.13.2.5.3 The minimum contents of a site plan shall be as follows:
(1) The footprints of all structures, including the square footage and/or number of rooms as appropriate
(2) The total acreage within the development parcel
(3) The location and size of all storm-water management facilities within the development parcel
(4) The location and number of all required parking spaces to serve the development, with the required number of handicapped spaces being specifically designated
(5) The location and size of the open space within each development. A minimum of 30 percent of each development parcel shall be maintained in open space
(6) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, and location of pedestrian facilities both existing and proposed
(7) The limits of the 100-year flood plain as determined by consultation with the FEMA flood plain design guidelines
(8) The most land ward limits of either the regional water management district, the state department of environmental regulation, or the Army Corps of Engineers (ACOE) wetland jurisdictions
(9) The location of proposed and/or existing and types of landscaped and hardscape areas
(10) The plan must identify the accessible route between all facilities required to be accessible in accordance with this Code.
SUBSTANTIATION: Designs often do not identify how all the facilities are complying with accessibility. Adding this requirement will ensure that the appropriate information will be submitted for plan review.F
COMMITTEE ACTION: Accept in Principle.
Revise 1.13.2.5.3 as follows:
1.13.2.5.3 The minimum contents of a site plan shall be as follows:
(1) The footprints of all structures, including the square footage and/or number of rooms as appropriate
(2) The total acreage within the development parcel
(3) The location and size of all storm-water management facilities within the development parcel
(4) The location and number of all required parking spaces to serve the development, with the required number of handicapped spaces being specifically designated
(5) The location and size of the open space within each development. A minimum of 30 percent of each development parcel shall be maintained in open space
(6) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, and location of pedestrian facilities both existing and proposed
(7) The limits of the 100-year floodplain as determined by consultation with the FEMA floodplain design guidelines
(8) The most landward limits of either the regional water management district, the state department of environmental regulation, or the Army Corps of Engineers (ACOE) wetland jurisdictions

(9) The location of proposed and/or existing and types of landscaped and hardscape areas

(10) The identification of the accessible route between all facilities required to be accessible in accordance with this Code.

COMMITTEE STATEMENT: The committee action does what the submitter asked but also rewords new subitem (10) editorially for parallel construction within the numbered list.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #631)

Committee: BLD-STR

5000- 52 - (1-13.2.5.3): Accept in Principle

TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this proposal be amended so as to position the new text as part of 1.8.7.2.5.3 which deals with site plan information. Further, the TCC directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN and BLD-STR requesting that the TC's review this action and revise/relocate the material as needed for clarity.

SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate

RECOMMENDATION: Revise subsection (3), insert a new subsection (4), renumber subsequent subsections, correct old subsection (7) as follows:

1.13.2.5.3 The minimum contents of a site plan shall be as follows:

(1) The footprints of all structures, including the square footage and/or number of rooms as appropriate

(2) The total acreage within the development parcel

(3) The location and size of all storm-water management facilitates within the development parcel, and pre-alteration and post-alteration drainage patterns

(4) If the proposed building or structure is located wholly or partly within the flood hazard area established by section 100.3.2, the locations and quantities associated with any filling, excavation and grading shall be shown.

(5 ~~4~~) The location and number of all required parking spaces to serve the development, with the required number of handicapped spaces being specifically designated

(6 ~~5~~) The location and size of the open space within each development. A minimum of 30 percent of each development parcel shall be maintained in open space

(7 ~~6~~) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, and location of pedestrian facilities both existing and proposed

(8 ~~7~~) ~~The limits of the 100 year flood plain as determined by consultation with the FEMA flood plain design guidelines.~~ The flood hazard zones and boundaries, floodway boundaries and design flood elevations shown on he flood hazard map adopted by the jurisdiction, or otherwise legally adopted by the jurisdiction. If the proposed building or structure is located wholly or partly within the flood hazard area, the lowest floor elevation shall be shown, along with the natural and final ground elevations adjacent to the footprint of the building or structure.

(9 ~~8~~) The most landward limits of either the regional water management district, the state department of environmental regulation, or the Army Corps of Engineers (ACOE) wetland jurisdictions

(10 ~~9~~) The location of proposed and/or existing and types of landscaped and hardscape areas.

SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (site plan requirements) for buildings and structures in flood hazard areas. Not that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.

COMMITTEE ACTION: Accept in Principle.

Revise subsection (3), insert a new subsection (4), renumber subsequent subsections, correct old subsection (7) as follows:

1.13.2.5.3 The minimum contents of a site plan shall be as follows:

(1) The footprints of all structures, including the square footage and/or number of rooms as appropriate

(2) The total acreage within the development parcel

(3) The location and size of all storm-water management facilitates within the development parcel, and pre-alteration and post-alteration drainage patterns

(4) Except for 1- and 2 family dwellings, if the proposed building or structure is located wholly or partly within the flood hazard area established by section 100.3.2, the locations and quantities associated with any filling, excavation and grading shall be shown.

(5) The location and number of all required parking spaces to serve the development, with the required number of handicapped spaces being specifically designated

(6) The location and size of the open space within each development. A minimum of 30 percent of each development parcel shall be maintained in open space

(7) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, and location of pedestrian facilities both existing and proposed

(8) The flood hazard zones and boundaries, floodway boundaries and design flood elevations shown on the flood hazard map adopted by the jurisdiction, or otherwise legally adopted by the jurisdiction. If the proposed building or structure is located wholly or partly within the flood hazard area, the lowest floor elevation shall be shown, along with the natural and final ground elevations adjacent to the footprint of the building or structure.

(9) The most landward limits of either the regional water management district, the state department of environmental regulation, or the Army Corps of Engineers (ACOE) wetland jurisdictions

(10) The location of proposed and/or existing and types of landscaped and hardscape areas.

COMMITTEE STATEMENT: Typically such tight restrictions on fill are required only in the flood plane and this is not necessarily the case. The Technical Committee modified the proposal by excepting 1- and 2- Family Dwellings.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #74)
Committee: SAF-FUN

5000- 53 - (1-13.2.5.3(10) (New)): Accept in Principle
SUBMITTER: Northcentral Regional Fire Code Dev. Committee
RECOMMENDATION: Add a new 10 to read:
(10) Utility plan shall include all utilities, power, gas, and fire protection water service mains and hydrants.
SUBSTANTIATION: The utility details should be added and reviewed by the ahj to prevent unnecessary and unexpected costs to the developer due to added requirements after the site plans acceptance.
COMMITTEE ACTION: Accept in Principle.
Add a new subitem (11) to 1.13.2.5.3 as follows:
(11) The location of all utilities, power, gas, and fire protection water service mains and hydrants.
COMMITTEE STATEMENT: The committee action should meet the submitter's intent; it does what was requested but editorially revises the language for parallel construction with the other subitems. The submitter's language was numbered subitem (11) because subitem (10) was added by Proposal 5000-51 (Log #403).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #165)
Committee: SAF-FUN

5000- 54 - (1-13.2.5.3(5)): Accept in Principle
SUBMITTER: Brian F. O'Connor, Baltimore Gas & Electric Company
RECOMMENDATION: The location and size of the open space within each development. A minimum of 30 percent of each development parcel shall be maintained in open space.
SUBSTANTIATION: The requirements for the amount of open space should be set by the AHJ. This is a local issue not a national issue.
COMMITTEE ACTION: Accept in Principle.
Revise subitem (5) to 1.13.2.5.3 as follows:
(5) The location and size of the open space within each development. ~~A minimum of 30 percent of each development parcel shall be maintained in open space.~~
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #75)
Committee: SAF-FUN

5000- 55 - (1-13.2.5.3(6)): Accept in Principle
SUBMITTER: Northcentral Regional Fire Code Dev. Committee
RECOMMENDATION: Revise (6) to read:
(6) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, location of pedestrian facilities both existing and proposed, and size and location of proposed or existing fire lanes and fire department access.
SUBSTANTIATION: Fire lanes and fire department access should also be included in these plans.
COMMITTEE ACTION: Accept in Principle.
Revise subitem (6) of 1.13.2.5.3 as follows:
(6) The location and size of proposed and/or existing road rights-of-way, proposed and/or existing transit corridors or facilities as appropriate, ~~and~~ location of pedestrian facilities both existing and proposed, and size and location of proposed or existing fire lanes and fire department access.
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #527)
Committee: SAF-FUN

5000- 56 - (1-13.2.5.3.5(5)): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete the second sentence.
SUBSTANTIATION: This is a planning issue, not a building code issue. An urban development will not have 30 percent open space.
COMMITTEE ACTION: Accept in Principle.
Revise subitem (5) to 1.13.2.5.3 as follows:
(5) The location and size of the open space within each development. ~~A minimum of 30 percent of each development parcel shall be maintained in open space.~~
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #617)
Committee: SAF-FUN

5000- 57 - (1-13.3.1.3): Accept in Principle
SUBMITTER: Sherri L. Weaver, Lees Summit, MO
RECOMMENDATION: Remove all existing wording and replace with the following:
1.13.3.1.3 The plans and specifications for buildings and/or structures, alterations, repairs or improvements, replacements, and additions shall be prepared by persons or companies under the provisions of all applicable state licensing laws.
SUBSTANTIATION: As written, 1.13.3.1.3 is in conflict with existing state licensing laws.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #1094)
Committee: SAF-FUN

5000- 58 - (1-13.3.1.3): Accept in Principle
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete section 1.13.3.1.3.
SUBSTANTIATION: The code should not require certified plans based on dollar value that could conflict with state regulations.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #175)
Committee: SAF-FUN

5000- 59 - (1-13.3.1.4): Reject
SUBMITTER: John E. Kampmeyer, Triad Fire Protection Engineering Corp.
RECOMMENDATION: Revise text as follows:
1.13.3.1.4 Plans for additions and alterations in which mechanical or electrical or fire protection design is required shall, at the discretion of the authority having jurisdiction, be prepared by and bear the seal of a professional mechanical or electrical engineer ~~registered~~ licensed in the state, commonwealth or province where the construction site is located.
SUBSTANTIATION: Fire protection systems are as critical and perhaps even more so than mechanical and electrical systems. As such, their design should be prepared by qualified individuals who have met the licensing requirements of the jurisdiction in which they practice. The use of the term licensed rather than registered is consistent with practice of most states.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-1 (Log #CP2047) which deletes 1.13.3.1.4. The subject is adequately addressed by the revision to 1.13.3.1.3 via the referenced proposal.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #528)
Committee: SAF-FUN

5000- 60 - (1-13.3.1.4): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add "fire protection" so that the section applies to mechanical, electrical, or fire protection design and bears the seal of a professional mechanical, electrical, or fire protection engineer.
SUBSTANTIATION: Since the purpose of registration is public safety, it is appropriate to specifically include fire protection in this section.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-1 (Log #CP2047) which deletes 1.13.3.1.4. The subject is adequately addressed by the revision to 1.13.3.1.3 via the referenced proposal.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #618)
Committee: SAF-FUN

5000- 61 - (1-13.3.1.4): Accept in Principle
SUBMITTER: Sherri L. Weaver, Lees Summit, MO
RECOMMENDATION: Remove all existing wording and replace with the following:
1.13.3.1.4 Plans for additions and alterations in which mechanical or electrical design is required shall be prepared by persons or companies under the provisions of all applicable state licensing laws.
SUBSTANTIATION: As written, 1.13.3.1.4 is in conflict with existing state licensing laws.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-1 (Log #CP2047).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #CP2049)
Committee: SAF-FUN

5000- 62 - (1-13.3.1.6): Accept
SUBMITTER: Technical Committee on Fundamentals
RECOMMENDATION: Revise 1.13.3.1.6 as follows:
1.13.3.1.6 Plans for all buildings shall indicate required fire resistance-rated construction and how required structural and fire resistance integrity will be maintained where a penetration of a required fire-resistant wall, floor, or partition will be made for electrical, gas, mechanical, plumbing and communication conduits, pipes, and systems and also indicate in sufficient detail how the fire integrity will be maintained where required fire-resistant floors intersect the exterior walls.
SUBSTANTIATION: It is important that the plan show required fire resistance-rated construction.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #529)
Committee: SAF-FUN

5000- 63 - (1-13.3.1.7 (New)): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a new section:
"For high-rise buildings, covered mall buildings, and buildings containing atriums, the construction documents shall include a description of fire protection systems in the building. This description shall include the basic concepts used for suppression, alarm, notification, egress, smoke control, and other related systems, as well as the coordination of those systems. Upon completion of the project, a copy of the approved documentation shall be maintained at the site."
SUBSTANTIATION: This concept has been used in several major cities to assure that the systems are coordinated. Clark County, Nevada and Seattle, Washington are two examples.
COMMITTEE ACTION: Accept in Principle.
Add a 1.13.3.1.7 as follows:
1.13.3.1.7 For high-rise buildings, covered mall buildings, and buildings containing atriums, the construction documents shall include a description of fire protection systems in the building. This description shall include the basic concepts used for suppression, alarm, notification, egress, smoke control, and other related systems, as well as the coordination of those systems. Upon completion of the project, a copy of the approved documentation shall be maintained at the site.
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1091)
Committee: SAF-FUN

5000- 64 - (1-13.3.1.7 (New)): Reject
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Insert a new section to read as follows:
"The construction documents and shop drawing submitted to the department shall contain sufficient detail as outlined here in to evaluate the protected hazards and the effectiveness of the system.
Information: construction documents for fire protection systems shall be submitted with the construction documents for a construction permit. Included shall be information on the contents, the occupancy, the location arrangement of the structure and the contents involved, the exposure to any hazard, the extent of the system coverage, the suppression system design criteria, the supply and extinguishing agents, the location of any standpipes, and the location and method of operation of detection and alarm devices.
Shop drawings: shop drawings for the installation of fire protection systems shall be submitted for review and approval prior to the installation of a fire protection system. Included on the shop drawing shall be information showing the basis for compliance with the design density, the specific arrangement of the system, the devices and methods of operation, and the suppression agents. The detail on the construction documents or shop drawings for the fire protection systems shall include design considerations, spacing and arrangement of fire protection devices, protection agents supply and discharge requirements, calculations with sizes and equivalent lengths of pipe and fittings, and protection agents source. Sufficient information shall be included to identify the apparatus and devices utilized and other information as required by this code.
SUBSTANTIATION: This change will allow the fire protection drawings to be submitted at a different time than the balance of the permit drawings. This section is included in the International Building Code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's text is much too detailed. It would require unnecessary redundancy. The subject is adequately covered by NFPA 13.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #310)
Committee: SAF-FUN

5000- 65 - (1-13.6.2.3): Reject
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Add the following:
"Fire protection systems may be active or passive. Active fire protection systems include automatic sprinklers and fire alarm systems. Passive fire protection systems include fire walls and smoke barriers."
SUBSTANTIATION: This is a clarification in the Administrative section of types of fire protection systems that will need to be complied with.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Distinguishing labels are not needed, especially in Chapter 1.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #632)
Committee: SAF-FUN

5000- 66 - (1-13.6.2.3): Accept

SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate

RECOMMENDATION: Add new text to read as follows:

Mandatory Inspections: insert an additional inspection (lowest floor) to comply with NFIP lowest floor elevation and certification requirements. Renumber subsequent subsections.

1.13.6.2.3 The permit holder or their agent shall notify the AHJ of the time when that stage of construction will be ready for inspection. The AHJ shall then make such called inspection and other inspection as necessary, and they shall either approve in writing on the permit card that part of the construction as completed or shall notify the permit holder or their agent specifically wherein the work fails to comply with the provisions of this Code.

Inspections shall be conducted as follows for each building element:

(a) Foundations. When the excavation for footings is complete, footing forms, and required anchorage and reinforcing steel are in place, but before concrete is placed.

(b) Reinforcing Steel (lower stresses). After all reinforcing steel is in place, and slab, soffit, beam, girder, column and joist forms on one side of wall forms are in place and are braced, but before the concrete is placed and reshoring after concrete placement.

(c) Lowest Floor.* For buildings and structures located wholly or partly within the flood hazard area established by section 100.3.2, to be made by person(s) qualified to complete the elevation certificate required by sections 100.6.1.3 and 100.6.2.3. The certificate shall be submitted to the AHJ immediately after the floor level is set.

A.1.13.6.2.3(c) In order to complete the elevation certificate, additional subsequent inspections may be required to determine the lowest elevation of machinery or equipment servicing the building, adjacent grade elevations, and floor opening information.

(d ~~e~~) Framing. To be made at each floor level and after all floor, wall and roof framing, and fire blocking are complete, welds and clip connections are made and all pipes, chimneys, vents, ductwork, rough plumbing, and rough electrical work are in.

(e ~~d~~) Insulation. To be made before lathing, wallboard, or other finishes are applied.

(f ~~e~~) Lathing and Wallboard. When supports, backing, lath, and/or wallboard are in place and ready for plaster and other finish work and all plastering materials are delivered on the job, but before any finish is applied and before wallboard joints and fasteners are taped and finished.

(g ~~f~~) Roofing. After anchor sheet or sheets are on and secured and before installation of capsheet or other finish course.

(h ~~g~~) Masonry. After units are set and reinforcing steel is placed and prior to grouting.

(i ~~h~~) Structural Steel. When structural steel members and required connections are complete, but before concealing any members or connections.

(j ~~i~~) Plumbing and Gas Systems. To be made in accordance with the requirements of the Uniform Plumbing Code and NFPA 54, National Fuel Gas Code.

(k ~~j~~) Electrical Systems. To be made in accordance with the requirements of NFPA 70, National Electrical Code®.

(l ~~k~~) Heating and Ventilating Systems. To be made in accordance with the requirements of the Uniform Mechanical Code, and NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems.

(m ~~l~~) Fire Protection Systems. To be in accordance with applicable standards.

(n ~~m~~) Special Inspections. To be made immediately after completion and at such intervals during the progress of the work as required by the AHJ, and as follows:

(1) Elevators, Escalators, Transporting Assemblies and Amusement Rides. To be made in accordance with the requirements of ASME A17.1.

(2) Swimming Pools. To be made in accordance with the requirements of _ of this Code.

(3) Signs. To be made in accordance with the requirements of Appendix BD of this Code.

(o ~~n~~) Other Inspections. To be made as the AHJ, owner, or contractor reasonably requests. Prefabricated assemblies are permitted to be inspected at the place of manufacture as set forth in 1.14.6.1.

(p) Final Inspection. To be made when the building or structure is completed and is ready for use or occupancy.

SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (lowest floor elevation and certification) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #824)
Committee: SAF-FUN

5000- 67 - (1-13.6.2.3): Reject

SUBMITTER: Dick M. Glumac, Glumac International/Rep. Golden Gate Chapter ASHRAE

RECOMMENDATION: Be more specific what the inspection consists of.

SUBSTANTIATION: This subparagraph lists all inspections to be done but does not specify what the inspection should consist of.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Submitter did not provide any suggested wording.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1071)
Committee: SAF-FUN

5000- 68 - (1-13.6.2.3): Reject
SUBMITTER: Bruce J. Swiecicki, National Propane Gas Association
RECOMMENDATION: Revise 1.13.6.2.3 (i) to read as follows:
(i) Fuel Gas Systems. The installation of fuel gas distribution piping, equipment, appliances and venting systems shall be in accordance with he requirements of ANSI Z223.1/NFPA 54, National Fuel Gas Code.
(~~i~~ j) Plumbing ~~and Gas~~ Systems. Shall ~~To~~ be ~~made~~ in accordance with the requirements of the Uniform Plumbing ~~code and NFPA 54, National Fuel Gas Code.~~
SUBSTANTIATION: The Uniform Plumbing Code contains code requirements for both water/drainage systems and fuel gas piping/water heaters. The National Fuel Gas Code is the companion NFPA code that is the lead document regarding fuel-gas installations. The change would clearly state that all requirement for fuel-gas systems must be in accordance with the National Fuel Gas Code. The change also add the full designation of the National Fuel Gas Code, ANSI Z223.1/NFPA 54.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's subject deals with installation, yet the 1.13.6.2's address inspections. The Chapter 1 provisions must assume that coordination will take place between NFPA 54 and the Uniform Plumbing Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #607)
Committee: SAF-FUN

5000- 69 - (1-13.6.2.3(i)): Reject
SUBMITTER: James Ranfone, American Gas Assn.
RECOMMENDATION: Revise text to read to read as follows:
(i) Fuel Gas Systems. The installation of fuel gas distribution piping, equipment, appliances and venting systems shall be in accordance with the requirements of ANSI Z223.1/NFPA 54, National Fuel Gas Code.
(~~i~~j) Plumbing ~~and Gas~~ Systems. Shall ~~To~~ be ~~made~~ in accordance with the requirements of the Uniform Plumbing ~~code and NFPA 54, National Fuel Gas Code.~~
SUBSTANTIATION: The Uniform Plumbing Code contains code requirements for both water/drainage systems and fuel gas piping/water heaters. The National Fuel Gas Code is the companion NFPA code that is the lead document regarding fuel-gas installations. The change would clearly state that all requirement for fuel-gas systems must be in accordance with the National Fuel Gas Code.
The change also add the full designation of the National Fuel Gas Code, ANSI Z223.1/NFPA 54.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's subject deals with installation, yet the 1.13.6.2's address inspections. The Chapter 1 provisions must assume that coordination will take place between NFPA 54 and the Uniform Plumbing Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #608)
Committee: SAF-FUN

5000- 70 - (1-13.6.2.3(k)): Reject
SUBMITTER: James Ranfone, American Gas Assn.
RECOMMENDATION: Revise text to read as follows:
(k) Heating and Ventilating Systems. Heating systems other than fuel gas fired shall ~~To~~ be ~~made~~ in accordance with the requirements of the Uniform Mechanical Code. Ventilating systems shall be in accordance with ~~and~~ NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems.
SUBSTANTIATION: The Uniform Mechanical Code contains code requirements for both fuel gas and other systems that operate on different energy sources. The National Fuel Gas Code is the companion NFPA code that is the lead document regarding fuel-gas installations. The change would clearly state that all requirement for other than fuel-gas systems must be in accordance with the Uniform Mechanical Code. AGA has submitted another change to this section that would add the appropriate reference to the National Fuel Gas Code for fuel gas fired equipment.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's subject deals with installation, yet the 1.13.6.2's address inspections. The Chapter 1 provisions must assume that coordination will take place between NFPA 90A and the Uniform Mechanical Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF NEGATIVE:

(Log #1070)
Committee: SAF-FUN

5000- 71 - (1-13.6.2.3(k)): Reject
SUBMITTER: Bruce J. Swiecicki, National Propane Gas Association
RECOMMENDATION: Revise 1.13.6.2.3(k) to read as follows:
(k) Heating and Ventilating Systems. Heating systems other than fuel gas fired shall ~~To~~ be ~~made~~ in accordance with the requirements of the Uniform Mechanical Code. Ventilating systems shall be in accordance with ~~and~~ NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems.
SUBSTANTIATION: The Uniform Mechanical Code contains code requirements for both fuel gas and other systems that operate on different energy sources. The National Fuel Gas Code is the companion NFPA code that is the lead document regarding fuel-gas installations. The change would clearly state that all requirement for other than fuel-gas systems must be in accordance with the Uniform Mechanical Code. AGA has submitted another change to this section that would add the appropriate reference to the National Fuel Gas Code for fuel gas fired equipment.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's subject deals with installation, yet the 1.13.6.2's address inspections. The Chapter 1 provisions must assume that coordination will take place between NFPA 90A and the Uniform Mechanical Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #257)
Committee: SAF-FUN

5000- 72 - (1-13.6.2.3(m)(4) (New)): Accept in Principle
TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN, SAF-MEA and SAF-RES requesting that:
(1) the subject of this proposal be reviewed to coordinate how the measurement should be made and to review the location of the information in the code.
(2) the enforceability of this provision be reviewed .
SUBMITTER: Jake Pauls, Jake Pauls Consulting Services
RECOMMENDATION: Add new text as follows:
(4) Stairways. To be made in accordance with of 12.2.2.3.5 and 12.2.2.3.6 of this Code before the installation of carpeting and after installation of carpeting provided that measurements made after installation of carpeting shall be made to the uncompressed, walking surface of the carpet.

SUBSTANTIATION: A too-often neglected problem of building safety is the uniformity of stairway step dimensions set out in codes. Nonuniformity of step dimensions, beyond the limits set by the Code, is an especially potent factor in missteps and injurious falls but all too often inspectors fail to catch such nonuniformities and require remedial measures, including those defects introduced when carpeting is installed. With stairway-related injuries currently imposing comprehensive costs exceeding cost of stairway construction by a factor of ten in the USA (about $50 billion versus $5 billion), and with dimensional nonuniformity being such a potent factor, the relatively small cost of this inspection and remedial measures, if necessary, provides more "bang for the buck" than do the other inspections required in 1.13.6.2. (See also my related proposal on 21-2.5.1).

COMMITTEE ACTION: Accept in Principle.

Add a subitem (4) to 1.13.6.2.3(m) as follows:

(m) Special Inspections. To be made immediately after completion and at such intervals during the progress of the work as required by the AHJ, and as follows:

(1) Elevators, Escalators, Transporting Assemblies and Amusement Rides. To be made in accordance with the requirements of ASME A 17.1.

(2) Swimming Pools. To be made in accordance with the requirements of this Code.

(3) Signs. To be made in accordance with the requirements ~~of Appendix BD~~ of this Code.

(4) Stairways. To be made in accordance with of 12.2.2.3.5 and 12.2.2.3.6 of this Code before the installation of carpeting and after installation of carpeting provided that measurements made after installation of carpeting shall be made to the uncompressed, walking surface of the carpet

COMMITTEE STATEMENT: The committee action should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #699)

Committee: SAF-FUN

5000- 73 - (1-13.8.2): Accept in Principle

SUBMITTER: Dave Frable, U.S. General Services Administration

RECOMMENDATION: Revise text to read as follows:

1.13.8.2 Existing Occupancy. ~~If an occupancy that was authorized prior to the adoption of this Code does not comply with the requirements of this Code, the AHJ shall issue a new certificate of occupancy, unless the building and use, in their opinion, constitutes a serious hazard to life, limb, or property. If an application for a new certificate of occupancy is denied, such existing occupancy shall be in violation of this Code.~~

The legal occupancy of any structure existing on the date of adoption of this Code shall be permitted to continue without change, except as is specifically covered in this Code, or as is deemed necessary by the AHJ for the general safety and welfare of the occupants and public.

SUBSTANTIATION: The purpose of this proposed code change is to delete unnecessary text that puts undue burden on existing occupancies and the AHJ. We believe the proposed new text meets the intent of what the original text was trying to convey.

COMMITTEE ACTION: Accept in Principle.

Revise 1.13.8.2 as follows:

1.13.8.2 Existing Occupancy. ~~If an occupancy that was authorized prior to the adoption of this Code does not comply with the requirements of this Code, the AHJ shall issue a new certificate of occupancy, unless the building and use, in their opinion, constitutes a serious hazard to life, limb, or property. If an application for a new certificate of occupancy is denied, such existing occupancy shall be in violation of this Code.~~ The authorized occupancy of any structure existing on the date of adoption of this Code shall be permitted to continue without change, except as is specifically covered in this Code, or as is deemed necessary by the AHJ for the general safety and welfare of the occupants and public.

COMMITTEE STATEMENT: The committee action does what the submitter requested but editorially changes the word "legal" to "authorized."

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #164)

Committee: SAF-FUN

5000- 74 - (1-13.8.5): Reject

SUBMITTER: Brian F. O'Connor, Baltimore Gas & Electric Company

RECOMMENDATION: Delete the following text:

"It shall be unlawful for a public service corporation or agency to begin utility service to a building or structure, except temporary service for used during building operation and/or testing operations, until a certificate of occupancy has been issued."

SUBSTANTIATION: This requirement will add costs to the owner and delay occupancy. The AHJ should as part of its inspection process authorize the connection of metered/final electric. It can take several days/weeks for the final meter to be installed once the proper documentation is received. Delaying it past the point where the electrical inspector approves until an occupancy permit is issued will leave a finished building empty or unmetered for days or weeks longer than necessary.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The current language is a needed tool to ensure that the certificate of occupancy is obtained.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #407a)

Committee: SAF-FUN

5000- 75 - (Chapter 2 - Other Publications): Accept in Principle

SUBMITTER: Joseph J. Messersmith, Jr., Portland Cement Association

RECOMMENDATION: In Chapter 2 add the following reference standards:

"Standard Method for Determining Fire Resistance of Concrete and Masonry Construction Assemblies" - ACI 216.1-97/TMS 0216.1-97

"Standard Calculation Methods for Structural Fire Protection" - ASCE/SFPE 29-99

SUBSTANTIATION: There is no general requirement in Chapter 8 that the fire resistance of structural elements or assemblies be proven by subjecting a specimen to the NFPA 251 fire test. I doubt if this omission is intentional.

The proposal will also adopt by reference two (2) relatively new consensus standards that contain procedures for calculating the fire resistance of assemblies based on the fire exposure and acceptance criteria of NFPA 251.

COMMITTEE ACTION: Accept in Principle.

Do not add any references now.

COMMITTEE STATEMENT: If a document is referenced mandatorily anywhere in the body of the Code (i.e., Chapter 1 or Chapters 3 through 54) staff/editors will add the document information to Chapter 2. The SAF-FUN committee doesn't know if the submitter's documents will be used as mandatory references by some other chapter, so the documents will not be added to Chapter 2 at this time.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2050)
Committee: SAF-FUN

5000- 76 - (Chapter 2): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that the TC give consideration to the first part of Mr. Lathrop's comment on affirmative so as to make any needed changes. The TCC also directs SAF-FUN to review the TCC action on 5000-2 (Log# CP1105) and 5000-313 (Log # CP2045) and to coordinate the sections dealing with use of referenced documents.

SUBMITTER: Technical Committee on Fundamentals

RECOMMENDATION: Create a Chapter 2 Mandatory Reference Documents to read as follows:

Chapter 2 Mandatory Reference Documents

2.1 General. The following documents or portions thereof are referenced within this Code as mandatory requirements and shall be considered part of the requirements of this Code. The edition indicated for each referenced mandatory NFPA document is the current edition as of the date of the NFPA issuance of this Code. Some of these mandatory documents might also be referenced in this Code for specific informational purposes.

2.1.1 NFPA Publications.

[Note: NFPA reference publications will be added to 2.1.1 as a staff/editorial function based on their appearance in a chapter of NFPA 5000.]

2.1.2 Other Publications.

[Note: Reference publications from organizations other than NFPA will be added to 2.1.2 as a staff/editorial function based on their appearance in a chapter of NFPA 5000.]

SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for the material that is to appear in a new document. This proposal makes clear that there will be a Chapter 2 on mandatory reference publications (as required by the NFPA Manual of Style). The actual lists of documents will be created based on the publications referenced by other chapters of the building code.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

COMMENT ON AFFIRMATIVE:

LATHROP: Revise 2.1 General as follows: "...and shall be considered part of the requirements of this Code to the extent reference within this Code." Self-explanatory.

3.3.150 the terms "volatile flammable liquid" should be changed to "flammable or combustible liquids, or flammable gases." As written diesel powered vehicles, CNG and possible LNG powered vehicles would not qualify a building as a garage. What is the difference between a flammable liquid and a volatile flammable liquid? Also, what is a cutoff? Try "...and that is not properly separated therefrom by appropriate barriers." If this came from another document and we cannot change it then delete the definition as it is an embarrassment as written.

3.3.150.1 the terms "highly flammable liquids" should be changed to "flammable liquids or gases." What is a highly flammable liquid? That is why we have combustible liquids and flammable liquids. Also, if we are concerned about flammable liquids, why are we not concerned about flammable gases? If this came from another document and we cannot change it then delete the definition, as it is an embarrassment as written.

(Log #530)
Committee: SAF-FUN

5000- 77 - (2-1): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Delete second sentence.

SUBSTANTIATION: References may not always be current as of the date of issuance. This puts a last minute burden on staff to check dates. Also, a Committee may choose not to update a standard published by another standards organization.

COMMITTEE ACTION: Accept in Principle.

Revise 2.1 as follows:

2.1 General. The following documents or portions thereof are referenced within this Code as mandatory requirements and shall be considered part of the requirements of this Code. The edition indicated for each referenced mandatory NFPA document is the current edition as of the date of the NFPA issuance of this Code. Some of these mandatory documents might also be referenced in this Code for specific informational purposes.

COMMITTEE STATEMENT: Thje submitter is correct that the technical committees might not want to reference the most up-to-date edition of a code/standard published by an organization other than NFPA. However, it is NFPA policy that where NFPA publications are referenced, only the most current edition is to be used. Staff/editors are prepared to meet the burden of checking reference dates of NFPA publications just prior to printing the Building Code. In lieu of deleting the second sentence of 2.1 as requested by the submitter, the committee action clarifies that the "current edition" rule applies only to NFPA publications, not to those of other organizations.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #500)
Committee: SAF-FUN

5000- 78 - (Chapter 3): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Where definitions are extracted from other NFPA codes, suggest referencing that Code. This will help clarify the source of the definition. This could, perhaps, exclude the Life Safety Code, which is mostly incorporated into the Building Code.

SUBSTANTIATION: None.

COMMITTEE ACTION: Accept in Principle.

Add parenthetical reference after each definition to denote document of origin, including those definitions for which NFPA 101 is the responsible document (i.e., the "owner). However, do this as a staff editorial function prior to publication of NFPA 5000.

COMMITTEE STATEMENT: The references to the NFPA document from which the definition originated can best be added after the definitions chapter appears in a more complete form. It can be done later in the code-development cycle as a staff editorial function.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2044)
Committee: SAF-FUN

5000- 79 - (Chapter 3): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN directing that:

(1) SAF-FUN revise the text in 3.1.1 and 3.1.3 to expand the source of terms from beyond the occupancy chapters. The Technical Correlating Committee (TCC) notes that the introductory text both here (3.1) and in Proposal 5000-81 (Log #CP832), 3.1.3 refers to changes from occupancy chapters only. Terms can be recommended from any chapter of the Code and not just the occupancy chapters.

(2) further correlation may be necessary for some of the terms and definitions found in this proposal. (See TCC items within definitions).

In other cases, individual proposals include definitions for certain terms in the proposal itself or in the assorted chapters that were compiled as part of the proposal.

(3) NFPA staff send the public comments on this proposal to the appropriate TC having responsibility for any such definitions. This is in addition to SAF-FUN receiving the comment.

SUBMITTER: Technical Committee on Fundamentals

RECOMMENDATION: Create a Chapter 3 Definitions to read as follows:

Chapter 3 Definitions

3.1 GENERAL

3.1.1 The following terms, for the purposes of this *Code*, shall have the meanings given in this chapter, if not otherwise modified for a specific occupancy.

3.1.2 Words used in the present tense shall include the future; words used in the masculine gender shall include the feminine and neuter; the singular number shall include the plural, and the plural number shall include the singular.

3.1.3 Where terms are not defined in this chapter or within an occupancy chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Webster's Third New International Dictionary of the English Language, Unabridged*, shall be a source for ordinarily accepted meaning.

3.2 OFFICIAL NFPA DEFINITIONS

3.2.1* Approved. Acceptable to the authority having jurisdiction.

3.2.2* Authority Having Jurisdiction. The organization, office, or individual responsible for approving equipment, materials, an installation, or a procedure.

3.2.3* Code. A standard that is an extensive compilation of provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

3.2.4 Labeled. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

3.2.5* Listed. Equipment, materials, or services included in a list published by an organization that is acceptable to the authority having jurisdiction and concerned with evaluation of products or services, that maintains periodic inspection of production of listed equipment or materials or periodic evaluation of services, and whose listing states that either the equipment, material, or service meets appropriate designated standards or has been tested and found suitable for a specified purpose.

3.2.6 Shall. Indicates a mandatory requirement.

3.2.7 Should. Indicates a recommendation or that which is advised but not required.

3.3 GENERAL DEFINITIONS

3.3.1 Accepted Engineering Practice. Those requirements that are compatible with standards of practice required by a registered architect or professional engineer.

3.3.2 Accessible Area of Refuge. See 3.3.14.1, *Area of Refuge, Accessible*.

3.3.3 Accessible Means of Egress. See 3.3.121.1, *Means of Egress, Accessible*.

3.3.4 Accessory Building. See 3.3.45.1, *Building, Accessory*.

3.3.5 Accreditation Body. An approved, third-party organization which is independent of the grading and inspection agencies, and the lumber mills, and which initially accredits and subsequently monitors, on a continuing basis, the competency and performance of a grading or inspection agency related to carrying out specific tasks.

3.3.6 Addition. An extension or increase in the floor area or height of a building or structure.

3.3.7 Agricultural Dust. Any finely divided solid agricultural material 420 microns or smaller in diameter (material passing a U.S. No. 40 Standard Sieve) that presents a fire or explosion hazard when dispersed and ignited in air. (61:1-4)

3.3.8 * Adjusted Shear Resistance. The unadjusted shear resistance multiplied by a shear resistance adjustment factor.

A.3.3.8 Adjusted Shear Resistance. Shear resistance adjustment factors can be found in Table 43.8.2.

[TCC: Part of definition moved to annex; this is different than that written by BLD-MAT for Chapter 43. The BLD-MAT committee should be asked to modify related language in Chapter 43.]

3.3.9 Agricultural Building. See 3.3.45.2, *Building, Agricultural*.

3.3.10 Aircraft Engine Test Facility. An integrated system of building(s), structure(s), space, and services used to test aircraft engines contained within a test cell or on a test stand. (423:1-3)

3.3.11 Air-Inflated Structure. See 3.3.334.1, *Structure, Air-Inflated*.

3.3.12 Air-Supported Structure. See 3.3.334.2, *Structure, Air-Supported*.

3.3.13* Aisle Accessway. The initial portion of an exit access that leads to an aisle.

3.3.14 Alley. Public space or thoroughfare less than 20 feet wide, but not less than 10 feet wide, that has been deeded or dedicated to the public for permanent public use.

3.3.15 Alter/Alteration. A modification, replacement, or other physical change to an existing facility.

3.3.16 Alternative Calculation Procedure. A calculation procedure that differs from the procedure originally employed by the design team but that provides predictions for the same variables of interest.

3.3.17 Ambulatory Health Care Occupancy. See 3.3.243.1, *Occupancy, Ambulatory Health Care*.

3.3.18 Analysis, Sensitivity. An analysis performed to determine the degree to which a predicted output will vary given a specified change in an input parameter, usually in relation to models.

3.3.19 Analysis, Uncertainty. An analysis performed to determine the degree to which a predicted value will vary.

3.3.20 Anchor Store. A department store or major merchandising center that has direct access to the covered mall but in which all required means of egress is independent of the covered mall.

3.3.21 Apartment Building. See 3.3.45.3, *Building, Apartment*.

3.3.22 Arcade. Passageway roofed over and enclosed, with egress at the ends and serving as a common entrance and exit for buildings located thereon.
3.3.23 Architect, Registered. A person licensed to practice architecture in a jurisdiction, subject to all laws and limitations imposed by the jurisdiction.

3.3.24 Area. See 3.3.140, Floor Area, Gross and 3.3.141, Floor Area, Net.

3.3.24.1 Area, Gross Leasable. The total floor area designated for tenant occupancy and exclusive use, expressed in square feet (square meters), measured from the centerlines of adjoining partitions and exteriors of outside walls.

3.3.24.2 Area, Hazardous. An area of a structure or building that poses a degree of hazard greater than that normal to the general occupancy of the building or structure, such as areas used for the storage or use of combustibles or flammables; toxic, noxious, or corrosive materials; or heat-producing appliances.

3.3.24.3 Area, Living. Any normally occupiable space in a residential occupancy, other than sleeping rooms or rooms that are intended for combination sleeping/living, bathrooms, toilet compartments, kitchens, closets, halls, storage or utility spaces, and similar areas.

3.3.25 Areaway. Unroofed surface adjacent to a building.

3.3.26* Area of Refuge. An area that is either (1) a story in a building where the building is protected throughout by an approved, supervised automatic sprinkler system and has not less than two accessible rooms or spaces separated from each other by smoke-resisting partitions; or (2) a space located in a path of travel leading to a public way that is protected from the effects of fire, either by means of separation from other spaces in the same building or by virtue of location, thereby permitting a delay in egress travel from any level.

3.3.27.1 Area of Refuge, Accessible. An area of refuge that complies with the accessible route requirements of ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*.

3.3.28 Assembly Occupancy. See 3.3.243.2, *Occupancy, Assembly*.

3.3.29 Attic/Attic Story. The space between the ceiling of the top habitable story and the roof that may be used for storage or habitation.

3.3.30 Atmosphere, Common. The atmosphere that exists between rooms, spaces, or areas within a building that are not separated by an approved smoke barrier.

3.3.31 Atmosphere, Separate. The atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.

3.3.32* Atrium. A large-volume space created by a floor opening or series of floor openings connecting two or more stories that is covered at the top of the series of openings and is used for purposes other than an enclosed stairway; elevator hoistway; escalator opening; or utility shaft used for plumbing, electrical, air-conditioning, or communications facilities.

3.3.33 Automatic. That which provides a function without the necessity of human intervention.

3.3.34 Automatic-Closing Door. See 3.3.85, *Door, Automatic Clo*sing.
3.3.35* Automatic Fire Extinguishing System. Any system that is designed and installed to detect a fire and subsequently discharge an extinguishing agent without human intervention.

3.3.36* Barrier, Smoke. A continuous membrane, or a membrane with discontinuities created by protected openings, where such membrane is designed and constructed to restrict the movement of smoke.

3.3.37* Barrier, Thermal. A material that limits the average temperature rise of an unexposed surface to not more than 250°F (120°C) for a specified fire exposure complying with the standard time-temperature curve of NFPA 251, *Standard Methods of Tests of Fire Endurance of Building Construction and Materials*.

3.3.38 Basement. Story of a building between floor and ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling
3.3.39 Bay Window. A window assembly whose maximum horizontal projection is no more than 2 ft (610 mm) from the plane of an exterior wall and is elevated above the floor level of the home or a Window supported on a foundation extending beyond the main walls of a building.

3.3.40* Birth Center. A facility in which low-risk births are expected following normal, uncomplicated pregnancies, and in which professional midwifery care is provided to women during pregnancy, birth, and postpartum.

3.3.41 Bleachers. A grandstand in which the seats are not provided with backrests.

3.3.42 Board and Care. See 3.3.289, Residential Board and Care Occupancy.

3.3.43 Boiler. A closed vessel in which water is heated, steam is generated, steam is superheated, or in which any combination thereof takes place by the application of heat from combustible fuels, in a self-contained or attached furnace.
3.3.44 Boiler Room. Any room with a boiler of 5 horsepower or greater.

3.3.45* Building. Any structure used or intended for supporting or sheltering any use or occupancy.

3.3.45.1 Building, Accessory. Any building or structure used incidentally to another building or structure.
3.3.45.2 Building, Agricultural. A building located on agricultural property used for sheltering farm implements, hay, grain, livestock or other farm produce or equipment in which there is not human habitation and that is not used by the public.

3.3.45.3* Building, Apartment. A building containing three or more dwelling units with independent cooking and bathroom facilities.

3.3.45.4 Building, Bulk Merchandising Retail. A building in which the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 12 ft (3.7 m) in storage height.

3.3.45.5* Building, Covered Mall. A building, including the covered mall, enclosing a number of tenants and occupancies wherein two or more tenants have a main entrance into the covered mall.

3.3.45.6* Building, Existing. A building erected or officially authorized prior to the effective date of the adoption of this edition of the *Code* by the agency or jurisdiction.

3.3.45.7* Building, Flexible Plan and Open Plan Educational or Day-Care. A building or portion of a building designed for multiple teaching stations.

3.3.45.8* Building, High-Rise. A building greater than 75 ft (23 m) in height where the building height is measured from the lowest level of fire department vehicle access to the floor of the highest occupiable story.

3.3.45.9* Building, Historic. A structure and its associated additions and site deemed to have historical, architectural, or cultural significance by a local, regional, or national jurisdiction.

3.3.45.10 Building, Private. Any building or that portion of a building that is normally not frequented by not open to the public.
3.3.45.11 Building, Public.A building or part of a building that is not a private building.

3.3.45.12* Building, Special Amusement. A building that is temporary, permanent, or mobile that contains a device or system that conveys passengers or provides a walkway along, around, or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available due to the mode of conveyance through the building or structure.

3.3.46 Building Height. See 3.3.177, *Height, Building.*

3.3.47 Bulkhead.

(a) Exterior walls of a store building that support show windows.

(b) Structure above the roof of a building, enclosing elevator machinery, tanks, stairs, or the like, or the part of a shaft extending above the roof.

(c) Retaining structure intended to withstand lateral pressure.

(d) A vertical structural wall, usually of stone, timber, metal, concrete or synthetic material, constructed along, and generally parallel to, the shoreline to retain earth as an extension of the upland, and often to provide suitable water depth at the waterside face.

3.3.48 Bulk Merchandising Retail Building. See 3.3.45.4, *Building, Bulk Merchandising Retail.*

3.3.49 Business Occupancy. See 3.3.243.3, *Occupancy, Business.*

3.3.50 Canopy. Any fixed roof-like structure which is self-supporting in whole or in part, but having no sidewalls or curtains other than valances not exceeding 18 inches in depth.

3.3.51 Cast Stone. Precast building stone manufactured from portland cement concrete, used as trim, veneer or facing on or in a building.

3.3.52 Cellular or Foamed Plastic. See 3.3.265, *Plastic, Cellular or Foamed.*

3.3.53 Chimney. One or more passageways, vertical or nearly so, for conveying flue gases to the outside atmosphere.

3.3.54 Cleanroom. A room in which the concentration of airborne particles is controlled to specified limits, and including areas below the raised floor and above the ceiling grid if these areas are part of the air path and within the rated construction.

3.3.55 Coal Preparation Plant. A facility designed to prepare coal for shipment, including coal mine surface buildings and structures, housing, and supporting coal-processing and coal-handling equipment. This preparation includes separation, crushing, screening, washing, drying, storage, and loadout of coal to make ready for market. This does not include other facilities such as those containing coal pulverizers, used to condition coal for firing in boilers at power-generating plants, gasification plants, or for utilization purposes.

3.3.56 Combustible. A material that, in the form in which it is used and under the conditions anticipated, will ignite and burn; a material that does not meet the definition of noncombustible or limited-combustible.

3.3.57 Combustion. A chemical process that involves oxidation sufficient to produce light or heat.

3.3.58 Common Atmosphere. See 3.3.30, *Atmosphere, Common.*

3.3.59* Common Path of Travel. The portion of exit access that must be traversed before two separate and distinct paths of travel to two exits are available.

3.3.60 Concrete. (See *ACI 318.*)

3.3.61 Concrete, Plain. (See *ACI 318.*)

3.3.62 Concrete, Reinforced. (See *ACI 318.*)

3.3.63 Construction. Work or operations necessary or incidental to land clearing, grading, excavation and filling; or erection, demolition, assembling, installing or equipping of buildings or structures; or alterations incidental thereto, or to the finished product of construction operations.

3.3.64 Construction Type. Combination of materials used in the construction of a building or structure, based on the varying degrees of fire resistance and combustibility.

3.3.65 Contents and Furnishings. Objects, goods, or products placed inside a structure for functional, operational, or decorative reasons, excluding parts of the building structure, building service equipment, and items meeting the definition of interior finish.

3.3.66 Contractor. One who contracts on predetermined terms to provide labor and materials and to be responsible for performance of a construction job in accordance with established plans and specifications.

3.3.67 Court. An open, uncovered, unoccupied space, unobstructed to the sky, bounded on three or more sides by exterior building walls.

3.3.67.1 Court, Enclosed. A court bounded on all sides by the exterior walls of a building or by the exterior walls and lot lines on which walls are permitted.

3.3.68 Covered Mall. A covered or roofed interior area used as a pedestrian way and connected to a building(s) or portions of a building housing single or multiple tenants.

3.3.69 Covered Mall Building. See 3.3.45.5, *Building, Covered Mall.*

3.3.70* Critical Radiant Flux. The level of incident radiant heat energy on a floor-covering system at the most distant flameout point.

3.3.71 Dalle Glass. A decorative composite glazing material made of individual pieces of glass that are embedded in a cast matrix of concrete or epoxy.

3.3.72 Dash-bond Coat (of plaster). A thick, wet mixture of aggregate and portland cement mixed in proportions of two parts aggregate to one part portland or plastic cement, dashed onto a monolithic surface to improve the mechanical key for subsequent plaster coats.

3.3.73 Data Conversion. The process of developing the input data set for the assessment method of choice.

3.3.74* Day-Care Home. A building or portion of a building in which more than three but not more than 12 clients receive care, maintenance, and supervision, by other than their relative(s) or legal guardians(s), for less than 24 hours per day.

3.3.75 Day-Care Occupancy. See 3.3.243.4, *Occupancy, Day-Care.*

3.3.76 Dead Load. (See *ASCE 7* in Chapter 37.)

3.3.77 Decorative Glass. A carved, leaded or Dalle glass or glazing material whose purpose is decorative or artistic, not functional; whose coloring, texture or other design qualities or components cannot be removed without destroying the glazing material; and whose surface, or assembly into which it is incorporated, is divided into segments.

3.3.78 Demolition. Dismantling or razing of all or part of a building and all operations incidental thereto.

3.3.79 Design Fire Scenario. See 3.3.132.1, *Fire Scenario, Design.*

3.3.80* Design Specifications. Building characteristics and other conditions that are under the control of the design team.

3.3.81 Design Team. A group of stakeholders including, but not limited to, representatives of the architect, client, and any pertinent engineers and other designers.

3.3.82 Detention and Correctional Occupancy. See 3.3.243.5, *Occupancy, Detention and Correctional.*

3.3.83 Detention and Correctional Residential Housing Area. See 3.3.291, *Residential Housing Area, Detention and Correctional.*

3.3.84* Display Sign. Structure arranged, intended or designed as an advertisement, announcement or direction.

3.3.85 Door, Automatic Closing. Doors that normally are open but that close when the automatic-closing device is activated.

3.3.86 Door Assembly. Any combination of a door, frame, hardware, and other accessories that is placed in an opening in a wall that is intended primarily for access or for human entrance or exit.

3.3.87* Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities.

3.3.88 Draft Stop. A continuous membrane used to subdivide a concealed space to restrict the passage of smoke, heat, and flames.

3.3.89 Drycleaning Plant. A plant in which drycleaning and associated operations are conducted, including the office, receiving area, and storage rooms. (32:1-4)

3.3.90 Dumbwaiter. (See *ANSI A17.1*.)

3.3.91 Dwelling, Multifamily. A building that contains three or more dwelling units.

3.3.92 Dwelling, One-Family. A building that consists solely of one dwelling unit.

3.3.93 Dwelling, Two-Family. A building that consists solely of two dwelling units.

3.3.94 Dwelling Unit. A single unit, providing complete, independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking, and sanitation.

3.3.95 Educational Occupancy. See 3.3.243.6, *Occupancy, Educational*.

3.3.96* Electroluminescent. Refers to a light-emitting capacitor in which alternating current excites phosphor atoms placed between electrically conductive surfaces and produces light.

3.3.97 Elevator. *(See Chapter 51.)*

3.3.98 Elevator Evacuation System. A system, including a vertical series of elevator lobbies and associated elevator lobby doors, an elevator shaft(s), and a machine room(s), that provides protection from fire effects for elevator passengers, people waiting to use elevators, and elevator equipment so that elevators can be used safely for egress.

3.3.99 Elevator Lobby. A space from which people directly enter an elevator car(s) and to which people directly leave an elevator car(s).

3.3.100 Elevator Lobby Door. A door between an elevator lobby and another building space other than the elevator shaft.

3.3.101 Emergency Access Opening. A window, panel, or similar opening in which (1) the opening has dimensions of not less than 22 in. (55.9 cm) in width and 24 in. (61 cm) in height and is unobstructed to allow for ventilation and rescue operations from the exterior, (2) the bottom of the opening is not more than 44 in. (112 cm) above the floor, (3) the opening is readily identifiable from both the exterior and interior, and (4) the opening is readily openable from both the exterior and interior.

3.3.102 Enclosed Court. See 3.3.67.1, *Court, Enclosed*.

3.3.103 Engineer, Professional. A person licensed to practice engineering in a jurisdiction, subject to all laws and limitations imposed by the jurisdiction.

3.3.104 Escalator. *(See Chapter 51.)*

3.3.105* Evacuation Capability. The ability of occupants, residents, and staff as a group either to evacuate a building or to relocate from the point of occupancy to a point of safety.

3.3.105.1 Evacuation Capability, Impractical. The inability of a group to reliably move to a point of safety in a timely manner.

3.3.105.2 Evacuation Capability, Prompt. The ability of a group to move reliably to a point of safety in a timely manner that is equivalent to the capacity of a household in the general population.

3.3.105.3 Evacuation Capability, Slow. The ability of a group to move reliably to a point of safety in a timely manner, but not as rapidly as members of a household in the general population.

3.3.106 Exhibit. A space or portable structure used for the display of products or services.

3.3.107 Exhibitor. An individual or entity engaged in the display of the products or services offered.

3.3.108* Existing. That which is already in existence on the date this edition of the *Code* goes into effect.

3.3.109 Existing Building. See 3.3.45.6, *Building, Existing*.

3.3.110* Exit. That portion of a means of egress that is separated from all other spaces of a building or structure by construction or equipment as required to provide a protected way of travel to the exit discharge.

3.3.110.1* Exit, Horizontal. A way of passage from one building to an area of refuge in another building on approximately the same level, or a way of passage through or around a fire barrier to an area of refuge on approximately the same level in the same building that affords safety from fire and smoke originating from the area of incidence and areas communicating therewith.

3.3.111 Exit Access. That portion of a means of egress that leads to an exit.

3.3.112 Exit Discharge. That portion of a means of egress between the termination of an exit and a public way.

3.3.112.1 Exit Discharge, Level of. (1) The lowest story from which not less than 50 percent of the required number of exits and not less than 50 percent of the required egress capacity from such a story discharge directly outside at grade; (2) the story with the smallest elevation change needed to reach grade where no story has 50 percent or more of the required number of exits and 50 percent or more of the required egress capacity from such a story discharge directly outside at grade.

3.3.113 Explosive. Any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. The term includes, but is not limited to, dynamite, black powder, pellet powder, initiating explosives, detonators, safety fuses, squibs, detonating cord, igniter cord, and igniters.The term includes any material determined to be within the scope of Title 18, United States Code, Chapter 40, "Importation, Manufacture, Distribution and Storage of Explosive Materials," and also includes any material classified as an explosive by the U.S. Department of Transportation, "Hazardous Materials Regulations," 49 CFR, Parts 100-199. (495:1-4)

3.3.114 Exposition. An event in which the display of products or services is organized to bring together the provider and user of the products or services.

3.3.115 Exposition Facility. A convention center, hotel, or other building at which exposition events are held.

3.3.116* Exposure Fire. A fire that starts at a location that is remote from the area being protected and grows to expose that which is being protected.

3.3.117 Exterior Surfaces. Weather-exposed surfaces.

3.3.118 Externally Illuminated. See 3.3.190, *Illuminated, Externally*.

3.3.119 Fence. A freestanding wall, balustrade or railing having a height of not less than 3 feet, erected to divide property, to serve as a barrier or guard, or for decoration.

3.3.120 Festival Seating. See 3.3.299, *Seating, Festival*.

3.3.121* Fiberboard. A fibrous, homogeneous panel made from lignocellulosic fibers and having a density of less than 31 pounds per

cubic foot (497 kg/m^3) but more than 10 pounds per cubic foot (160 kg/m^3).
A.3.3.121 Fiberboard. The lignocellulosic fibers are usually wood or cane.
[TCC: Part of definition moved to annex; this is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]

3.3.122* Fire Barrier. A continuous membrane or a membrane with discontinuities created by protected openings with a specified fire protection rating, where such membrane is designed and constructed with a specified fire resistance rating to limit the spread of fire and that also restricts the movement of smoke.

3.3.123 Fire Barrier Wall. See 3.3.357, *Wall, Fire Barrier*.

3.3.124* Fire Compartment. A space within a building that is enclosed by fire barriers on all sides, including the top and bottom.

3.3.125 Fire Door. A door assembly rated in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies, and installed in accordance with NFPA 80, Standard for Fire Doors and Fire Windows.
3.3.126 Fire Door Assembly. Any combination of a fire door, a frame, hardware, and other accessories that together provide a specific degree of fire protection to the opening.

3.3.127 Fire Exit Hardware. A door-latching assembly incorporating a device that releases the latch upon the application of a force in the direction of egress travel and provides fire protection where used as part of a fire door assembly.

3.3.128* Fire Model. A structured approach to predicting one or more effects of a fire.

3.3.129 Fire Protection Rating. See 3.3.280, *Rating, Fire Protection*.

3.3.130 Fire Resistance Rating. See 3.3.281, *Rating, Fire Resistance*.

3.3.131 Fire Retardant Treated Wood. Any wood product which, when impregnated with chemical by a pressure process or other means during manufacture and when tested in accordance with NFPA 255, has a flame spread of 25 or less and shows no evidence of significant progressive combustion when the test is continued for an additional 20–minute period; nor does the flame front progress more than 10 ½ feet (3200 mm) beyond the centerline of the burners at any time during the test.
[TCC: Definition revised (mainly editorially); this is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]

3.3.132* Fire Scenario. A set of conditions that defines the development of fire, the spread of combustion products throughout a building or portion of a building, the reactions of people to fire, and the effects of combustion products.

3.3.132.1 Fire Scenario, Design. A fire scenario used for evaluation of a proposed design.

3.3.133 Fire Stop. A fire-resistant material, barrier, or construction installed in concealed spaces or between structural elements of a building to prevent the extension of fire through walls, ceilings, and the like.
3.3.134 Fire Wall. See 3.3.356, *Wall, Fire*.

3.3.135* Fire Watch. A person or persons assigned to an area for the purpose of protecting the occupants from fire or similar emergencies.

3.3.136 Fire Window. A window assembly rated in accordance with NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, and installed in accordance with NFPA 80, *Standard for Fire Doors and Fire Windows*.

3.3.137* Flame Spread. The propagation of flame over a surface.

3.3.138* Flashover. A stage in the development of a contained fire in which all exposed surfaces reach ignition temperatures more or less simultaneously and fire spreads rapidly throughout the space.

3.3.139 Flexible Plan and Open Plan Educational or Day-Care Building. See 3.3.45.7, *Building, Flexible Plan and Open Plan Educational or Day-Care*.

3.3.140* Floor Area, Gross. The floor area within the inside perimeter of the outside walls of the building under consideration with no deduction for hallways, stairs, closets, thickness of interior walls, columns, or other features.

3.3.141 Floor Area, Net. The floor area that is the actual occupied area, not including accessory unoccupied areas or thickness of walls.

3.3.142 Flow Time. A component of total evacuation time that is the time during which there is crowd flow past a point in the means of egress system.

3.3.143 Fly Gallery. A raised floor area above a stage from which the movement of scenery and operation of other stage effects are controlled.

3.3.144 Foam Plastic Insulation. A cellular plastic used for thermal insulating or acoustical applications, having a density of 20 lbs/ft^3 or less (320 kg/m^3), containing open or closed cells, formed by a foaming agent

3.3.145 Folding and Telescopic Seating. See 3.3.300, *Seating, Folding and Telescopic*.

3.3.146 Footing. Part of the foundation of a structure that spreads and transmits the load direct to the soil or to piles.
3.3.147 Foyer. Area or space within a building, located between the main entrance and the occupied areas of a building, or, when used in connection with a theater, the area between the lobby and the main floor.

3.3.148* Fuel Load. The total quantity of combustible contents of a building, space, or fire area.

3.3.149 Gallery. That part of the seating area of a theater or assembly room located above a balcony and having a seating capacity of more than 10.
3.3.150 Garage. A building or portion of a building in which one or more self-propelled vehicles carrying volatile flammable liquid for fuel or power are kept for use, sale, storage, rental, repair, exhibition, or demonstrating purposes, and all that portion of a building that is on or below the floor or floors in which such vehicles are kept and that is not separated therefrom by suitable cutoffs.
3.3.150.1 Garage, Automotive Service. Garage where no repair work is done except the exchange of parts and maintenance requiring no open flame, cutting, welding or use of highly flammable liquids.
3.3.150.2 Garage, Basement Parking. Parking garage having exterior walls around more than 50 percent of the perimeter.
3.3.150.3 Garage, Parking. Garage used solely for parking motor vehicles.
3.3.150.4 Garage, Parking, Enclosed. Parking garage having exterior walls around more than 50 percent of the perimeter.
3.3.150.5 Garage, Parking, Open-Air. Garage having at least 50 percent of the perimeter open to the air at each story.
3.3.150.6 Garage, Private. A building or part thereof not over 1,000 square feet in area, in which only motor vehicles used by the owner or tenants of the building are stored or kept.
3.3.150.7 Garage, Repair. A building, structure, or portions thereof wherein major repair or painting or body and fender work is performed on motorized vehicles or automobiles, and includes associated floor space used for offices, parking, and showrooms.

3.3.151 General Industrial Occupancy. See 3.3.243.8.1, *Occupancy, Industrial, General*.

3.3.152 Goal. A nonspecific overall outcome to be achieved that is measured on a qualitative basis.

3.3.153 Grade (Ground Level). The reference plane representing the average elevation of the finished ground level measured at a distance of 10 ft. from all exterior walls of the building.
3.3.154 Grade (Lumber). The classification of lumber in regard to strength and utility in accordance with USDOC PS 20 and the grading rules of an approved lumber rules writing agency.
[TCC: Reference to the 1994 edition of USDOC PS20 has been removed; the year needs to be specified in Chapter 2 dealing with mandatory references. This is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]

3.3.155* Grandstand. A structure that provides tiered or stepped seating.

3.3.156 Gridiron. The structural framing over a stage supporting equipment for hanging or flying scenery and other stage effects.

3.3.157 Gross Floor Area. See 3.3.140, *Floor Area, Gross*.

3.3.158 Gross Leasable Area. See 3.3.24.1, *Area, Gross Leasable*.

3.3.159 Guard. A vertical protective barrier erected along exposed edges of stairways, balconies, and similar areas.

3.3.160 Guest. Person hiring or occupying a room for living or sleeping, not included in a family.

3.3.161 Guest Room. An accommodation combining living, sleeping, sanitary, and storage facilities within a compartment.

3.3.162 Guest Suite. An accommodation with two or more contiguous rooms comprising a compartment, with or without doors between such rooms, that provides living, sleeping, sanitary, and storage facilities.

3.3.163 Gypsum Base for Veneer Plaster. A gypsum board used as the base for application of a gypsum veneer plaster.
3.3.164 Gypsum Board. The generic name for a family of sheet products consisting of a noncombustible core primarily of gypsum with paper surfacing.
3.3.165 Gypsum Lath. A gypsum board used as the base for application of gypsum plaster.
3.3.166 Gypsum Panel Products. The general name for a family of sheet products consisting essentially of gypsum.
3.3.167 Gypsum Plaster. The generic name for a family of powdered cementitious products consisting primarily of calcined gypsum with additives to modify physical characteristics, and having the ability, when mixed with water, to produce a plastic mortar or slurry which can be formed to the desired shape by various methods and will subsequently set to a hard, rigid mass
3.3.168 Gypsum Wallboard. A gypsum board used primarily as an interior surfacing for building structures.
3.3.169 Gypsum Veneer Plaster. A calcined gypsum plaster specially manufactured to provide high strength, hardness, and abrasion resistance when applied in thin coats over a gypsum base for veneer plasters.
3.3.170 Habitable Room. Room in a residential occupancy used for living, sleeping, cooking and eating, but excluding bath, storage and service area and corridors.

3.3.171 Handrail. A bar, pipe, or similar member designed to furnish persons with a handhold.

3.3.172 Hardboard. A fibrous-felted, homogeneous panel made from lignocellulosic fibers consolidated under heat and pressure in a hot press to a density not less than 31 pounds per cubic foot (497 kg/m^3).

3.3.173 Hazardous Area. See 3.3.24.2, *Area, Hazardous*.

3.3.174 Health Care Facilities. Buildings or portions of buildings in which medical, dental, psychiatric, nursing, obstetrical, or surgical care are provided. Health care facilities include, but are not limited to, hospitals, nursing homes, limited care facilities, clinics, medical and dental offices and ambulatory care centers. (99A:2-2).

3.3.175 Health Care Occupancy. See 3.3.243.7, *Occupancy, Health Care*.

3.3.176* Heat Release Rate (HRR). The rate at which heat energy is generated by burning.

3.3.177 Height, Building. The vertical distance from the grade to the average elevation of the roof of the highest story.
3.3.178 Height, Story. The vertical distance from the upper surface of a floor and uper surface of the floor or roof next above.
3.3.179 Height, Wall. Vertical distance to the top of the wall measured from the foundation wall or from a girder or other immediate support of such wall.
3.3.180* Heliport. An identifiable area located on land, on water, or on a structure, that also includes any existing buildings or facilities thereon, used or intended to be used for landing and takeoff of helicopters.
3.3.181 Helistop. A heliport where no refueling, maintenance, repair or storage of helicopters is permitted.

3.3.182 High Hazard Industrial Occupancy. See 3.3.134.8.2, *Occupancy, Industrial, High Hazard*.

3.3.183 High-Rise Building. See 3.3.45.8, *Building, High-Rise*.

3.3.184 Historic Building. See 3.3.45.9, *Building, Historic*.

3.3.185 Horizontal Exit. See 3.3.110.1, *Exit, Horizontal*.

3.3.186 Horizontal Separation. See 3.3.307, *Separation, Horizontal*.

3.3.187 Hospital. A building or portion thereof used on a 24-hour basis for the medical, psychiatric, obstetrical, or surgical care of four or more inpatients.

3.3.188* Hotel. A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals.

3.3.189 Hypobaric Facility. A facility that is designed to provide an oxygen-enriched atmosphere in which the concentration of oxygen exceeds 23.5 percent by volume, and a pressure less than 760 mm Hg.

3.3.190* Illuminated, Externally. Refers to an illumination source that is contained outside of the device or sign legend area that is to be illuminated.

3.3.191* Illuminated, Internally. Refers to an illumination source that is contained inside the device or legend that is illuminated.

3.3.192 Impractical Evacuation Capability. See 3.3.105.1, *Evacuation Capability, Impractical*.

3.3.193 Incapacitation. A condition under which humans do not function adequately and become unable to escape untenable conditions.

3.3.194 Industrial Occupancy. See 3.3.243.8, *Occupancy, Industrial*.

3.3.195 Input Data Specification. Information required by the verification method.

3.3.196* Interior Finish. The exposed surfaces of walls, ceilings, and floors within buildings.

3.3.196.1 Interior Ceiling Finish. The interior finish of ceilings.

3.3.196.2* Interior Floor Finish. The interior finish of floors, ramps, stair treads and risers, and other walking surfaces.

3.3.196.3 Interior Wall Finish. The interior finish of columns, fixed or movable walls, and fixed or movable partitions.

3.3.197 Internally Illuminated. See 3.3.191, *Illuminated, Internally*.

3.3.198 Interior Surfaces. Surfaces other than weather-exposed surfaces.
3.3.199 Jurisdiction. Legally constituted governmental unit that has adopted this Code by law or ordinance.

3.3.200 Legitimate Stage. See 3.3.323.1, *Stage, Legitimate.*

3.3.201 Level of Exit Discharge. See 3.3.112.1, *Exit Discharge, Level of.*

3.3.202 Life Safety Evaluation. A written review dealing with the adequacy of life safety features relative to fire, storm, collapse, crowd behavior, and other related safety considerations.

3.3.203 Light Diffusing System. Panels, grids, baffles or lenses made with light transmitting plastics, other than those that are part of an electrical light fixture, positioned below independently mounted electrical light sources, skylights, or light-transmitting roof panels.
[TCC: Definition revised (mainly editorially) for compliance with NFPA Manual of Style; this is different than that written by BLD-MAT for Chapter 47. The BLD-MAT committee should be asked to modify related language in Chapter 47.]
3.3.204 Light Transmitting Plastics. Plastic materials that are used to transmit light into structures.
3.3.205 Light Transmitting Plastic Roof Panels. Structural plastic panel, other than skylights, in the plane of the roof, fastened to roof members, that transmit light into the structure.
[TCC: Definition revised (mainly editorially) for compliance with NFPA Manual of Style; this is different than that written by BLD-MAT for Chapter 47. The BLD-MAT committee should be asked to modify related language in Chapter 47.]
3.3.206 Light Transmitting Plastic Wall Panels. Plastic panels other than plastic glazing, fastened to structural wall members, that transmit light into the structure.
[TCC: Definition revised (mainly editorially) for compliance with NFPA Manual of Style; this is different than that written by BLD-MAT for Chapter 47. The BLD-MAT committee should be asked to modify related language in Chapter 47.]

3.3.207* Limited Care Facility. A building or portion of a building used on a 24-hour basis for the housing of four or more persons who are incapable of self-preservation because of age; physical limitations due to accident or illness; or limitations such as mental retardation/developmental disability, mental illness, or chemical dependency.

3.3.208* Limited-Combustible. Refers to a building construction material not complying with the definition of *noncombustible (see 3.3.131)* that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, and includes (1) materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of $^1/_8$ in. (3.2 mm) that has a flame spread index not greater than 50; and (2) materials, in the form and thickness used, other than as described in (1), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion, and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion.

3.3.209 Liquefied Petroleum Gas. Any material having a vapor pressure not exceeding that allowed for commercial propane composed predominantly of the following hydrocarbons, either by themselves or as mixtures: propane, propylene, butane (normal butane or isobutane), and butylenes.

3.3.210 Living Area. See 3.3.24.3, *Area, Living.*

3.3.211 Load, Dead. *(See ASCE 7.)*
3.3.212 Load, Live. *(See ASCE 7.)*
3.3.213 Lobby. Enclosed vestibule directly accessible from the main entrance of a theater, hotel, apartment house or similar building with an occupant load of 10 or more.

3.3.214 Lodging or Rooming House. A building or portion thereof that does not qualify as a one- or two-family dwelling, that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants.

3.3.215 Lot. Smallest parcel of land considered as a unit.
3.3.216 Lot Line. Line dividing one lot from another, or from a street or other public space.
3.3.217 LP Fuel. See 3.3.209, *Liquefied Petroleum Gas.*
3.3.218 LP Gas. See 3.3.209, *Liquefied Petroleum Gas.*
3.3.219 Marine Terminal. A facility comprising one or more berths, slips, piers, wharves, loading and unloading areas, warehouses, and storage yards used for transfer of people and/or cargo between waterborne carriers and land. (307:2-1)
3.3.220 Marquee. Permanent roofed structure attached to and supported by a building.
3.3.221 Masonry. Built-up unit of construction or combination of materials such as clay, shale, concrete, glass, gypsum, tile or stone set in mortar.
3.3.222 Masonry Unit, Solid. Masonry units whose net cross-sectional area in every plane parallel to the bearing surface is 75 percent or more of its gross cross-sectional area measured in the same plane.

3.3.223* Means of Egress. A continuous and unobstructed way of travel from any point in a building or structure to a public way consisting of three separate and distinct parts: (1) the exit access, (2) the exit, and (3) the exit discharge.

3.3.223.1 Means of Egress, Accessible. A path of travel, usable by a person with a severe mobility impairment, that leads to a public way or an area of refuge.

3.3.224 Means of Escape. A way out of a building or structure that does not conform to the strict definition of *means of egress* but does provide an alternate way out.

3.3.225 Membrane. A thin, flexible, water-impervious material capable of being supported by an air pressure of 1.5 in. (38.1 mm) water column.

3.3.226 Membrane Structure. See 3.3.134.3, *Structure, Membrane.*

3.3.227 Mercantile Occupancy. See 3.3.243.9, *Occupancy, Mercantile.*

3.3.228 Mezzanine. An intermediate level between the floor and the ceiling of any room or space.

3.3.229 Mixed Occupancy. See 3.3.243.10, *Occupancy, Mixed.*

3.3.230 Moist Curing. A method for the retention of moisture for hydration of portland cement plaster.
3.3.231* Motor Freight Terminal. The area where the overall operation of freight transfer, vehicle repair and service, truck parking, and administrative functions are performed.

3.3.232 Multilevel Play Structure. See 3.3.334.4, *Structure, Multilevel Play.*

3.3.233 Multipurpose Assembly Occupancy. See 3.3.243.12, *Occupancy, Multipurpose Assembly.*

3.3.234 Multiple Station Alarm Device. Two or more single station alarm devices that can be interconnected so that actuation of one causes all integral audible alarms to operate; or one single station alarm device having connections to other detectors or to a manual fire alarm box. (72:1.4)

3.3.235 Net Floor Area. See 3.3.141, *Floor Area, Net.*

3.3.236* Nominal Dimension (Masonry). A specified dimension plus an allowance for the joints with which the units are to be laid.
3.3.237 Nominal Dimension (Metal). A specified dimension or weight plus or minus the specified manufacturing tolerance for the material or product.
3.3.238* Nominal Size (Lumber). The commercial size designation of width and depth, in standard sawn lumber and glued laminated lumber grades.

A.3.3.238 Nominal Size (Lumber). The nominal size is somewhat larger than the standard net size of dressed lumber, in accordance with USDOC PS 20-94 for sawn lumber and in accordance with the AF&PA *NDS* for glued laminated lumber.
[TCC: Part of definition moved to annex; this is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]

3.3.239 Noncombustible. Refers to a material that, in the form in which it is used and under the conditions anticipated, does not ignite, burn, support combustion, or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, *Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C*, are considered noncombustible materials.

3.3.240 Nonconforming. Not conforming to the requirements of this Code.

3.3.241 Nursing Home. A building or portion of a building used on a 24-hour basis for the housing and nursing care of four or more persons who, because of mental or physical incapacity, might be unable to provide for their own needs and safety without the assistance of another person.

3.3.242* Objective. A requirement that needs to be met to achieve a goal.

3.3.243 Occupancy. The purpose for which a building or portion thereof is used or intended to be used.

3.3.243.1 Occupancy, Ambulatory Health Care. A building or portion thereof used to provide services or treatment simultaneously to four or more patients that (1) provides, on an outpatient basis, treatment for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others; or (2) provides, on an outpatient basis, anesthesia that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.

3.3.243.2* Occupancy, Assembly. An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.

3.3.243.3* Occupancy, Business. An occupancy used for account and record keeping or the transaction of business other than mercantile.

3.3.243.4* Occupancy, Day-Care. An occupancy in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than 24 hours per day.

3.3.243.5* Occupancy, Detention and Correctional. An occupancy used to house four or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control.

3.3.243.6* Occupancy, Educational. An occupancy used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than 12 hours per week.

3.3.243.7* Occupancy, Health Care. An occupancy used for purposes of medical or other treatment or care of four or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control.

3.3.243.8* Occupancy, Industrial. An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted.

3.3.243.8.1* Occupancy, Industrial, General. An industrial occupancy in which ordinary and low hazard industrial operations are conducted in buildings of conventional design suitable for various types of industrial processes.

3.3.243.8.2* Occupancy, Industrial, High Hazard. An industrial occupancy in which industrial operations that include high hazard materials, processes, or contents are conducted.

3.3.243.8.3 Occupancy, Industrial, Special Purpose. An industrial occupancy in which ordinary and low hazard industrial operations are conducted in buildings designed for and suitable only for particular types of operations, characterized by a relatively low density of employee population, with much of the area occupied by machinery or equipment.

3.3.243.9* Occupancy, Mercantile. An occupancy used for the display and sale of merchandise.

3.3.243.10 Occupancy, Mixed. A multiple occupancy where the occupancies are intermingled.

3.3.243.11* Occupancy, Multiple. A building or structure in which two or more classes of occupancy exist.

3.3.243.12 Occupancy, Multipurpose Assembly. An assembly room designed to accommodate temporarily any of several possible assembly uses.

3.3.243.13* Occupancy, Residential. An occupancy that provides sleeping accommodations for purposes other than health care or detention and correctional.

3.3.243.14* Occupancy, Residential Board and Care. A building or portion thereof that is used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

3.3.243.15 Occupancy, Separated. A multiple occupancy where the occupancies are separated by fire resistance–rated assemblies.

3.3.243.16* Occupancy, Storage. An occupancy used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals.

3.3.244 Occupant Characteristics. The abilities or behaviors of people before and during a fire.

3.3.245 Occupant Load. The total number of persons that might occupy a building or portion thereof at any one time.

3.3.246 Occupiable Story. See 3.3.328.1, *Story, Occupiable.*

3.3.247 Open-Air Mercantile Operation. An operation conducted outside of all structures, with the operations area devoid of all walls and roofs except for small, individual, weather canopies.

3.3.248 Open-Air Parking Structure. See 3.3.334.7, *Structure, Open-Air Parking.*

3.3.249 Open Structure. See 3.3.334.6, *Structure, Open.*

3.3.250* Outside Stair. A stair with not less than one side open to the outer air.

3.3.251 Owner. The owner of a building or structure or his duly authorized agent or attorney, a purchaser, devisee, fiduciary and a person having a vested interest in the property.

3.3.252 Panic Hardware. A door-latching assembly incorporating a device that releases the latch upon the application of a force in the direction of egress travel.

3.3.253 Parapet. That part of a wall entirely above the roof line.

3.3.254* Particleboard. A generic term for a panel primarily composed of cellulosic materials in the form of discrete pieces or particles, as distinguished from fibers, which are combined with synthetic resin or other suitable bonding system by a process in which the interparticle bond is created by the bonding system under heat and pressure.
A.3.3.254 Particleboard. The cellulosic material is usually wood.
[TCC: Part of definition moved to annex and part revised editorially; this is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]
3.3.255* Partition. An interior wall that subdivides spaces within a story, or the attic or basement of a building.
3.3.255.1 Partition, Partial Height. A partition with a height not greater than 72 inches.
3.3.256* Penthouse. Enclosed structure other than a roof structure located on a roof, extending not more than 12 feet above a roof.

3.3.257* Performance Criteria. Threshold values on measurement scales that are based on quantified performance objectives.

3.3.258 Permanent Structure. See 3.3.334.9, *Structure, Permanent.*

3.3.259 Permit. A document issued by the authority having jurisdiction for the purpose of authorizing performance of a specified activity.
3.3.260 Person. Any individual, firm, partnership, corporation, company, association, or joint-stock association, including any trustee, receiver, assignee, or personal representative thereof.

3.3.261* Personal Care. The care of residents who do not require chronic or convalescent medical or nursing care.

3.3.262* Photoluminescent. Having the property of emitting light that continues for a length of time after excitation by visible or invisible light has been removed.

3.3.263 Pinrail. A rail on or above a stage through which belaying pins are inserted and to which lines are fastened.

3.3.264 Plastic. Any of a wide range of natural or synthetic organic materials of high molecular weight that can be formed by pressure, heat, extrusion, and other methods into desired shapes. Plastics are usually made from resins, polymers, cellulose derivatives, caseins, and proteins. The principal types are thermosetting and thermoplastic.

3.3.265* Plastic, Cellular or Foamed. A heterogeneous system comprised of not less than two phases, one of which is a continuous polymeric organic material, and the second of which is deliberately introduced for the purpose of distributing gas in voids throughout the material.

3.3.266 Plastic Glazing. Plastic panels or lenses that are glazed or set in a frame or sash and which are not mechanically fastened to a structural member of the structure.
[TCC: Definition revised (mainly editorially) for compliance with NFPA Manual of Style; this is different than that written by BLD-MAT for Chapter 47. The BLD-MAT committee should be asked to modify related language in Chapter 47.]

3.3.267* Platform. The raised area within a building used for the presentation of music, plays, or other entertainment.

3.3.267.1 Platform, Temporary. A platform erected within an area for not more than 30 days.

3.3.268 Plenum. A compartment or chamber to which one or more air ducts are connected and that forms part of the air distribution system.

3.3.269 Point of Safety. A location that (a) is exterior to and away from a building; or (b) is within a building of any type construction protected throughout by an approved automatic sprinkler system and that is either (1) within an exit enclosure meeting the requirements of this *Code,* or (2) within another portion of the building that is separated by smoke barriers in accordance with Section 8.3, with not less than a $^1/_2$-hour fire resistance rating, and that portion of the building has access to a means of escape or exit that conforms to the requirements of this *Code* and does not necessitate return to the area of fire involvement; or (c) is within a building of Type I, Type II(222), Type II(111), Type III(211), Type IV, or Type V(111) construction *(see 8.2.1)* and is either (1) within an exit enclosure meeting the requirements of this *Code*, or (2) within another portion of the building that is separated by smoke barriers in accordance with Section 8.3, with not less than a $^1/_2$-hour fire resistance rating, and that portion of the building has access to a means of escape or exit that conforms to the requirements of this *Code* and does not necessitate return to the area of fire involvement.

3.3.270 Portland Cement Plaster. A plaster mix in which portland cement or combinations of portland and masonry cements or portland cement and lime are the principal cementitious materials mixed with aggregate.
3.3.271 Prefabricated. Fabricated prior to erection or installation on or in a building or on a foundation.
3.3.272 Preservative-treated Wood. Wood impregnated under pressure with compounds that reduce their susceptibility to deterioration caused by fungi, insects, or marine borers.

3.3.273 Private Party Tent. See 3.3.341.1, *Tent, Private Party.*

3.3.274 Professional Engineer. An engineer who is registered or licensed to practice engineering.

3.3.275 Prompt Evacuation Capability. See 3.3.105.2, *Evacuation Capability, Prompt.*

3.3.276* Proposed Design. A design developed by a design team and submitted to the authority having jurisdiction for approval.

3.3.277 Proscenium Wall. See 3.3.363, *Wall, Proscenium.*

3.3.278 Public Way. A street, alley, or other similar parcel of land essentially open to the outside air deeded, dedicated, or otherwise permanently appropriated to the public for public use and having a clear width and height of not less than 10 ft (3 m).

3.3.279* Ramp. A walking surface that has a slope steeper than 1 in 20.

3.3.280 Rating, Fire Protection. The designation indicating the duration of the fire test exposure to which a fire door assembly or fire window assembly was exposed and for which it met all the acceptance criteria as determined in accordance with NFPA 252, *Standard Methods of Fire Tests of Door Assemblies*, or NFPA 257, *Standard on Fire Test for Window and Glass Block Assemblies*, respectively.

3.3.281 Rating, Fire Resistance. The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with the test procedures of NFPA 251, *Standard Methods of Tests of Fire Endurance of Building Construction and Materials.*

3.3.282 Registered Design Professional. An individual who is registered or licensed to practice his/her respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

3.3.283 Regular Stage. See 3.3.323.2, *Stage, Regular.*

3.3.284 Reinforced Plastic, Glass Fiber. Plastic materials containing not less than 20% by weight glass fiber which impart some mechanical properties superior to those of the base resin.
3.3.285 Repair. Replacement or renewal of any part of an existing building with equivalent materials for the purpose of its maintenance, excluding addition, change or modification as defined in *Alteration.*
3.3.286 Repair Garage. See 3.3.150.7, *Garage, Repair.*
3.3.287 Required. Required by this Code.

3.3.288 Resident, Residential Board and Care. A person who receives personal care and resides in a residential board and care facility.

3.3.289 Residential Board and Care Occupancy. See 3.3.243.14, *Occupancy, Residential Board and Care*.

3.3.290 Residential Board and Care Resident. See 3.3.288, *Resident, Residential Board and Care*.

3.3.291 Residential Housing Area, Detention and Correctional. Sleeping areas and any contiguous day room, group activity space, or other common space for customary access of residents.

3.3.292 Residential Occupancy. See 3.3.243.13, *Occupancy, Residential*.

3.3.293 Rooftop Landing Pad. The entire load-bearing surface intended for the landing, takeoff, and parking of helicopters. (418:1-3)

3.3.294 Roof Structure. Structure above the roof of any part of a building enclosing a stairway, tank, elevator machinery, service equipment or part of a shaft extending above the roof, not housing living or recreational accommodations.

3.3.295 Safe Location. A location remote or separated from the effects of a fire so that such effects no longer pose a threat.

3.3.296 Safety Factor. A factor applied to a predicted value to ensure that a sufficient safety margin is maintained.

3.3.297 Safety Margin. The difference between a predicted value and the actual value where a fault condition is expected.

3.3.298 Sally Port (Security Vestibule). A compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.

3.3.299* Seating, Festival. A form of audience/spectator accommodation in which no seating, other than a floor or ground surface, is provided for the audience/spectators gathered to observe a performance.

3.3.300 Seating, Folding and Telescopic. A structure that is used for tiered seating of persons and whose overall shape and size can be reduced, without being dismantled, for purposes of moving or storing.

3.3.301 Seating, Smoke-Protected Assembly. Seating served by means of egress that is not subject to smoke accumulation within or under the structure.

3.3.302 Self-Closing. Equipped with an approved device that ensures closing after opening.

3.3.303* Self-Luminous. Illuminated by a self-contained power source and operated independently of external power sources.

3.3.304* Self-Preservation (Day-Care Occupancy). The ability of a client to evacuate a day-care occupancy without direct intervention by a staff member.

3.3.305 Sensitivity Analysis. See 3.3.18, *Analysis, Sensitivity*.

3.3.306 Separate Atmosphere. See 3.3.31, *Atmosphere, Separate*.

3.3.307 Separation, Horizontal. Permanent open space between a building wall and the lot line or the center line of a facing street, alley or public way. Where two or more buildings are located on the same lot, the horizontal separation of the wall shall be measured from an imaginary line drawn at a distance from the facing wall equal to the horizontal separation applicable for that wall.

3.3.308 Severe Mobility Impairment. The ability to move to stairs but without the ability to use the stairs.

3.3.309 Shaft. An enclosed space extending through one or more stories connecting Vertical opening or passage through two or more in successive floors, of a building or through or floors and roof.

3.3.310 Single Station Alarm. A detector comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation. (72:1.4)

3.3.311 Slow Evacuation Capability. See 3.3.105.3, *Evacuation Capability, Slow*.

3.3.312 Smoke Alarm. A single- or multiple-station alarm responsive to smoke. (72:1.4)

3.3.313 Smoke Barrier. See 3.3.36, *Barrier, Smoke*.

3.3.314* Smoke Compartment. A space within a building enclosed by smoke barriers on all sides, including the top and bottom.

3.3.315 Smoke Detector. A device that detects visible or invisible particles of combustion. (72:1.4)

3.3.316* Smoke Partition. A continuous membrane that is designed to form a barrier to limit the transfer of smoke.

3.3.317* Smokeproof Enclosure. A stair enclosure designed to limit the movement of products of combustion produced by a fire.

3.3.318 Smoke-Protected Assembly Seating. See 3.3.301, *Seating, Smoke-Protected Assembly*.

3.3.319 Soundstage. A building or a portion of a building, usually insulated from outside noise and natural light, used by the entertainment industry for the purpose of motion picture, television, or commercial productions. (140:2-2)

3.3.320 Special Amusement Building. See 3.3.45.12, *Building, Special Amusement*.

3.3.321 Special Purpose Industrial Occupancy. See 3.3.243.8.3, *Occupancy, Industrial, Special Purpose*.

3.3.322 Staff (Residential Board and Care). Persons who provide personal care services, supervision, or assistance.

3.3.323 Stage. A space within a building used for entertainment and utilizing drops or scenery or other stage effects.

3.3.323.1 Stage, Legitimate. A stage with a height greater than 50 ft (15 m) measured from the lowest point on the stage floor to the highest point of the roof or floor deck above.

3.3.323.2 Stage, Regular. A stage with a height of 50 ft (15 m) or less measured from the lowest point on the deck above.

3.3.324 Stairway. One or more flights of stairs and the landings and platforms connecting them, forming a continuous and uninterrupted passage from one story to another in a building or structure. Two or more risers shall constitute a flight of stairs.

3.3.325 Stakeholder. An individual, or representative of same, having an interest in the successful completion of a project.

3.3.326 Standpipe System. An arrangement of piping, valves, hose connections, and allied equipment installed in a building or structure, with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire, thereby protecting a building or structure and its contents in addition to protecting the occupants. This is accomplished by means of connections to water supply systems or by means of pumps, tanks, and other equipment necessary to provide an adequate supply of water to the hose connections. (14:1-4.28)

3.3.327 Storage Occupancy. See 3.3.243.16, *Occupancy, Storage*.

3.3.328 Story. The portion of a building located between the upper surface of a floor and the upper surface of the floor or roof next above.

3.3.328.1* Story, Occupiable. A story occupied by people on a regular basis.

3.3.329 Street. A public thoroughfare that has been dedicated for vehicular use by the public and can be used for access by fire department vehicles.

3.3.330* Street Floor. A story or floor level accessible from the street or from outside a building at ground level, with the floor level at the main entrance located not more than three risers above or below ground level and arranged and utilized to qualify as the main floor.

3.3.331 Structural Elements. The columns and girders, beams, trusses, joists, braced frames, moment resistant frames, vertical and lateral resisting elements and other framing members that are designed to carry any portion of the dead or live load and lateral forces and that are essential to the stability of the building or structure.

3.3.332 Structural Frame. Frame composed of individual members of a building or structure required to transmit loads to the ground.

3.3.333 Structural Glued Laminated Timber. Any member comprising an assembly of laminations of lumber in which the grain of all laminations is approximately parallel longitudinally, in which the laminations are bonded with adhesives.

3.3.334* Structure. That which is built or constructed.

3.3.334.1 Structure, Air-Inflated. A structure whose shape is maintained by air pressure in cells or tubes forming all or part of the enclosure of the usable area and in which the occupants are not within the pressurized area used to support the structure.

3.3.334.2* Structure, Air-Supported. A structure whose shape is maintained by air pressure and in which occupants are within the elevated pressure area.

3.3.334.3 Structure, Membrane. A building or portion of a building incorporating an air-inflated, air-supported, tensioned-membrane structure; a membrane roof; or a membrane-covered rigid frame to protect habitable or usable space.

3.3.334.4 Structure, Multilevel Play. A structure that consists of tubes, slides, crawling areas, and jumping areas that is located within a building and is used for climbing and entertainment, generally by children.

3.3.334.5 Structure, Enclosed Parking. Any parking structure that is not an open parking structure.

3.3.334.6* Structure, Open. A structure that supports equipment and operations not enclosed within building walls.

3.3.334.7 Structure, Open-Air Parking. A structure used for the parking or storage of motor vehicles that have (1) uniformly distributed openings in exterior walls on not less than two sides totaling not less than 40 percent of the building perimeter, (2) aggregate areas of such openings in exterior walls in each level not less than 20 percent of the total perimeter wall area of each level, and (3) interior wall lines and columns not less than 20 percent open with openings distributed to allow ventilation.

3.3.334.8 Structure, Open Parking. A parking structure that, at each parking level, has wall openings open to the atmosphere, for an area of note less than 1.4 ft^2 (0.13 m^2) for each linear foot (0.3m) of its exterior perimeter. Such openings are distributed over 40 percent of the building perimeter or uniformly over two opposing sides. Interior walls lines and column lines are at least 20 percent open, with openings distributed to provide ventilation.

3.3.334.9 Structure, Permanent. A building or structure that is intended to remain in place for a period of more than 180 consecutive days.

3.3.334.10 Structure, Temporary. A building or structure not meeting the definition of *permanent structure. (See 3.3.334.9.)*

3.3.334.11 Structure, Tensioned-Membrane. A membrane structure incorporating a membrane and a structural support system such as arches, columns and cables, or beams wherein the stresses developed in the tensioned membrane interact with those in the structural support so that the entire assembly acts together to resist the applied loads.

3.3.334.12* Structure, Underground. A structure or portions of a structure in which the floor level is below the level of exit discharge.

3.3.334.13 Structure, Water-Surrounded. A structure fully surrounded by water.

3.3.334.14 Structure, Windowless. A structure or portions of a structure lacking access openings.

3.3.335 Studio, Production. A building, a portion of a building, or a group of buildings designed and constructed for use by the entertainment industry for the purpose of motion picture, television, or commercial productions, or broadcasting television programs utilizing a soundstage. (140:2-2)

3.3.336 Tank. A structure above grade, that encloses a volume that either holds bulk solids or liquids or simulates that.

3.3.337 Temporary. A building or structure that is in place for a period of 180 consecutive days or less.

3.3.338 Temporary Platform. See 3.3.267.1, *Platform, Temporary.*

3.3.339 Temporary Structure. See 3.3.334.10, *Structure, Temporary.*

3.3.340 Tensioned-Membrane Structure. See 3.3.334.11, *Structure, Tensioned-Membrane.*

3.3.341* Tent. A temporary structure, the covering of which is made of pliable material that achieves its support by mechanical means such as beams, columns, poles, or arches, or by rope or cables, or both.

3.3.341.1 Tent, Private Party. A tent erected in the yard of a private residence for entertainment, recreation, dining, a reception, or similar function.

3.3.342 Thermal Barrier. See 3.3.37, *Barrier, Thermal.*

3.3.343 Thermoplastic Material. Plastic material capable of being repeatedly softened by heating and hardened by cooling, and that in the softened state can be repeatedly shaped by molding or forming.

3.3.344 Thermoset Material. Plastic material that, after having been cured by heat or other means, is substantially infusible and cannot be softened and formed.

3.3.345 Tower. An enclosed independent structure or portion of a building with elevated levels for support of equipment or occupied for observation, control, operation, signaling, or similar limited use where (1) the elevated levels are provided to allow adequate observation or line-of-sight for personnel or equipment, and (2) the levels within the tower below the observation level and equipment room for that level are not occupied.

3.3.346 Townhouse. A single family dwelling constructed in attached groups of three or more units in which each unit extends from the foundation to the roof and has open space on at least two sides.

3.3.347 Type I (Segmented) Shear Wall. A wall designed to resist inplane lateral forces that is fully sheathed and that is provided with hold-down anchors at each end of the wall segment. [TCC: Following sentence removed from the definition drafted by BLD-MAT. The BLD-MAT committee should be asked to relocate it to Chapter 43 as a

requirement: "Type I walls are only permitted to have openings where detailing for force transfer around the openings is provided."]
3.3.348* Type II (Perforated) Shear Wall. A wall designed to resist inplane lateral forces that is sheathed with wood structural panel or sheet steel that contains openings, but which has not been specifically designed and detailed for force transfer around wall openings.
A.3.3.348 Type II (Perforated) Shear Wall. Hold-down anchors for Type II shear walls are provided at the ends of the wall.
[TCC: Part of definition moved to annex; this is different than that written by BLD-MAT for Chapter 43. The BLD-MAT committee should be asked to modify related language in Chapter 43.]
3.3.349* Type II Shear Wall Segment. A section of shear wall with full-height sheathing and which meets required aspect ratio limits.
A.3.3.349 Type II Shear Wall Segment. Required aspect ratio limits are provided in 43.8.1 and Tables 43.8.1.1 and 43.8.1.3.
[TCC: Part of definition moved to annex; this is different than that written by BLD-MAT for Chapter 43. The BLD-MAT committee should be asked to modify related language in Chapter 43.]
[TCC: the following is not a definition. The BLD-MAT committee should be asked to relocate the wording to Chapter 43 as requirements: "Unadjusted Shear Resistance. The unadjusted shear resistance shall be as set forth in Tables 43.8.1.1 and 43.8.1.3 when the aspect ratio of any Type II shear wall segment used in calculation of Type II shear wall resistance does not exceed 2.1. When the aspect ratio of any Type II shear wall segment used in calculation of Type II shear wall resistance is greater than 2/1, but not exceeding 4/1, the unadjusted factored shear resistance shall be the factored shear resistance set forth in Table 43.8.1.1 and 43.8.1.3 and multiplied by $2w/h$."]

3.3.350 Uncertainty Analysis. See 3.3.19, *Analysis, Uncertainty.*

3.3.351 Underground Structure. See 3.3.334.12, *Structure, Underground.*

3.3.352 Verification Method. A procedure or process used to demonstrate *or* confirm that the proposed design meets the specified criteria.

3.3.353 Vertical Opening. An opening through a floor or roof.

3.3.354 Wall, Bearing. Wall supporting a vertical load in addition to its own weight.
3.3.355 Wall, Cavity. Wall built of masonry units or of plain concrete, or a combination of these materials arranged to provide an air space within the wall and in which the inner and outer wythes of the wall are tied together with metal ties.
3.3.356 Wall, Fire. A wall separating buildings to prevent the spread of fire and having a fire resistance rating and structural stability.

3.3.357 Wall, Fire Barrier. A wall, other than a fire wall, that has a fire resistance rating.

3.3.358 Wall, Foundation. Wall below the floor nearest grade, supporting a wall, pier, column or other structural part of a building or structure.
3.3.359 Wall, Masonry Bonded Hollow. Wall built of masonry units arranged to provide an air space within the wall, in which the inner and outer wythes of the wall are tied together with masonry units.
3.3.360 Wall, Metal Composite Panel. Nonbearing wall built between columns and piers wholly supported at each story and comprised of an exterior and interior metal panel housing a foam or other insulating material.
3.3.361 Wall, Nonbearing. Wall that supports no vertical load other than its own weight.
3.3.362 Wall, Panel. Nonbearing wall built between columns and piers wholly supported at each story.

3.3.363 Wall, Proscenium. The wall that separates the stage from the auditorium or house.

3.3.364 Wall, Veneered. Wall having a facing of masonry, plastic, glass or other material securely attached to the backing but not bonded to exert a common reaction under load.

3.3.365 Water-Surrounded Structure. See 3.3.334.13, *Structure, Water-Surrounded.*

3.3.366 Weathered-Membrane Material. Membrane material that has been subjected to not less than 3000 hours in a weatherometer in accordance with ASTM G 26, *Practice for Operating Light/Exposure Apparatus (Zenon-Arc Type) With and Without Water for Exposure of Non-Metallic Materials*, or approved equivalent.

3.3.367 Weather-Exposed Surfaces. Surfaces of walls, ceilings, roofs, soffits and similar surfaces exposed to the weather except the following.
1. Ceilings and roof soffits enclosed by walls, fascia, bulkheads, or beams that extend a minimum of 305 mm (12 inches) below such ceiling or roof soffits.
2. Walls or portions of walls beneath an unenclosed roof area, where located a horizontal distance from an open exterior opening equal to at least twice the height of the opening.
3. Ceiling and roof soffits located a minimum horizontal distance of 3050 mm (10 feet) from the outer edges of the ceiling or roof soffits.

3.3.368 Windowless Structure. See 3.3.334.14, *Structure, Windowless.*

3.3.369 Wood Structural Panel. A panel manufactured from veneers; or wood strands or wafers; or a combination of veneer and wood strands or wafers bonded together with waterproof synthetic resins or other suitable bonding systems.
3.3.369.1 Wood Structural Panel, Composite Panels. A structural panel that is made of layers of veneer and wood-based material.
3.3.369.2 Wood Structural Panel, Oriented Strand Board (OSB). A mat-formed wood structural panel product composed of thin rectangular wood strands or wafers arranged in oriented layers and bonded with waterproof adhesive.
3.3.369.3 Wood Structural Panel, Plywood. A wood structural panel comprised of plies of wood veneer arranged in cross-aligned layers.
[TCC: The three subentries of Wood Structural Panel created above were shown in the definition created by BLD-MAT as "examples"; this is different than that written by BLD-MAT for Chapter 44. The BLD-MAT committee should be asked to modify related language in Chapter 44.]
3.3.370 Written Notice. A notification in writing delivered in person to the individual or parties intended, or delivered at, or sent by certified or registered mail to, the last residential or business address of legal record.

3.3.371 Yard. An open, unoccupied space other than a court, unobstructed from the ground to the sky on the lot on which a building is situated.

CHAPTER 3 ANNEX

A.3.2.1 Approved. The National Fire Protection Association does not approve, inspect, or certify any installations, procedures, equipment, or materials; nor does it approve or evaluate testing laboratories. In determining the acceptability of installations, procedures, equipment, or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure, or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization that is concerned with product evaluations and is thus in a position to determine compliance with appropriate standards for the current production of listed items.

A.3.2.2 Authority Having Jurisdiction. The phrase "authority having jurisdiction" is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or

other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

A.3.2.3 Code. The decision to designate a standard as a "code" is based on such factors as the size and scope of the document, its intended use and form of adoption, and whether it contains substantial enforcement and administrative provisions.

A.3.2.5 Listed. The means for identifying listed equipment may vary for each organization concerned with product evaluation; some organizations do not recognize equipment as listed unless it is also labeled. The authority having jurisdiction should utilize the system employed by the listing organization to identify a listed product.

A.3.3.13 Aisle Accessway. *Aisle accessway* is the term used for the previously unnamed means of egress component leading to an aisle or other means of egress. For example, circulation space between parallel rows of seats having a width of 1 ft to 2 ft (0.3 m to 0.6 m) and a length not exceeding 100 ft (30 m) is an aisle accessway. Some of the circulation space between tables or seats in restaurants might be considered aisle accessway.

Depending on the width of aisle accessway, which is influenced by its length and expected utilization, the movement of a person through the aisle accessway might require others to change their individual speed of movement, alter their postures, move their chairs out of the way, or proceed ahead of the person.

A.3.3.26 Area of Refuge. An area of refuge has a temporary use during egress. It generally serves as a staging area that provides relative safety to its occupants while potential emergencies are assessed, decisions are made, and mitigating activities are begun. Taking refuge within such an area is, thus, a stage of the total egress process; a stage between egress from the immediately threatened area and egress to a public way.

An area of refuge might be another building connected by a bridge or balcony, a compartment of a subdivided story, an elevator lobby, or an enlarged story-level exit stair landing. An area of refuge is accessible by means of horizontal travel or, as a minimum, via an accessible route meeting the requirements of ICC/ANSI A117.1, *American National Standard for Accessible and Usable Buildings and Facilities*.

This *Code* recognizes any floor in a building protected throughout by an approved, supervised automatic sprinkler system as an area of refuge. This recognition acknowledges the ability of a properly designed and functioning automatic sprinkler system to control a fire at its point of origin and to limit the production of toxic products to a level that is not life threatening.

The requirement for separated rooms or spaces can be met on an otherwise undivided floor by enclosing the elevator lobby with ordinary glass or other simple enclosing partitions that are smoke resisting.

For some occupancies, one accessible room or space is permitted.

A.3.3.32 Atrium. As defined in NFPA 92B, *Guide for Smoke Management Systems in Malls, Atria, and Large Areas*, a large-volume space is an uncompartmented space, generally two or more stories in height, within which smoke from a fire either in the space or in a communicating space can move and accumulate without restriction. Atria and covered malls are examples of large-volume spaces.

A.3.3.36 Barrier, Smoke. A smoke barrier might be vertically- or horizontally-aligned, such as a wall, floor, or ceiling assembly. A smoke barrier might or might not have a fire resistance rating. Application of smoke barrier criteria where required elsewhere in the *Code* should be in accordance with Section 8.4.

A.3.3.37 Barrier, Thermal. Finish ratings, as published in the UL *Fire Resistance Directory*, are one way of determining thermal barrier.

A.3.3.40 Birth Center. A birth center is a low-volume service for healthy, childbearing women, and their families, who are capable of ambulation in the event of fire or fire-threatening events. Birth center mothers and babies have minimal analgesia, no general or regional anesthesia, and are capable of ambulation, even in second-stage labor.

A.3.3.45 Building. The term *building* is to be understood as if followed by the words *or portions thereof. (See also Structure, A.3.3.334).*

A.3.3.45.3 Building, Apartment. The *Code* specifies, that wherever there are three or more living units in a building, the building is considered an apartment building and is required to comply with Chapter 24. Townhouse units are considered to be apartment buildings if there are three or more units in the building. The type of wall required between units in order to consider them to be separate buildings is normally established by the authority having jurisdiction. If the units are separated by a wall of sufficient fire resistance and structural integrity to be considered as separate buildings, then the provisions of Chapter 21 apply to each townhouse. Condominium status is a form of ownership, not occupancy; for example, there are condominium warehouses, condominium apartments, and condominium offices.

A.3.3.45.5 Building, Covered Mall. Covered mall buildings are occupied primarily by mercantile occupancies. However, they can include other occupancies such as drinking and dining establishments, entertainment and amusement facilities, offices, and similar uses that are incidental to the primary use of the building.

A.3.3.45.6 Building, Existing. With respect to judging whether a building should be considered existing, the deciding factor is not when the building was designed or when construction started but, rather, the date plans were approved for construction by the appropriate authority having jurisdiction.

A.3.3.45.7 Building, Flexible Plan and Open Plan Educational or Day-Care. Flexible plan buildings have movable corridor walls and movable partitions of full-height construction with doors leading from rooms to corridors. Open plan buildings have rooms and corridors delineated by tables, chairs, desks, bookcases, counters, low-height partitions, or similar furnishings. It is the intent that low-height partitions not exceed 5 ft (1.5 m).

A.3.3.45.8 Building, High-Rise. It is the intent of this definition that, in determining the level from which the highest occupiable floor is to be measured, the enforcing agency should exercise reasonable judgment, including consideration of overall accessibility to the building by fire department personnel and vehicular equipment. Where a building is situated on a sloping terrain and there is building access on more than one level, the enforcing agency might select the level that provides the most logical and adequate fire department access.

A.3.3.45.9 Building, Historic. Designation for a historic building might be in an official national, regional, or local historic register, listing, or inventory.

A.3.3.45.12 Building, Special Amusement. Such structures include amusements such as a haunted house, a roller coaster-type ride within a building, a multilevel play structure within a building, a submarine ride, and similar amusements where the occupants are not in the open air.

A.3.3.59 Common Path of Travel. Common path of travel is measured in the same manner as travel distance but terminates at that point where two separate and distinct routes become available. Paths that merge are common paths of travel.

A.3.3.70 Critical Radiant Flux. Critical radiant flux is the property determined by the test procedure of NFPA 253, *Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.* The unit of measurement of critical radiant flux is watts per square centimeter (W/cm^2).

A.3.3.74 Day-Care Home. A day-care home is generally located within a dwelling unit.

A.3.3.80 Design Specifications. Design specifications include both hardware and human factors, such as the conditions produced by maintenance and training. For purposes of performance-based design, the design specifications of interest are those that affect the ability of the building to meet the stated goals and objectives.

A.3.3.84 Display Sign. Display signs include signs, sign screens, billboards and advertising devices of all kinds.

A.3.3.87* Dormitory. Rooms within dormitories intended for the use of individuals for combined living and sleeping purposes are guest rooms or guest suites. Examples of dormitories are college dormitories, fraternity and sorority houses, and military barracks.

A.3.3.96 Electroluminescent. This light source is typically contained inside the device.

A.3.3.105 Evacuation Capability. The evacuation capability of the residents and staff is a function of both the ability of the residents to evacuate and the assistance provided by the staff. It is intended that the evacuation capability be determined by the procedure acceptable to the authority having jurisdiction. It is also intended that the timing of drills, the rating of residents, and similar actions related to determining the evacuation capability be performed by persons approved by or acceptable to the authority having jurisdiction. The evacuation capability can be determined by the use of the definitions, the application of NFPA 101A, *Guide on Alternative Approaches to Life Safety,* Chapter 6, or a program of drills (timed).

Where drills are used in determining evacuation capability, it is suggested that the facility conduct and record fire drills six times per year on a bimonthly basis, with a minimum of two drills conducted during the night when residents are sleeping, and that the facility conduct the drills in consultation with the authority having jurisdiction. Records should indicate the time taken to reach a point of safety, date and time of day, location of simulated fire origin, escape paths used, and comments relating to residents who resisted or failed to participate in the drills.

Translation of drill times to evacuation capability is determined as follows:

(1) 3 minutes or less — prompt

(2) Over 3 minutes, but not in excess of 13 minutes — slow

(3) More than 13 minutes — impractical

Evacuation capability, in all cases, is based on the time of day or night when evacuation of the facility would be most difficult, such as, when residents are sleeping or fewer staff are present.

Evacuation capability determination is considered slow if the following conditions are met:

(1) All residents are able to travel to centralized dining facilities without continuous staff assistance.

(2) There is continuous staffing whenever there are residents in the facility.

A.3.3.108 Existing. See *Building, Existing,* A.3.3.45.6.

A.3.3.110 Exit. Exits include exterior exit doors, exit passageways, horizontal exits, exit stairs, and exit ramps. In the case of a stairway, the exit incudes the stair enclosure, the door to the stair enclosure, stairs and landings inside the enclosure, the door from the stair enclosure to the outside or to the level of exit discharge, and any exit passageway and its associated doors if such are provided so as to discharge the stair directly to the outside. In the case of a door leading directly from the street floor to the street or open air, the exit comprises only the door.

Doors of small individual rooms, as in hotels, while constituting exit access from the room, are not referred to as exits except where they lead directly to the outside of the building from the street floor.

A.3.3.110.1 Exit, Horizontal. Horizontal exits should not be confused with egress through doors in smoke barriers. Doors in smoke barriers are designed only for temporary protection against smoke, whereas horizontal exits provide protection against serious fire for a relatively long period of time in addition to providing immediate protection from smoke. *(See 7.2.4.)*

A.3.3.116 Exposure Fire. An exposure fire usually refers to a fire that starts outside a building, such as a wildlands fire or vehicle fire, and that consequently exposes the building to a fire.

A.3.3.122 Fire Barrier. A fire barrier might be vertically- or horizontally-aligned, such as a wall or floor assembly.

A.3.3.124 Fire Compartment. Additional fire compartment information is contained in 8.2.2.

In the provisions for fire compartments utilizing the outside walls of a building, it is not intended that the outside wall be specifically fire resistance-rated unless required by other standards. Likewise, it is not intended for outside windows or doors to be protected, unless specifically required for exposure protection by another section of this *Code* or by other standards.

A.3.3.128 Fire Model. Due to the complex nature of the principles involved, models are often packaged as computer software. Any relevant input data, assumptions, and limitations needed to properly implement the model will be attached to the fire models.

A.3.3.132 Fire Scenario. A fire scenario defines the conditions under which a proposed design is expected to meet the fire safety goals. Factors typically include fuel characteristics, ignition sources, ventilation, building characteristics, and occupant locations and characteristics. The term *fire scenario* includes more than the characteristics of the fire itself but excludes design specifications and excludes any characteristics that do not vary from one fire to another; the latter are called assumptions. The term *fire scenario* is used here to mean only those specifications required to calculate the fire's development and effects but, in other contexts, the term might be used to mean both the initial specifications and the subsequent development and effects (that is, a complete description of fire from conditions prior to ignition to conditions following extinguishment).

A.3.3.135 Fire Watch. Duties of the fire watch might include notifying the fire department and building occupants of an emergency, preventing a fire from occurring, or extinguishing small fires.

A.3.3.137 Flame Spread. See Section 10.3.2.

A.3.3.138 Flashover. Flashover occurs when the surface temperatures of combustible contents rise, producing pyrolysis gases, and the room heat flux becomes sufficient to heat all such gases to their ignition temperatures.

A-3.3.140 Floor Area, Gross. Where the term *floor area* is used, it should be understood to be gross floor area unless otherwise specified.

A.3.3.148 Fuel Load. Fuel load includes interior finish and trim.

A.3.3.155 Grandstand. Where the term *grandstand* is preceded by an adjective denoting a material, it means a grandstand the essential members of which, exclusive of seating, are of the material designated.

A.3.3.176 Heat Release Rate (HRR). The heat release rate of a fuel is related to its chemistry, physical form, and availability of oxidant and is ordinarily expressed as British thermal units per second (Btu/s) or kilowatts (kW).

A.3.3.180 Heliport. The term heliport applies to all sites used or intended to be used for the landing and takeoff of helicopters.

A.3.3.188 Hotel. So-called apartment hotels should be classified as hotels because they are potentially subject to the same transient occupancy as hotels. Transients are those who occupy accommodations for less than 30 days.

A.3.3.190 Illuminated, Externally. The light source is typically a dedicated incandescent or fluorescent source.

A.3.3.191* Illuminated, Internally. The light source is typically incandescent, fluorescent, electroluminescent, photo-luminescent, light-emitting diodes, or self-luminous.

A.3.3.196 Interior Finish. Interior finish is not intended to apply to surfaces within spaces such as those that are concealed or inaccessible. Furnishings that, in some cases, might be secured in place for functional reasons should not be considered as interior finish.

A.3.3.196.2 Interior Floor Finish. Interior floor finish includes coverings applied over a normal finished floor or stair treads and risers.

A.3.3.207 Limited Care Facility. Limited care facilities and residential board and care occupancies both provide care to people with physical and mental limitations. However, the goals and programs of the two types of occupancies differ greatly. The requirements in this *Code* for limited care facilities are based on the assumption that these are medical facilities, that they provide medical care and treatment, and that the patients are not trained to respond to the fire alarm; that is, the patients do not participate in fire drills but, rather, they await rescue. The requirements for residential board and care occupancies are based on the assumption that the residents are provided with personal care and activities that foster continued independence, that the residents are encouraged and taught to overcome their limitations, and that most residents, including all residents in prompt and slow homes, are trained to respond to fire drills, to the extent they are able.

A.3.3.208 Limited-Combustible. Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition are considered combustible. See NFPA 259, *Standard Test Method for Potential Heat of Building Materials,* and NFPA 220, *Standard on Types of Building Construction.*

A.3.3.223 Means of Egress. A means of egress comprises the vertical and horizontal travel and incudes interventing room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, elevators, enclosures, lobbies, escalators, horizontal exits, courts, and yards.

A.3.3.231 Motor Freight Terminal. The motor freight terminal might also include the following:

(a) Facilities for repair of crates
(b) Cases
(c) Barrels
(d) Cartons
(e) Storage of undelivered freight or damaged goods pending settlement of claims
(f) Rest rooms
(g) A dormitory for drivers
(h) Locker rooms
(i) Meal facilities

A.3.3.236 Nominal Dimension (Masonry). Nominal dimensions are usually stated in whole numbers. Thickness is given first, followed by height and then length.

A.3.3.242 Objective. Objectives define a series of actions necessary to make the achievement of a goal more likely. Objectives are stated in more specific terms than goals and are measured on a more quantitative, rather than qualitative, basis.

A.3.3.243.2 Occupancy, Assembly. Assembly occupancies might include the following:

(1) Armories
(2) Assembly halls
(3) Auditoriums
(4) Bowling lanes
(5) Club rooms
(6) College and university classrooms, 50 persons and over
(7) Conference rooms
(8) Courtrooms
(9) Dance halls
(10) Drinking establishments
(11) Exhibition halls
(12) Gymnasiums
(13) Libraries
(14) Mortuary chapels
(15) Motion picture theaters
(16) Museums
(17) Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
(18) Places of religious worship
(19) Pool rooms
(20) Recreation piers
(21) Restaurants
(22) Skating rinks
(23) Special amusement buildings regardless of occupant load
(24) Theaters

Assembly occupancies are characterized by the presence or potential presence of crowds with attendant panic hazard in case of fire or other emergency. They are generally open or occasionally open to the public, and the occupants, who are present voluntarily, are not ordinarily subject to discipline or control. Such buildings are ordinarily occupied by able-bodied persons and are not used for sleeping purposes. Special conference rooms, snack areas, and other areas incidental to, and under the control of, the management of other occupancies, such as offices, fall under the 50-person limitation.

Restaurants and drinking establishments with an occupant load of fewer than 50 persons should be classified as mercantile occupancies.

For special amusement buildings, see 15.4.7.

A.3.3.243.3 Occupancy, Business. Business occupancies include the following:

(1) Air traffic control towers (ATCTs)
(2) City halls
(3) College and university instructional buildings, classrooms under 50 persons, and instructional laboratories
(4) Courthouses
(5) Dentists' offices
(6) Doctors' offices

(7) General offices

(8) Outpatient clinics, ambulatory

(9) Town halls

Doctors' and dentists' offices are included, unless of such character as to be classified as ambulatory health care occupancies. *(See 3.3.17.)*

Birth centers occupied by fewer than four patients, not including infants, at any one time; not providing sleeping facilities for four or more occupants; and not providing treatment procedures that render four or more patients, not including infants, incapable of self-preservation at any one time should be classified as business occupancies. For birth centers occupied by patients not meeting these parameters, see Chapter 18.

Service facilities common to city office buildings such as newsstands, lunch counters serving fewer than 50 persons, barber shops, and beauty parlors are included in the business occupancy group.

City halls, town halls, and court houses are included in this occupancy group insofar as their principal function is the transaction of public business and the keeping of books and records. Insofar as they are used for assembly purposes, they are classified as assembly occupancies.

A.3.3.243.4 Occupancy, Day-Care. Day-care occupancies include the following:

(1) Adult day-care occupancies, except where part of a health care occupancy

(2) Child day-care occupancies

(3) Day-care homes

(4) Kindergarten classes that are incidental to a child day-care occupancy

(5) Nursery schools

In areas where public schools offer only half-day kindergarten programs, many child day-care occupancies offer state-approved kindergarten classes for children who need full-day care. As these classes are normally incidental to the day-care occupancy, the requirements of the day-care occupancy should be followed.

A.3.3.243.5 Occupancy, Detention and Correctional. Detention and correctional occupancies include the following:

(1) Adult and juvenile substance abuse centers

(2) Adult and juvenile work camps

(3) Adult community residential centers

(4) Adult correctional institutions

(5) Adult local detention facilities

(6) Juvenile community residential centers

(7) Juvenile detention facilities

(8) Juvenile training schools

A.3.3.243.6 Occupancy, Educational. Educational occupancies include the following:

(1) Academies

(2) Kindergartens

(3) Schools

An educational occupancy is distinguished from an assembly occupancy in that the same occupants are regularly present.

A.3.3.243.7 Occupancy, Health Care. Health care occupancies include the following:

(1) Ambulatory health care facilities

(2) Hospitals

(3) Limited care facilities

(4) Nursing homes

Occupants of health care occupancies typically have physical or mental illness, disease, or infirmity. They also include infants, convalescents, or infirm aged persons.

A.3.3.243.8 Occupancy, Industrial. Industrial occupancies include the following:

(1) Dry cleaning plants

(2) Factories of all kinds

(3) Food processing plants

(4) Gas plants

(5) Hangars (for servicing/maintenance)

(6) Laundries

(7) Power plants

(8) Pumping stations

(9) Refineries

(10) Sawmills

(11) Telephone exchanges

In evaluating the appropriate classification of laboratories, the authority having jurisdiction should treat each case individually based on the extent and nature of the associated hazards. Some laboratories are classified as occupancies other than industrial; for example, a physical therapy laboratory or a computer laboratory.

A.3.3.243.8.1 Occupancy, Industrial, General. General industrial occupancies include multistory buildings where floors are occupied by different tenants or buildings suitable for such occupancy and, therefore, are subject to possible use for types of industrial processes with a high density of employee population.

A.3.3.243.8.2 Occupancy, Industrial, High Hazard. A high hazard occupancy includes occupancies where gasoline and other flammable liquids are handled, used, or stored under such conditions that involve possible release of flammable vapors; where grain dust, wood flour or plastic dusts, aluminum or magnesium dust, or other explosive dusts are produced; where hazardous chemicals or explosives are manufactured, stored, or handled; where cotton or other combustible fibers are processed or handled under conditions that might produce flammable flyings; and where other situations of similar hazard exist.

A.3.3.243.9 Occupancy, Mercantile. Mercantile occupancies include the following:

(1) Auction rooms

(2) Department stores

(3) Drugstores

(4) Restaurants with fewer than 50 persons

(5) Shopping centers

(6) Supermarkets

Office, storage, and service facilities incidental to the sale of merchandise and located in the same building should be considered part of the mercantile occupancy classification.

A.3.3.243.13 Occupancy, Residential. Residential occupancies are treated as separate occupancies in this *Code* as follows:

(1) One- and two-family dwellings (Chapter 21)

(2) Lodging or rooming houses (Chapter 22)

(3) Hotels, motels, and dormitories (Chapter 23)

(4) Apartment buildings (Chapter 24)

A.3.3.243.14 Occupancy, Residential Board and Care. The following are examples of facilities that are classified as residential board and care occupancies:

(1) A group housing arrangement for physically or mentally handicapped persons who normally attend school in the community, attend worship in the community, or otherwise use community facilities

(2) A group housing arrangement for physically or mentally handicapped persons who are undergoing training in preparation for independent living, for paid employment, or for other normal community activities

(3) A group housing arrangement for the elderly that provides personal care services but that does not provide nursing care

(4) Facilities for social rehabilitation, alcoholism, drug abuse, or mental health problems that contain a group housing arrangement and that provide personal care services but do not provide acute care

(5) Assisted living facilities

(6) Other group housing arrangements that provide personal care services but not nursing care

A.3.3.243.16 Occupancy, Storage. Storage occupancies include the following:

(1) Barns

(2) Bulk oil storage

(3) Cold storage

(4) Freight terminals

(5) Grain elevators

(6) Hangars (for storage only)

(7) Parking structures

(8) Stables

(9) Truck and marine terminals

(10) Warehouses

Storage occupancies are characterized by the presence of relatively small numbers of persons in proportion to the area.

A.3.3.250 Outside Stair. See 12.2.2.

A.3.3.255 Partition. A partition may be permanent or temporary.

A.3.3.256 Penthouse. When the area of a penthouse exceeds 1/3 of the roof area, it is considered a story.

A.3.3.257 Performance Criteria. Performance criteria are stated in engineering terms. Engineering terms include temperatures, radiant heat flux, and levels of exposure to fire products. Performance criteria provide threshold values used to evaluate a proposed design.

A.3.3.261 Personal Care. Personal care involves responsibility for the safety of the resident while inside the building. Personal care might include daily awareness by the management of the resident's functioning and whereabouts, making and reminding a resident of appointments, the ability and readiness for intervention in the event of a resident experiencing a crisis, supervision in the areas of nutrition and medication, and actual provision of transient medical care.

A.3.3.262 Photoluminescent. The light source is considered internally illuminated.

A.3.3.265 Plastic, Cellular or Foamed. Cellular or foamed plastic might contain foamed and unfoamed polymeric or monomeric precursors (prepolymer, if used), plasticizers, fillers, extenders, catalysts, blowing agents, colorants, stabilizers, lubricants, surfactants, pigments, reaction control agents, processing aids, and flame retardants.

A.3.3.267 Platform. Platforms also include the head tables for special guests; the raised area for lecturers and speakers; boxing and wrestling rings; theater-in-the-round; and for similar purposes wherein there are no overhead drops, pieces of scenery, or stage effects other than lighting and a screening valance. A platform is not intended to be prohibited from using a curtain as a valance to screen or hide the electric conduit, lighting track, or similar fixtures, nor is a platform prohibited from using curtains that are used to obscure the back wall of the stage; a curtain between the auditorium and the stage (grand or house curtain), a maximum of four leg drops; or a valance to screen light panels, plumbing, and similar equipment from view.

A.3.3.276 Proposed Design. The design team might develop a number of trial designs that will be evaluated to determine if they meet the performance criteria. One of the trial designs will be selected from those that meet the performance criteria for submission to the authority having jurisdiction as the proposed design.

The proposed design is not necessarily limited to fire protection systems and building features. It also includes any component of the proposed design that is installed, established, or maintained for the purpose of life safety, without which the proposed design could fail to achieve specified performance criteria. Therefore, the proposed design often includes emergency procedures and organizational structures that are needed to meet the performance criteria specified for the proposed design.

A.3.3.279 Ramp. See 7.2.5.

A.3.3.299 Seating, Festival. Festival seating describes situations in assembly occupancies where live entertainment events are held that are expected to result in overcrowding and high audience density that can compromise public safety. It is not the intent to apply the term *festival seating* to exhibitions; sports events; dances; conventions; and bona fide political, religious, and educational events. Assembly occupancies with 15 ft^2 (1.4 m^2) or more per person should not be considered festival seating.

A.3.3.303 Self-Luminous. An example of a self-contained power source is tritium gas. Batteries do not qualify as a self-contained power source. The light source is typically contained inside the device.

A.3.3.304 Self-Preservation (Day-Care Occupancy). Examples of clients who are incapable of self-preservation include infants, clients who are unable to use stairs because of confinement to a wheelchair or other physical disability, and clients who cannot follow directions or a group to the outside of a facility due to mental or behavioral disorders. It is the intent of this *Code* to classify children under the age of 24 months as incapable of self-preservation. Examples of direct intervention by staff members include carrying a client, pushing a client outside in a wheelchair, and guiding a client by direct hand-holding or continued bodily contact. If clients cannot exit the building by themselves with minimal intervention from staff members, such as verbal orders, classification as incapable of self-preservation should be considered.

A.3.3.314 Smoke Compartment. In the provision of smoke compartments using the outside walls or the roof of a building, it is not intended that outside walls or roofs or any openings therein be capable of resisting the passage of smoke.

A.3.3.316 Smoke Partition. A smoke partition is not required to have a fire resistance rating.

A.3.3.317 Smokeproof Enclosure. For further guidance, see the following publications:

(1) ASHRAE *Handbook and Product Directory — Fundamentals*

(2) *Design of Smoke Management Systems*, by Klote and Milke

(3) NFPA 105, *Recommended Practice for the Installation of Smoke-Control Door Assemblies*

A.3.3.328.1 Story, Occupiable. Stories used exclusively for mechanical equipment rooms, elevator penthouses, and similar spaces are not occupiable stories.

A.3.3.330 Street Floor. Where, due to differences in street levels, there are two or more stories accessible from the street, each is a street floor. Where there is no floor level within the specified limits for a street floor above or below ground level, the building has no street floor.

A.3.3.334 Structure. The term *structure* is to be understood as if followed by the words *or portion thereof. (See also Building*, A.3.3.45.)

A.3.3.334.2 Structure, Air-Supported. A cable-restrained air-supported structure is one in which the uplift is resisted by cables or webbing that is anchored by various methods to the membrane or that might be an integral part of the membrane. It is not a tensioned-membrane structure.

A.3.3.334.6 Structure, Open. Open structures are often found in oil refining, chemical processing, or power plants. Roofs or canopies without enclosing walls are not considered an enclosure.

A.3.3.334.12 Structure, Underground. In determining openings in exterior walls, doors or access panels are permitted to be included. Windows are also permitted to be included if they are openable or provide a breakable glazed area.

A.3.3.341 Tent. A tent might also include a temporary tensioned-membrane structure.

SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for all the material that is to appear in a new document. This proposal establishes that there will be a Chapter 3 on definitions. The draft incorporates the actions taken by SAF-FUN on the proposals on Chapter 3 that were not assigned to other technical committees; includes editorial changes; and reflects changes made by the committee to NFPA 101 material so as to be appropriate for the building code.

The preprint of Chapter 3 that will appear at the end of the Report on Proposals will be a further refinement of the chapter in that it will include the actions on the 100+ proposals on definitions that were assigned to technical committees other than SAF-FUN.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP1102)

Committee: BLD-MAT

5000- 80 - (Chapter 3 Various Definitions): Accept

SUBMITTER: Technical Committee Materials

RECOMMENDATION: Add the following definitions:

Chapter 43
Adjusted shear resistance: See 43.1.1 for definition.
Type I (segmented) shear wall: See 43.1.1 for definition.
Type II (perforated) shear wall: See 43.1.1 for definition.
Type II shear wall segment: See 43.1.1 for definition.
Unadjusted shear resistance: See 43.1.1 for definition.
Chapter 44:
Accreditation Body. See 44.1.1 for definition.
Fiberboard. See 44.1.1 for definition.
Fire-Retardant Treated Wood. See 44.1.1 for definition.
Grade (Lumber). See 44.1.1 for definition.
Hardboard. See 44.1.1 for definition.
Nominal Size (Lumber). See 44.1.1 for definition.
Particleboard. See 44.1.1 for definition.
Preservative-treated Wood. See 44.1.1 for definition.
Structural Glued Laminated Timber. See 44.1.1 for definition.
Wood Structural Panel. See 44.1.1 for definition.
Composite Panels. See 44.1.1 for definition.
Oriented Strand Board (OSB). See 44.1.1 for definition.
Plywood. See 44.1.1 for definition.
Chapter 45:
Dalle Glass: See 45.2.1 for definition.
Decorative Glass: See 45.2.1 for definition.
Chapter 46:
Dash-bond Coat (of plaster) – See 46.1.5 for definition.
Exterior Surfaces – See 46.1.5 for definition.
Gypsum Base for Veneer Plaster – See 46.1.5 for definition.
Gypsum Board – See 46.1.5 for definition.
Gypsum Lath – See 46.1.5 for definition.
Gypsum Panel Products – See 46.1.5 for definition.
Gypsum Plaster – See 46.1.5 for definition.
Gypsum Wallboard – See 46.1.5 for definition.
Gypsum Veneer Plaster – See 46.1.5 for definition.
Interior Surfaces – See 46.1.5 for definition.
Moist Curing – See 46.1.5 for definition.
Portland Cement Plaster – See 46.1.5 for definition.
Weather-Exposed Surfaces – See 46.1.5 for definition.
Chapter 47
Foam Plastic Insulation. See 47.2 for definition.
Light Diffusing System. See 47.2 for definition.
Light Transmitting Plastics. See 47.2 for definition.
Light Transmitting Plastic Roof Panels. See 47.2 for definition.
Light Transmitting Plastic Wall Panels. See 47.2 for definition.
Plastic Glazing. See 47.2 for definition.
Reinforced Plastic, Glass Fiber. See 47.2 for definition.
Thermoplastic Material. See 47.2 for definition.
Thermoset Material. See 47.2 for definition.

SUBSTANTIATION: This Technical Committee strongly recommends that the definitions with specific applications to a chapter remain within that chapter. All terms would be listed in Chapter 3, and those terms applicable to the whole code would be defined there. Chapter-specific terms would contain a reference in Chapter 3 leading the user to the specific definitions in the appropriate chapters.

The above approach greatly increases the useability of the document, since terminology for different engineering practices and procedures require unique applications of those terms.

Definitions should be assigned and maintained by specific Technical Committee.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 18

ABSTENTION: 1

NOT RETURNED: 1 Thomas

EXPLANATION OF ABSTENTION:

GREENWALD: I am abstaining on items dealing with glazing and plastics. I have no direct knowledge of these provisions and; therefore, are unable to vote either affirm or negative on these items.

(Log #832)

Committee: SAF-FUN

5000- 81 - (3-1, 3.1.1, 3.1.2):

TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this be changed from 'Accept' to 'Accept in Principle'. Also, see the TCC notes on 5000-79 (Log#832)

SUBMITTER: Howard Hooper, Underwriters Laboratories Inc.

RECOMMENDATION: Replace 3.1 with the following new text:

~~3.1 General. The definitions contained in Chapter 3 shall apply to the terms used in this code. Where terms are not included in Chapter 3, common usage of the term shall apply.~~

3.1 The following terms, for the purposes of this Code, shall have the meanings given in this chapter, if not otherwise modified for a specific occupancy.

3.1.1 Words used in present tense include the future; words used in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

3.1.2 Where terms are not defined, they shall have their ordinary accepted meanings within the context with which they are used. Webster's Third New International Dictionary of the English Language, Unabridged, shall be considered.

SUBSTANTIATION: The proposed Sections 3.1 and 3.1.1 are extracted from Section 3-1.1 and 3-1.2 of NFPA 101, respectively. The proposed Section 3.1.2 is taken from Section 2-1 of NFPA 1. These proposed sections are more complete than the current text in NFPA 5000.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #402)

Committee: SAF-FUN

5000- 82 - (3-2.2 Authority Having Jurisdiction): Reject

SUBMITTER: Rick Breezee

RECOMMENDATION: Revise text to read as follows:

3.2.2* Authority Having Jurisdiction. The building official ~~organization, office,~~ or individual responsible for the administration and enforcement of this code ~~approving equipment, materials, an installation, or procedure.~~

SUBSTANTIATION: The definition does not designate the person who is responsible for enforcing building codes. This revision does so and will minimize confusion and designate the responsible party and their duties.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The definition is an official NFPA definition that the technical committees are not permitted to change.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1166)

Committee: SAF-FUN

5000- 83 - (3-2.3 Code): Reject

SUBMITTER: Robert Friedlander, Construction Code Consultants

RECOMMENDATION: Revise text as follows:

3.2.3 Code. An extensive compilation of standards and minimum requirements and ~~that is an extensive compilation of~~ provisions covering broad subject matter or that is suitable for adoption into law independently of other codes and standards.

SUBSTANTIATION: The current definition in the Draft document is completely wrong. A Code is not a Standard. A Code is a document that references standards and provides for minimum requirements to obtain the desired results. In this case the desired results are a safe structure.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The definition is an official NFPA definition that the technical committees are not permitted to change.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #847)

Committee: SAF-FUN

5000- 84 - (3-2.4 Consensus): Accept

SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.

RECOMMENDATION: Delete the definition of Consensus.

~~3.2.4.Consensus. Consensus has been achieved when, in the judgement of the Standards Council of the National Fire Protection Association, substantial agreement has been reached by materially affected interest categories.~~
~~recommendations in the body of the text.~~
~~Substantial agreement means much more than a simple majority but not necessarily unanimity. Consensus requires that all views and objections be considered and that a concerted effort be made toward their resolution. The Standards Council bases its judgement as to when a consensus has been~~
~~achieved on the entire record before the Council.~~

SUBSTANTIATION: The term "consensus" is not used in the body of the code, and is only used in Annex note A.5.8.2, which refers to standards developed under an open consensus process conducted by recognized professional societies, codes or standards. This use of the term consensus does not correlate with the definition, and is not included in NFPA 101.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1206)

Committee: BLD-STR

5000- 85 - (3-3.x Aluminum Composite Material (ACM) (New)): Accept

SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Mitsubishi Chemical America, Inc.

RECOMMENDATION: Add a new definition in Chapter 3 to read as follows:

3.3.x Aluminum Composite Material (ACM). A factory-manufactured panel consisting of aluminum skins bonded to both faces of a plastic core.

SUBSTANTIATION: Aluminum composite materials (ACMs) are commonly used on buildings for exterior applications. This revision is suggested to provide a section in NFPA 5000 to regulate ACMs. ACMs consist of a thin extruded plastic core encapsulated within aluminum facings. ACM panels are a maximum of 1/4 inch thick. Such materials are not specifically addressed in the draft of NFPA 5000. ACMs have been permitted by the Evaluation Service of each of the model building code organizations on the basis of the requirements for foam plastic insulation and more recently as a specific section in the International Building Code. These Evaluation Reports have been issued recognizing exterior applications. However, ACMs are not intended to provide insulation nor do they typically contain foam plastic insulating cores.

Most of the provisions contained in this proposed new section are based on similar provisions in the IBC which are based on how ACM has historically been regulated and evaluated by each of the model code Evaluation Services. A limitation on the flame spread and smoke-developed indexes has been included for those applications that do not require a full scale fire test for approval. We believe this is appropriate in order to equate the ACM performance to that assumed for wood veneers in similar applications currently allowed by the existing model building codes. In fact, the flame spread index limit of 75 is somewhat conservative.

The market for ACMs continues to grow and industry members have developed new materials. Because such materials are not truly foam plastic insulation, light-transmitting plastic, plastic veneer or traditional combustible construction, they are not specifically addressed within NFPA 5000. The proposed new section will provide the code official, the manufacturer, and design professional with the appropriate guidance to adequately regulate and use these relatively new composite materials.

The following tables summarize the fire safety requirements of the proposed new section and compare those requirements to those of the existing three model codes.

Fire Safety Requirements of US Model Codes for ACM on Noncombustible Exterior Walls – No Height Limit

Parameter	SBC	NBC	UBC	IBC	Proposed Change
Fire Resistance Maintained Where Required	X (2603.4.1)	X (2603.6.1)	X [2602.5.2.2(1)]	X [1407.8]	X [35.xx.3]
Flame Spread L.E. 25: Smoke Developed L.E. 450	X (2603.4.4)	X (2603.6.3)	X [2602.5.2.2(4)]	X [1407.9.1]	X [35.xx.5.1]
Full Scale Fire Test	X (2603.4.5)	X (2603.6.5)	X [2602.5.2.2(5)]	X [1407.9.4]	X [35.xx.5.4]
Thermal Barrier Required	X (2603.4.2)	X (2603.6.6)	X [2602.5.2.2(2)]	X [1407.9.2]	X [35.xx.5.3]

Fire Safety Requirements of US Model Codes for ACM on Noncombustible Exterior Walls – 40 Height Limit

Parameter	SBC	NBC	UBC	IBC	Proposed Change
Flame Spread L.E. 75: Smoke Developed L.E. 450	NR (1404)	NR (1406.2.2)	NT	X (1407.10.1.2)	X [35.xx.6.1]
Fire Resistance Maintained Where Required	NT	NT	NT	X (1407.8)	X [35.xx.3]
10% limit for fire separation L.E. 5 ft; No limit for fire separation G.T. 5 ft.	NR (1404)	X (1406.2.2)	NT	X (1407.10.1.1)	X [35.xx.6.2.1]

Fire Safety Requirements of US Model Codes for ACM on Noncombustible Exterior Walls – 50 ft. Height Limit

Parameter	SBC	NBC	UBC	IBC	Proposed Change
Self-Ignition Temp. G.E. 650°F	X [2604.9 and 202]	NT	X [2604.2 & 217]	X [1407.10.2.1]	X [35.xx.6.3.1]
Flame Spread L.E. 75:	NR	NT	NR	X [1407.10.2.1]	X [35.xx.6.1]
CC1 or CC2 required	X [2604.9 and 202]	NT	X [2604.2 & 217]	NR	NR
Smoke Developed L.E. 450	X [2604.9 and 202]	NT	X [2604.2 & 217]	X [1407.10.2.1]	X [35.xx.6.1]
Max. 300 sq ft and min 4 ft. vertical separation	X [2604.9-1998 Rev]	NT	X [2604.2]	X [1407.10.2.2]	X [35.xx.6.3.2]

Fire Safety Requirements of US Model Codes for ACM on Combustible Exterior Walls

Parameter	SBC	NBC	UBC	IBC	Proposed Change
Flame Spread L.E. 75: Smoke Developed L.E. 450	NR	NR	NR	X [1407.11.1]	X [35.xx.7]
Fire Resistance Maintained Where Required	NT	NT	NT	X [1407.8]	X [35.xx.3]

Legend: X = Required by Code. NR = No requirement. NP = Not permitted.
L.E. = Less than or equal to G.T. = Greater than. NT = Not Treated.
G.E. = Greater than or equal to

COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
COMMENT ON AFFIRMATIVE:
NACHEMAN: Note: "ACM" is typically the acronym used for Asbestos Containing Material. Care should be taken not to use the acronym without its definition or other areas where confusion may occur.
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #311)
Committee: SAF-MEA

5000- 86 - (3-3.x Area, Net Floor (New)): Accept in Principle

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-MEA requesting that the committee move the 3.3.29.4 definition of "Area, Net Floor," as shown in the draft at the end of this report, to 3.3.184 "Floor Area, Net" and resolve which of these two conflicting definitions is to be retained.
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Add a new definition to read:
Area, Net Floor. The floor area within a defined area or space.
SUBSTANTIATION: Gross floor area is well defined, but net floor area, used to subdivide an area for classification is not.
COMMITTEE ACTION: Accept in Principle.
Add a definition to Section 3.3 to read as follows:
Area, Net Floor. The floor area within the inside perimeter of the outside walls, or the outside walls and fire walls of the building under consideration with deductions for hallways, stairs, closets, thickness of interior walls, columns, or other features.
COMMITTEE STATEMENT: The definition in the committee action draws from the wording in the definition of "Area, Gross Floor" for consistency. This should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 26
NOT RETURNED: 2 DeVries, Woodward

(Log #CP2021)
Committee: SAF-END

5000- 87 - (3-3.xx Atmosphere,Common and Atmosphere, Separate): Accept
SUBMITTER: Technical Committee on Educational and Day-Care Occupancies
RECOMMENDATION: Add definitions as follow:
3.3.xx Atmosphere, Common. The atmosphere that exists between rooms, spaces, or areas within a building that are not separated by an approved smoke barrier.
3.3.xx Atmosphere, Separate. The atmosphere that exists between rooms, spaces, or areas that are separated by an approved smoke barrier.
SUBSTANTIATION: The terms are used in the educational occupancy chapter.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 14
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14

(Log #634)
Committee: BLD-STR

5000- 88 - (3-3.x Basement, Building; Building, Existing, Value/Valuation (New)): Accept in Principle

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR requesting that the definitions in the proposal be revised for agreement with the definitions of the same terms as shown in the draft of Chapter 3 that appears at the end of this report. The draft chapter has been revised for general compliance with the NFPA Manual of Style. More specifically, the special flood-related terms "Basement", "Structure", and "Building, Existing" which appear as second definitions of generalized existing terms, should be shown as "Basement (Flood Resistance)", "Structure (Flood Resistance)", and "Building, Existing (Flood Resistance)".
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Insert additional definitions for terms already defined in NFPA 5000.
3.3.20 Basement. Story of a building between floor and ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling.
Basement. For all matters related to flood resistant design and construction, the portion of a building having its floor subgrade (below ground level) on all sides.
3.3.24* Building. A structure used or intended for supporting or sheltering any use or occupancy.
A.3.3.24 Building. Personnel could occupy buildings continuously or intermittently.
Building. For all matters related to flood resistant design and construction, a walled and roofed structure, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.
3.3.24.4 Building, Existing. Any structure erected or officially authorized prior to the effective date of the adoption of this edition of the code by the agency or jurisdiction.
Building, Existing. For all matters related to flood resistant design and construction, a building for which the "start of construction" commenced before the effective date of the jurisdiction's first floodplain management ordinance, code or standard.
3.3.140 Value/Valuation. Estimated cost to replace the building in kind, based on current replacement costs as determined by this Code.
Value/Valuation. For buildings and structures in flood hazard areas, the value used for substantial damage and substantial improvement determinations shall be the market value before the damage occurred or before the start of construction of the improvement.

SUBSTANTIATION: Makes code definitions compliant with National Flood Insurance Program regulations, SEI/ASCE 7-98 (Minimum Design Loads for Buildings and Other Structures) and SEI/ASCE 24-98 (Flood Resistant Design and Construction) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Accept in Principle.

Insert additional definitions for terms already defined in NFPA 5000.

3.3.20 Basement. Story of a building between floor and ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling.

Basement. For all matters related to flood resistant design and construction, the portion of a building having its floor ~~subgrade (~~below ground level~~)~~ on all sides.

3.3.24* Building. A structure used or intended for supporting or sheltering any use or occupancy.

A.3.3.24 Building. Personnel could occupy buildings continuously or intermittently.

Structure. For all matters related to flood resistant design and construction, a walled and roofed building, ~~including~~ a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

3.3.24.4 Building, Existing. Any structure erected or officially authorized prior to the effective date of the adoption of this edition of the code by the agency or jurisdiction.

Building, Existing. For all matters related to flood resistant design and construction, a building for which the "start of construction" commenced before the effective date of the jurisdiction's first floodplain management ordinance, code or standard.

3.3.140 Value/Valuation. Estimated cost to replace the building in kind, based on current replacement costs as determined by this Code.

Value/Valuation. For buildings and structures in flood hazard areas, the value used for substantial damage and substantial improvement determinations shall be the market value before the damage occurred or before the start of construction of the improvement.

COMMITTEE STATEMENT: The Technical Committee agreed that these additional definitions relating to flood resistant design were necessary. Minor editorial modifications were made to the definitions to improve clarity.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #777)
Committee: SAF-FIR

5000- 89 - (3-3.x Borrowed Lite (New)): Reject
SUBMITTER: James F. McMullen, The McMullen Company, Inc./Rep. O'Keeeffe's Inc.
RECOMMENDATION: Add a new section to Section 3.3, Definitions, entitled "Borrowed Lite."

Borrowed Lite. A stationary window unit that is installed in an interior partition that allows the passage of natural or artificial light from one area into an adjoining space.

SUBSTANTIATION: NFPA 5000 does not have a definition for "Borrowed Lite." This definition is taken verbatim from NFPA 80, Standard for Fire Doors and Windows, 1999 edition. Since borrowed lites are an integral part of construction, the building code should include a definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Currently this term is not used in this document is those chapters which this technical committee has responsibility for. Therefore, it was determined that the addition of this definition is not necessary.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #CP805)
Committee: SAF-MER

5000- 90 - (3-3.xx Building, Covered Mall; Street Floor): Accept
SUBMITTER: Technical Committee on Mercantile and Business Occupancies
RECOMMENDATION: Add the following term and annex note as follows:

3.3.xx.x* Building, Covered Mall. A building, including the covered mall, enclosing a number of tenants and occupancies wherein two or more tenants have a main entrance into the covered mall.

3.3.xx Covered Mall Building. See 3.3.xx.x, Building, Covered Mall.

A.3.3.xx.x Building, Covered Mall. Covered mall buildings are occupied primarily by mercantile occupancies. However, they can include other occupancies such as drinking and dining establishments, entertainment and amusement facilities, offices, and similar uses that are incidental to the primary use of the building.

3.3.xx Street Floor. A story or floor level accessible from the street or from outside a building at ground level, with the floor level at the main entrance located not more than three risers above or below ground level and arranged and utilized to qualify as the main floor.

A.3.3.xx Street Floor. Where, due to differences in street levels, there are two or more stories accessible from the street, each is a street floor. Where there is no floor level within the specified limits for a street floor above or below ground level, the building has no street floor.

SUBSTANTIATION: The technical committee feels that the term "street floor" should be included in the document as the term is used within the document. This definition was copied from the NFPA 101, Life Safety Code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
ABSTENTION: 1
EXPLANATION OF ABSTENTION:
THORNBERRY: See my Explanation of Abstention on Proposal 5000-1063 (Log #58). Also, as proposed the definition for Covered Mall Building and the Appendix are too broad in scope since there is no indication as to the specific types of occupancies that would be suitable in a covered mall building. Although the Appendix note does give some guidance, it may be considered too broad and beyond the intent of the covered mall building section of this chapter.

(Log #CP2023)
Committee: SAF-END

5000- 91 - (3-3.xx Building, Flexible Plan and Open Plan Educational or Day-Care): Accept
SUBMITTER: Technical Committee on Educational and Day-Care Occupancies
RECOMMENDATION: Add definition and associated annex as follow:
3.3.xx* Building, Flexible Plan and Open Plan Educational or Day-Care. A building or portion of a building designed for multiple teaching stations.
A.3.3.xx Building, Flexible Plan and Open Plan Educational or Day-Care. Flexible plan buildings have movable corridor walls and movable partitions of full-height construction with doors leading from rooms to corridors. Open plan buildings have rooms and corridors delineated by tables, chairs, desks, bookcases, counters, low-height partitions, or similar furnishings. It is the intent that low-height partitions not exceed 5 ft (1.5 m).
SUBSTANTIATION: The term is used in the educational occupancy and day-care occupancy chapters.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 14
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14

(Log #854)
Committee: SAF-IND

5000- 92 - (3-3.x Building, High-Rise, High-Rise Building): Accept
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Add the following definitions and Annex notes:
3.3.X* Building, High-Rise. A building greater than 75 ft (23 m) in height where the building height is measured from he lowest level of fire department vehicle access to the floor of the highest occupiable story.
A.3.3.X Building, High Rise. It is the intent of this definition that, in determining the level from which the highest occupiable floor is to be measured, the enforcing agency should exercise reasonable judgment, including consideration of overall accessibility to the building by fire department personnel and vehicular equipment. Where a building is situated on a sloping terrain and there is building access on more than one level, the enforcing agency might select the level that provides the most logical and adequate fire department access.
3.3.X High- Rise Building. See Building, High-Rise.
SUBSTANTIATION: This adds the NFPA 101 definition of High Rise Building to the code. Such a definition is needed for applying Chapter 32 requirements.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #1177)
Committee: SAF-FIR

5000- 93 - (3-3.x Damper (New)): Accept in Principle
SUBMITTER: Vickie Lovell, InterCode Inc./Rep. Air Movement and Control Association
RECOMMENDATION: Add the following new Definition to Chapter 3:
Damper.
Fire Damper. A listed device installed in ducts and air transfer openings, designed to close automatically upon detection of heat, to interrupt migratory airflow, and to restrict the passage of flame. Fire dampers are classified for use in either static systems that will automatically shut down in the event of a fire, or in a dynamic system that operates in the event of a fire. A dynamic fire damper is tested and rated for closure under airflow.
Smoke Damper. A listed device installed in ducts and air transfer opening that is designed to resist the passage of air and smoke. The device is installed to operate automatically, controlled by a smoke detection system, and where required, is capable of being positioned manually from a remote command station.
Ceiling Radiation Damper. A listed device installed in a ceiling membrane of a fire resistance rated floor/ceiling or roof/ceiling assembly to automatically limit the radiative heat transfer through an air inlet/outlet opening.
Combination Fire/Smoke Damper. A listed device installed in ducts and air transfer openings designed to close automatically upon the detection of heat and to also resist the passage of air and smoke. The device is installed to operate automatically, controlled by a smoke detection system, and where required is capable of being positioned manually from a remote command station. A combintion fire/smoke damper is tested to both UL555S and UL555.
SUBSTANTIATION: None provided.
COMMITTEE ACTION: Accept in Principle.
Add the following definitions and the annex material:
3.3.xx* Fire Damper. A device, installed in air distribution system, that is designed to close automatically upon detection of heat, to interrupt migratory airflow and to restrict the passage of flame.
A.3.3.xx (fire damper) Fire dampers are classified for use in either static systems that will automatically shut down in the event of a fire, or in a dynamic system that operates in the event of a fire. A dynamic fire damper is tested and rated for closure under airflow.
3.3.xx Smoke Damper. A device within the air distribution system to control the movement of smoke.
3.3.xx Ceiling Radiation Damper. A listed device installed in a ceiling membrane of a fire resistance rated floor/ceiling or roof/ceiling assembly to automatically limit the radiative heat transfer through an air inlet/outlet opening.
3.3.xx Combination Fire/Smoke Damper. A device that meets both the fire damper and smoke damper requirements.
COMMITTEE STATEMENT: The definitions were coordinated with the current definitions that are used within NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems. The annex material for fire dampers was determined to be useful in describing the different types of fire dampers available.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #909)
Committee: SAF-FUN

5000- 94 - (3-3.x Deck, Sunroom Addition (New)): Reject
SUBMITTER: Michael Fischer, Patio Enclosures, Inc./Rep. National Sunroom Association
RECOMMENDATION: Add the following definitions:
Deck. An exterior floor system used to provide exterior walking surface or support and flooring for a sunroom, that is supported on at least two opposing sides by attachment to an existing or adjacent structure, posts, piers, or other independent means of support.
Sunroom Addition. A one-story addition added to an existing structure with a glazed area in excess of 40 percent of the gross area of the addition's exterior walls and roof.
SUBSTANTIATION: To add appropriate definitions to NFPA 5000 and aid in the development of future code language related to those highly glazed additions.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed definition of "deck" is too specific given that the term can be used in many different contexts. The term "sunroom addition" is not currently used in the building code draft.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1072)
Committee: BLD-SYS

5000- 95 - (3-3.x Drain Tile Loop, Radon, Sub-Membrane Depressurization System, Sub-slab Depressurization System (Active), Sub-slab Depressurization System (Passive), Soil-gas-retarder): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-SYS requesting that the definitions in the proposal be revised for agreement with the definitions of the same terms as shown in the draft of Chapter 3 that appears at the end of this report. The draft chapter has been revised for general compliance with the NFPA Manual of Style. Also, in the definition of "Soil-gas Retarder," delete the words "of 6-mil (0.15 mm) polyethylene or other equivalent material" because they impose a requirement that should not be part of a definition. If needed, add such criteria to the code chapter that addresses radon protection.

SUBMITTER: Gene Fisher, U.S. Enviornmental Protection Agency

RECOMMENDATION: Add text to Chapter 3, "Definitions," Section 3.3, "General Definitions" and a new Chapter XX, Radon Control Methods.

Add text to Chapter 3, "Definitions," Section 3.3, "General Definitions"

Drain tile loop: A continuous length of drain tile or perforated pipe extending around all or part of the internal or external perimeter of a basement or crawl space footing.

Radon: A naturally-occurring, chemically inert, radioactive gas that is not detectable by human senses. As a gas it can move readily through particles of soil and rock and can accumulate under the slabs and foundations of homes where it can easily enter into the living space through construction cracks and openings.

Sub-membrane depressurization system: A system designed to achieve lower sub-membrane air pressure relative to crawl space air pressure by use of a vent drawing air from beneath the soil-gas-retarder membrane.

Sub-slab depressurization system (Active): A system designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a fan-powered vent drawing air from beneath the slab.

Sub-slab depressurization system (Passive): A system designed to achieve lower sub-slab air pressure relative to indoor air pressure by use of a vent pipe routed through the conditioned space of a building and connecting the sub-slab area with outdoor air, thereby relying on the convective flow of air upward in the vent to draw air from beneath the slab.

Soil-gas retarder: A continuous membrane of 6-mil (0.15mm) polyethylene or other equivalent material used to regard the flow of soil gases into a building.

SUBSTANTIATION: PURPOSE: To include a new chapter in the NFPA's 2002 Edition of the NFPA 5000 Building Code, current, validated techniques for constructing one and two family dwellings that are resistant to randon entry. Use of these techniques during construction will produce homes that provide reduced risk of exposure to the ionizing radiation associated with elevated levels of radon.

REASON: Radon is a colorless, odorless, radioactive gas that is produced by the natural decay of uranium. Based on findings by the National Academy of Sciences, the World Health Organization, and other national and international organizations, long term exposure to radon in the home increases the risk to occupants of contracting lung cancer. Radon has been identified as the second leading cause of lung cancer in the U.S. The hazards of exposure to indoor radon have been acknowledged by the Surgeon General, the Center for Disease Control, the American Lung Association, the American Medical Association, and many other national health authorities.

Radon critics have, for a long time, questioned the risk estimates associated with indoor radon exposure, despite robust data to the contrary. However, in 1998, the National Academy of Sciences' Biological Effects of Ionizing Radiation committee's (BEIR VI) report completely substantiated EPA's earlier risk estimates and put to rest any last doubts associated with radon as a human carcinogen.

The average indoor radon level in the U.S. is approximately 1.3 pico Curies per liter (Pci/L). In areas identified as Zone 1 on the EPA Map of Radon Zones (which is included in this code change proposal), indoor radon levels at or above 4.0 pCi/L are found in a high percentage of existing homes. It is expected that new homes built in these Zone 1 areas will also have elevated levels of indoor radon unless these homes are constructed with radon-resistant features.

Since radon is a gas, it can easily move through small spaces in the soil and rock on which a house is built and ultimately enter a building through dir basements, crawl space floors, cracks in concrete floors and walls, floor drains, sump pits, joints, and tiny cracks or pores in hollow-block walls.

Effective, low-cost construction techniques for preventing or reducing radon entry through these many entry routes have been developed over the past 15 years in close cooperation with all segments of the building industry. The estimated additional cost of applying these techniques will vary from $350 to $500. The actual cost depends on which components are already required by current state and local building codes for moisture protection, energy conservation, and fire-stopping. Because many of the requirements in the proposed chapter are already required by state and local codes, the actual additional cost can be less than $350.

The construction techniques presented in this change proposal are consistent with those already adopted as Appendix F "RADON CONTROL METHODS" in CABO's "One and Two Family Dwelling Code" (OTFDC), and Appendix F of the ICC's "International Residential Code." Adoption of these changes in NFPA's Building Code would provide current, accepted, and proven guidance to builders who use that code when they are building homes in areas where radon has been identified by local authorities as a significant threat to public health.

This proposal is presented as a new chapter intended for the main body of the code, rather than as an optional appendix. It could also be part of an existing chapter, if the drafting committee feels the requirements would be best suited there. However, we strongly recommend that the proposal not be included as an appendix. it was always EPA's intention to have the requirements in the main body of a code document. The closest we came to this goal was CAPO's 1995 One and Two Family Dwelling Code, where information on the requirements was placed in Chapter 3 "Building Planning" (Sections 301 and 324). This required code officials to indicate if a jurisdiction was Zone 1, and if so, the requirements of Appendix F were mandatory. Unfortunately the ICC/IRC drafting committee elected to exclude the mandatory provision and make the appendix completely optional.

Because of the number of deaths now attributed to indoor radon gas (14,000 annually), the Agency believes that radon-resistant new construction methods should be mandatory in Zone 1 areas. Despite the Agency's ten-year effort to encourage voluntary compliance, only 43% of homes in the nation's highest radon potential counties were built with radon-resistant features in 1999. In order to protect the health and life safety of residents in one and two family dwellings, it is important that these features be a mandatory provision in all high-radon potential areas. In addition, the installation of radon-resistant features would become nationally uniform and of better quality.

Substantiation References:

CABO One and Two Family Dwelling Code, 1995 Edition, Chapter 3, "Building Planning," and Appendix F, "Radon Control Methods."

ICC International Residential Code Appendix F, "Radon Control Methods." 2000

U.S. EPA's Model Standards and Techniques for Control of Radon in New Residential Buildings. 1994

ASTM 1465-92: "Standard Guide for Radon Control Options for the Design and Construction of New Low Rise Residential Buildings"

ICC's supplementary guide, "Radon-Resistant Construction and Building Codes." 1999

EPA Map of Radon Zones with Fact Sheet. 1993

EPA's "Buying a New Home? How To Protect Your Family From Radon." 1998

EPA's cost estimates for components of passive radon-resistant construction methods (Virginia specific). 1998

COMMITTEE ACTION: Accept.

COMMITTEE STATEMENT: The Committee noted that the appropriate section number needs to be determined and added.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NEGATIVE: 1

EXPLANATION OF NEGATIVE:

MORRIS: Radon definitions. These definitions should be in an optional appendix, adoptable by the local authority having jurisdiction (AHJ). Local AHJs should be permitted to make the decision as to whether to adopt these requirements based on results of local radon tests and lung cancer rates in their jurisdiction.

(Log #99a)
Committee: SAF-FIR

5000- 96 - (3-3.x Fire Area (New)): Reject

SUBMITTER: Catherine L. Stashak, Des Plaines Fire Dept., IL

RECOMMENDATION: Add to Chapter 3 a definition of "Fire Area" as follows:

3.3.x Fire Area. An area of the building separated from the remainder of the building by construction having a fire resistance rating of at least 2 hours and having all communicating openings protected by an assembly having a fire protection rating of at least 1 1/2 hours.

SUBSTANTIATION: I serve as chair of the Life Safety Technical Committee on Educational and Day-Care Occupancies. A task group of the technical committee met and drafted the proposed revisions. The subject was not balloted through the full technical committee, so I am submitting the proposal in my name.

The threshold at which sprinklers will be required for educational and day-care occupancies is based on the size of a "fire area." For day-care occupancies, the sprinkler threshold also is based on client incapability of "self-preservation." Definitions of "fire area" and "self-preservation" are needed. The proposed definition of "fire area" is modeled after that in NFPA 30, Flammable and Combustible Liquids Code, with the required fire ratings increased to meet the need of the building code. The proposed definition of "self-preservation (day-care occupancy)" is copied from that in NFPA 101, Life Safety Code.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The height and area provisions that are currently being developed does not use the term "fire area" but address sprinklered and unsprinklered compartment areas as defined by rated compartment walls and floors. Because of this activity it was determined that it would not be necessary to add this term. If other technical committees use this term then it should be reviewed by them and developed so that it is applicable to their use.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #1095)
Committee: SAF-FIR

5000- 97 - (3-3.x Fire Area (New)): Reject

SUBMITTER: Kevin Kelly, National Fire Sprinkler Association

RECOMMENDATION: Insert a new definition for "Fire Area" in section 3.3 to read as follows:

Fire Area: The total floor area contained with a firewalls, fire barriers, exterior walls or horizontal assemblies of a building with specified fire resistance rating.

SUBSTANTIATION: The use of the fire area concept is being submitted in other code changes to eliminate the possibility of designing around sprinkler systems based on square footage of floor only. This concept is similar to the IBC.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The height and area provisions that are currently being developed does not use the term "fire area" but address sprinklered and unsprinklered compartment areas as defined by rated compartment walls and floors. Because of this activity it was determined that it would not be necessary to add this term. If other technical committees use this term then it should be reviewed by them and developed so that it is applicable to their use.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #776)
Committee: SAF-FIR

5000- 98 - (3-3.x Fire Protection Rating, Opening Protective (New)): Reject

SUBMITTER: James F. McMullen, The McMullen Company, Inc./Rep. O'Keeeffe's Inc.

RECOMMENDATION: Add new sections to Section 3.3, Definitions, entitled "Fire Protection Rating" and "Opening Protective".

Fire Protection Rating. The designation indicating the duration of the fire test exposure to which a fire door assembly or other opening was exposed and for which it successfully met all acceptance criteria as determined in accordance with NFPA 252, Standard Methods for Fire Tests of Door Assemblies, or NFPA 251, Building Construction and Materials, respectively.

Opening Protective. See Fire Protection Rating.

SUBSTANTIATION: NFPA 5000, the NFPA Building Code, does not have a definition for "Fire Protection Rating". NFPA 80, Standard for Fire Doors and Windows, contains a definition for Fire Protection Rating.

However, NFPA 5000 does specify "Opening Protective" in several areas such as 6.3.6.2, 6.3.6.3, etc. that state "Opening Protective" without the benefit of a definition. "Opening Protective" is defined by referring to the new Fire Protection Rating definition, which has been extracted and modified from NFPA 80, Standard for Fire Doors and Windows. Moreover, this new definition requires compliance with the proper NFPA standard for opening protection in order to achieve proper protection of an opening.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: It was determined that the definition of fire protection rating as noted in NFPA 80 is still appropriate for this application. The proposed revisions substitutes "other openings" for "fire window assembly" and substitutes NFPA 251 for NFPA 257. This changes the application and the particular test procedures recognized which is a significant departure from the current application. Also this action is for consistency with the action taken on proposal 5000-476 (Log #786).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #1076)
Committee: BLD-STR

5000- 99 - (3-3.x Floor Area (New)): Reject

SUBMITTER: Mark Kluver, Portland Cement Association

RECOMMENDATION: Add new text to read as follows:

3.3.x Floor Area. The area included within surrounding exterior walls (or exterior walls and fire walls) exclusive of courts, and usable area under the horizontal projection of the roof or floor above where not surrounded by walls.

SUBSTANTIATION: Allowable area provisions of the code must rely on a definition for floor area. The definition being proposed is taken from the results of the BCMC Public Hearing on Building Heights and Areas that occurred on February 9, 1988. In that document the term used is "Building Area".
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee took a different approach to height and area requirements in Committee Proposal 5000-391 (Log #CP1007). Consequently, this definition is no longer needed.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NEGATIVE: 2
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF NEGATIVE:
GREENWALD: The definition of floor area is necessary to the NFPA 5000. It does exist anywhere in the code.
MESSERSMITH: "Floor area" should be regulated as has been done for the last century in other building codes.
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #193)
Committee: BLD-STR

5000- 100 - (3-3.x Foundation Wall, Retaining Wall, Segmental Retaining Wall and Section 39.8 (New)): Accept in Principle
SUBMITTER: Jeffrey H. Greenwald, National Concrete Masonry Association
RECOMMENDATION: Add the following definitions to Chapter 3:
Foundation Wall. A wall below the floor nearest grade which serves as a structural support for a wall, pier, column, or other part of a building, or the wall of a basement that resists lateral soil load.
Retaining Wall. A wall that is not laterally supported at the top, designed to resist later soil load.
Segmental Retaining Wall. A retaining wall formed of modular block units stacked dry without mortar.
Add new section in Chapter 39 as follows:
39.8 Retaining walls. Walls built to retain or support the lateral pressure of earth or water or other superimposed loads shall be designed and constructed of masonry, concrete, steel sheet piling or other approved materials.
39.8.1 Design. Retaining walls shall be designed to resist the design lateral soil loads in Chapter 37, including both dead and live load surcharges to which such walls are subjected, and to ensure stability against overturning, sliding, excessive foundation pressure and water uplift.
39.8.2 Hydrostatic Pressure. Unless drainage is provided, the hydrostatic head of the water pressure shall be assumed to be equal to the height of the wall.
39.8.3 Concrete Retaining Walls. Concrete retaining walls shall be designed and constructed in accordance with ACI 318.
39.8.4 Reinforced Masonry Retaining Walls. Masonry retaining walls shall be designed and constructed in accordance with ACI 530/ASCE 5/TMS 402. Footings for reinforced masonry retaining walls shall be designed in accordance with ACI 318.
39.8.5 Segmental Retaining Walls. Segmental retaining walls shall be designed in accordance with NCMA Design Manual for Segmental Retaining Walls.
Also, add new reference as follows:
NCMA Design Manual for Segmental Retaining Walls, Second Edition, 1997.
SUBSTANTIATION: The purpose of the proposed code change to provide provisions for retaining walls. There are currently no provisions for retaining walls in the NFPA and this change proposes to place them into Chapter 39.
The proposed change introduces definitions for retaining walls. The definition of segmental retaining walls is from the NCMA Design Manual. Sections 39.8, 39.8.1, and 39.8.2 of the proposal provides minimum loading and requires the designer to check the stability of the retaining wall due to overturning, sliding, excessive foundation pressure and water uplift. For concrete and masonry retaining walls, design is in accordance with ACI 318 and the Building Code Requirements for Masonry Structures (ACI 530/ASCE 5/TMS 402), respectively.
Section 39.8.5 is included to direct the designer to use the NCMA Design Manual for Segmental Retaining Walls for design. This design manual was produced by the National Concrete Masonry Association (NCMA) to provide a standardized engineering approach for the analysis and design of segmental retaining walls (SRWs). The purpose of this manual is to provide generic design guidelines for segmental retaining walls constructed as gravity structures and as geosynthetically reinforced soil segmental retaining walls. Reinforced SRW systems are composite facing-mechanically stabilized earth (MSE) retaining wall structures that have unique features and design requirements that are not addressed in previous MSE design guidelines. This manual provides design guidelines and engineering procedures necessary to produce safe, cost effective retaining wall structures. The design methodologies contained in this manual also the engineer to analyze the influence of all components of the SRW system on walls performance. The theories presented int his manual offer the designer the possibility to quantify performance of retaining wall structures built with segmental concrete facing units, geosyntetic reinforcement and soils. The design concepts presented in this manual are based on conventional engineering principles and experience with the design and construction of a large number of SRW structures in North America over the past 10 years.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: The Technical Committee accepted the definition of both Foundation Wall and Retaining Wall.
Additionally, the Technical Committee incorporated the proponent's Section 39.8 into Committee Proposal 5000-1325 (Log #CP1012) , as Section 39.9 with minor editiorial changes.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
COMMENT ON AFFIRMATIVE:
TAMERHOULET: There is a conflict between the definition of retaining wall and Section 39.8, which also defines retaining walls. The definition is limited to what is called "cantilevered retaining wall" (not laterally supported at the top), Section 39.8 defines retaining walls as all walls that retain soils. This definition is applicable to both cantilevered and restrained retaining wall. I believe the first definition needs to be removed.
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #108)
Committee: BLD-STR

5000- 101 - (3-3.x Impact Resistant Covering Impact Resistant Glazing (New)): Reject
SUBMITTER: David B. Hattis, Building Technology Inc./Rep. National Greenhouse Manufacturers Association (NGMA)
RECOMMENDATION: Add new text as follows:
3.3.x Impact Resistant Covering. A covering designed to protect glazing, which has been shown by testing in accordance with ASTM E 1886 and ASTM E 1996 to withstand the impact of wind borne debris missiles likely to be generated during design winds.
3.3.xx Impact Resistant Glazing. Glazing that has been shown by testing in accordance with ASTM E 1886 and ASTM E 1996 to

withstand the impact of wind borne debris missiles likely to be generated during design winds.

SUBSTANTIATION: These definitions are needed to complete proposed changes to Section 37.4 (Wind Loads), specifically that add a paragraph 37.4.2.9.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The Technical Committee noted that these terms are not used currently in the NFPA 5000 Draft, and consequently, these definitions are not needed. Additionally, these definitions reside in the reference document, ASCE 7-98. Repetition within NFPA 5000 would only increase the required amount of future maintenance. Therefore, the Technical Committee rejected Proposal 5000-1317 (Log #658).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 20
NEGATIVE: 1
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF NEGATIVE:

DAVIS: This proposal and Proposals 5000-102 (Log #1163), 5000-1318 (Log #1162), and 5000-1317 (Log #658) require or define protection against windborne debris in very limited, but highly vulnerable hurricane prone areas as noted in ASCE 7. This issue should be addressed for important buildings for life safety for those seeking shelter in those buildings during a hurricane, and for property protection to limit damage to building interiors and contents from wind driven rain.

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #1163)
Committee: BLD-STR

5000- 102 - (3-3.x Impact Resistant Covering, Impact Resistant Glazing (New)): Reject

SUBMITTER: Julia Schimmelpenningh, Solutia Inc.

RECOMMENDATION: Insert new text as follows:

3.3.x Impact Resistant Covering. A covering designed to protect glazing, that has been shown by testing in accordance with ASTM E 1886 and ASTM E 1996 to withstand the impact of wind borne debris missiles likely to be generated during design winds.

3.3.xx Impact Resistant Glazing. Glazing that has been shown by testing in accordance with ASTM E 1886 and ASTM E 1996 to withstand the impact of wind borne debris missiles likely to be generated during design winds.

SUBSTANTIATION: These definitions are needed to complete proposed changes to Section 37.4 (Wind Loads), specifically that add a paragraph 37.4.2.9.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: See Committee Action on Proposal 5000-101 (Log #108).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 20
NEGATIVE: 1
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF NEGATIVE:

DAVIS: See my Explanation of Negative on Proposal 5000-101 (Log #108).

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #168)
Committee: SAF-AXM

5000- 103 - (3-3.x Legitimate Stages (New)): Accept in Principle

SUBMITTER: Karl G. Ruling, Entertainment Services and Technology Assn.

RECOMMENDATION: We suggest that Chapter 3 include the definitions for "legitimate stages" found in ANSI/NFPA 101-2000 sections 3.3.191.1.

SUBSTANTIATION: Section 15.4.3.2 and 15.4.5.6 refer to "legitimate stages." "Legitimate stages" are not defined in Chapter 3.

COMMITTEE ACTION: Accept in Principle.

See Committee Proposal 5000-122 (Log #CP2032).

COMMITTEE STATEMENT: The referenced proposal adds the definitions requested by the submitter.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

(Log #70)
Committee: SAF-FUN

5000- 104 - (3-3.x Limited-Combustible Material): Accept in Principle

SUBMITTER: Donald W. Belles, Koffel Assoc., Inc./Rep. North American Insulation Manufacturers Assocation

RECOMMENDATION: Add a new definition to Section 3.3 as 3.3.89, renumbering existing 3.3.89 and subsequent definitions as follows:

3.3.89 Limited-Combustible Material. A building construction material not complying with the definition of noncombustible material that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259, Standard Test Method for Potential Heat of Building Materials, and complies with (a) or (b): (a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1/8 in, (3.2 mm) that has a flame spread index not greater than 50; and (b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. (Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible.)

SUBSTANTIATION: The terms limited combustible material are used in Chapter 7 with respect to allowable materials in certain construction - see Sections 7.2.3.2, 7.2.3.3, 7.2.3.4, and 7.2.3.5. The term should be defined within NFPA 5000.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-173 (Log #1192).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim

EXPLANATION OF ABSTENTION:

LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #844)
Committee: SAF-BSF

5000- 105 - (3-3.x Multiple Station Alarm Device, Single Station Alarm, Smoke Alarm, Smoke Detector (New)): Accept in Part
SUBMITTER: Howard Hooper, Underwriters Laboratories Inc.
RECOMMENDATION: Add the following definitions:
Multiple Station Alarm Device. Two or more single station alarm devices that can be interconnected so that actuation of one causes all integral audible alarms to operate; or one single station alarm device having connections to other detectors or to a manual fire alarm box. (72:1-4)
Single Station Alarm. A detector comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation. (72:1-4)
Smoke Alarm. A single or multiple station alarm responsive to smoke and listed in accordance with ANSI/UL 217, Standard for Safety Single and Multiple Station Smoke Alarms. See Single Station Alarm and Multiple Station Alarm Device.
Smoke Detector. A device that detects visible or invisible particles of combustion and is listed in accordance with ANSI/UL 268, Standard for Safety Smoke Detectors for Fire Protective Signaling Systems.
SUBSTANTIATION: There is often confusion as to whether a smoke alarm or smoke detector is required for a particular application. This proposal includes definitions for Single Station Alarm and Multiple Stations Alarm Unit that are directly extracted from NFPA 72, and definitions for Smoke Alarm and Smoke Detector that are based on requirements included in NFPA 72.
COMMITTEE ACTION: Accept in Part.
Add the following definitions:
Multiple Station Alarm Device. Two or more single station alarm devices that can be interconnected so that actuation of one causes all integral audible alarms to operate; or one single station alarm device having connections to other detectors or to a manual fire alarm box. (72:1-4)
Single Station Alarm. A detector comprising an assembly that incorporates a sensor, control components, and an alarm notification appliance in one unit operated from a power source either located in the unit or obtained at the point of installation. (72:1-4)
Smoke Alarm. A single or multiple station alarm responsive to smoke. (72-1.4)
Smoke Detector. A device that detects visible or invisible particles of combustion. (72-1.4)
COMMITTEE STATEMENT: The committee action eliminates the references in the proposed definitions, which are not permitted by the NFPA Manual of Style. Also, the committee action duplicates the definitions in NFPA 72, National Fire Alarm Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 21
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21

(Log #166)
Committee: SAF-AXM

5000- 106 - (3-3.x Platform (New)): Accept in Principle
SUBMITTER: Karl G. Ruling, Entertainment Services and Technology Assn.
RECOMMENDATION: We suggest that the definition of "platform" used in ANSI/NFPA 101-2000, section 3.3.149, be used in NFPA 5000.
SUBSTANTIATION: Section 3.3.116 has a definition of "platform" that is different from the one offered in ANSI/NFPA 101-2000, Section 3.3.149. The definition in the draft NFPA 5000 offers examples of the types of entertainment that might be offered on a platform, but also adds the restriction that no scenery other than a screening valance can be suspended over a platform. This creates a problem in that there are stages that do not have a proscenium arch but that do use suspended scenery. Thus they are not platforms as defined here. However, since they do not have a proscenium arch, they do not fit the definition of "stage" offered in 3.3.128 in the draft NFPA 5000 either. Thus, there is a gap in the definitions that would allow some performance spaces to be neither platforms nor stages.
COMMITTEE ACTION: Accept in Principle.
Replace the 3.3.116 definition of platform in the NFPA 5000 draf with the NFPA 101-2000:3.3.149 definition of platform as inserted by Committee Proposal 5000-122 (Log #CP2032).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #170)
Committee: SAF-AXM

5000- 107 - (3-3.x Platform, Temporary (New)): Accept in Principle
SUBMITTER: Karl G. Ruling, Entertainment Services and Technology Assn.
RECOMMENDATION: Chapter 3 should include the definition for "platform, temporary" given in ANSI/NFPA 101-2000, section 3.3.149.1.
SUBSTANTIATION: Section 15.4.5.2 refers to "temporary platforms" but no definitions of a "temporary platform" is given in Chapter 3.
COMMITTEE ACTION: Accept in Principle.
See Committee Proposal 5000-122 (Log #CP2032).
COMMITTEE STATEMENT: The action on the referenced proposal accomplishes what the submitter requested.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #167)
Committee: SAF-AXM

5000- 108 - (3-3.x Regular Stage (New)): Accept in Principle
SUBMITTER: Karl G. Ruling, Entertainment Services and Technology Assn.
RECOMMENDATION: We suggest that the definition of "regular stage" found in ANSI/NFPA 101-2000 section 3.3.191.2 be incorporated into Chapter 3.
SUBSTANTIATION: Sections 15.4.5.3.1 and 15.4.5.5 refer to "regular stages". "Regular stages" are not defined in Chapter 3.
COMMITTEE ACTION: Accept in Principle.
See Committee Proposal 5000-122 (Log #CP2032).
COMMITTEE STATEMENT: The action on the referenced proposal accomplishes what the submitter requested.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #709a)
Committee: BLD-STR

5000- 109 - (3-3.x Roof Assemblies (New)): Accept in Principle
SUBMITTER: Richard J. Davis, FM Global
RECOMMENDATION: Add the following definition to Chapter 3:
Roof Assemblies. All roof related components above the roof structural framing including the roof deck, vapor barrier and insulation (if applicable), roof cover, and coatings or toppings (if applicable).
SUBSTANTIATION: The current text does not contain any guidance with regard to materials and installations. This proposed text provides general guidance in this are, defines roof assemblies, and lists various exposures the roof must provide performance against.
COMMITTEE ACTION: Accept in Principle.

COMMITTEE STATEMENT: The Technical Committee incorporated this definition with minor editorial changes into Committee Proposal 5000-1269 (Log #CP1005).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #99b)
Committee: SAF-END

5000- 110 - (3-3.x Self-Preservation (Day-Care Occupancy) (New)): Accept in Principle
SUBMITTER: Catherine L. Stashak, Des Plaines Fire Dept., IL
RECOMMENDATION: Add to Chapter 3 a definition of "Self-Preservation (Day-Care Occupancy)" as follows:
3.3.x Self-Preservation (Day-Care Occupancy). The ability of a client to evacuate a day-care occupancy without direct intervention by a staff member.
SUBSTANTIATION: I serve as chair of the Life Safety Technical Committee on Educational and Day-Care Occupancies. A task group of the technical committee met and drafted the proposed revisions. The subject was not balloted through the full technical committee, so I am submitting the proposal in my name.
The threshold at which sprinklers will be required for educational and day-care occupancies is based on the size of a "fire area." For day-care occupancies, the sprinkler threshold also is based on client incapability of "self-preservation." Definitions of "fire area" and "self-preservation" are needed. The proposed definition of "fire area" is modeled after that in NFPA 30, Flammable and Combustible Liquids Code, with the required fire ratings increased to meet the need of the building code. The proposed definition of "self-preservation (day-care occupancy)" is copied from that in NFPA 101, Life Safety Code.
COMMITTEE ACTION: Accept in Principle.
Add to Chapter 3 a definition of "Self-Preservation (Day-Care Occupancy)" as follows:
3.3.x Self-Preservation (Day-Care Occupancy). The ability of a client to evacuate a day-care occupancy without direct intervention by a staff member.
Also add the annex note that accompanies the definition as found in NFPA 101. Make it read as follows:
A.3.3.x Self-Preservation (Day-Care Occupancy). Examples of clients who are incapable of self-preservation include infants, clients who are unable to use stairs because of confinement to a wheelchair or other physical disability, and clients who cannot follow directions or a group to the outside of a facility due to mental or behavioral disorders. It is the intent of this Code to classify children under the age of 24 months as incapable of self-preservation. Examples of direct intervention by staff members include carrying a client, pushing a client outside in a wheelchair, and guiding a client by direct hand-holding or continued bodily contact. If clients cannot exit the building by themselves with minimal intervention from staff members, such as verbal orders, classification as incapable of self-preservation should be considered.
COMMITTEE STATEMENT: The committee action accomplishes what the submitter requested. Additionally it includes adding the associated annex text as found in NFPA 101. This should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 14
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14

(Log #779)
Committee: SAF-FIR

5000- 111 - (3-3.x Side Light (New)): Reject
SUBMITTER: James F. McMullen, The McMullen Company, Inc./Rep. O'Keeffe's, Inc.
RECOMMENDATION: Add a new section to Section 3.3, Definitions, entitled "Side Light".
Side Light. An opening in a fire door frame alongside the fire door opening that is filled with glazing material.
SUBSTANTIATION: NFPA 5000 does not have a definition for "Side Light." This definition is taken verbatim from NFPA 80, Standard for Fire Doors and Windows, 1999 edition. Since transoms are an integral part of construction, the building code should include a definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Currently this term is not used in this document is those chapters which this technical committee has responsibility for. Therefore, it was determined that the addition of this definition is not necessary.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #256)
Committee: SAF-FIR

5000- 112 - (3-3.x Smoke Seal (New)): Reject
SUBMITTER: Richard Licht, 3M Company
RECOMMENDATION: Add new text as follows:
Smoke Seal. An approved seal material that is installed in smoke barrier and smoke partitions that limits the migration of smoke through penetrations and joints.
SUBSTANTIATION: Smoke barrier and partitions are defined in the codes but there is not a definition for smoke penetrations and joints. Materials used to seal penetrations and joints are required in the codes but there is not definition for these materials and how they can be measured.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Currently this term is not used in this document is those chapters which this technical committee has responsibility for. Therefore, it was determined that the addition of this definition is not necessary. See related technical committee activity in Committee Proposal 5000-536 (Log #CP605).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #518)
Committee: SAF-FUN

5000- 113 - (3-3.x Special Inspection (New)): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a new definition to Section 3.3 as follows:
Special Inspection. Services provided by a qualified person, retained by the Owner and approved by the AHJ, to observe the installation and witness pre-testing and operation of the system or systems. The services will include preparation of inspection reports and a final, signed, summary report describing system performance.
SUBSTANTIATION: This is a companion change to the reference to Special Inspections in Chapter 1, and the requirement for them in Chapter 4. See the rationale with the Code change for Chapter 4.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: A definition is not to contain a requirement. The term "special inspection" can be very encompassing. The details should appear as requirements in other Code sections.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #141a)
Committee: SAF-IND

5000- 114 - (3-3.x Structure, Enclosed Parking; Structure, Open Parking): Accept
SUBMITTER: Jonathan Humble, American Iron and Steel Insitute
RECOMMENDATION: Add to Chapter 3 Definitions
3.3.X.X Structure, Enclosed Parking. Any parking structure that is not an open parking structure.
3.3.X.X Structure, Open Parking. A parking structure that, at each parking level, has wall openings open to the atmosphere, for an area of note less than 1.4 ft2 (0.13 m2) for each linear foot (0.3m) of its exterior perimeter. Such openings are distributed over 40 percent of the building perimeter or uniformly over two opposing sides. Interior walls lines and column lines are at least 20 percent open, with openings distributed to provide ventilation.
SUBSTANTIATION: The proposal before you recommends that the applicable content of NFPA 88A "Standard for Parking Structures" be extracted and imported into the NFPA 5000 Building Code in lieu of simply referencing NFPA 88A. This approach will make NFPA 5000 a more complete document as the amount of text being proposed for extraction is not substantive.
The proposal has been submitted under the provisions of Section 2.6.2 "Extracted Material" of the Manual of Style for NFPA Technical Committee Documents, April 2000 Edition, and in accordance with the July 19, 1999 Safety to Life Technical Correlating Committee letter to SAF-IND. The proposal for definitions has been extracted from Section 2-1 Definitions of NFPA 88A-1998 Standard for Parking Structures.
The proposed modifications to Sections 29.8.2.2.6.1, 29.8.2.6, and 29.8.3.4.1 are intended to coordinate the terms with the revised definitions.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #717b)
Committee: BLD-STR

5000- 115 - (3-3.x Thermal Barrier (New)): Reject
SUBMITTER: Richard J. Davis, FM Global
RECOMMENDATION: Add the following new definition to Chapter 3:
Thermal Barrier - a layer of insulating material used within a roof or wall assembly on the fire exposed side and intended to limit fuel contribution from other combustible components of the assembly.
SUBSTANTIATION: The current text does not provide guidance regarding performance against interior fire exposure. This proposed text references nationally accepted test standards for fire resistive or limited combustible construction, as required by Chapter 7. It also adds a definition for thermal barrier which is not contained in the current Chapter 3.
Note: Supporting material is available for review at NFPA Headquarters.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee noted that this term is not currently used Committee Proposal 5000-1269 (Log #CP1005), Chapter 36. Consequently, this definition is not needed in Chapter 3. Additionally, this proposed definition is inconsistent with the accepted NFPA definition, without adaquate technical substantiation.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 20
NEGATIVE: 1
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF NEGATIVE:
DAVIS: This proposal would add a definition for "thermal barrier". See my Explanation of Negative on Proposal 5000-1275 (Log #717).
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #717c)
Committee: BLD-MAT

5000- 116 - (3-3.x Thermal Barrier (New)): Reject
SUBMITTER: Richard J. Davis, FM Global
RECOMMENDATION: Add the following new definition to Chapter 3:
Thermal Barrier - a layer of insulating material used within a roof or wall assembly on the fire exposed side and intended to limit fuel contribution from other combustible components of the assembly.
SUBSTANTIATION: The current text does not provide guidance regarding performance against interior fire exposure. This proposed text references nationally accepted test standards for fire resistive or limited combustible construction, as required by Chapter 7. It also adds a definition for thermal barrier which is not contained in the current Chapter 3.
Note: Supporting material is available for review at NFPA Headquarters.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Thermal Barrier is a system which is fully described within Committee Proposal 5000-1364 (Log #CP1103), Section 47.3.3. Consequently, a definition is not needed.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 1 Thomas

(Log #717d)
Committee: SAF-BCF

5000- 117 - (3-3.x Thermal Barrier (New)): Reject
SUBMITTER: Richard J. Davis, FM Global
RECOMMENDATION: Add the following new definition to Chapter 3:
Thermal Barrier - a layer of insulating material used within a roof or wall assembly on the fire exposed side and intended to limit fuel contribution from other combustible components of the assembly.
SUBSTANTIATION: The current text does not provide guidance regarding performance against interior fire exposure. This proposed text references nationally accepted test standards for fire resistive or limited combustible construction, as required by Chapter 7. It also adds a definition for thermal barrier which is not contained in the current Chapter 3.
Note: Supporting material is available for review at NFPA Headquarters.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed definition does not describe the term as used in Chapter 25, Residential Board and Care Occupancies.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 16
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
NOT RETURNED: 1 Groner

(Log #778)
Committee: SAF-FIR

5000- 118 - (3-3.x Transom (New)): Reject
SUBMITTER: James F. McMullen, The McMullen Company, Inc./Rep. O'Keeffe's, Inc.
RECOMMENDATION: Add a new section to Section 3.3, Definitions, entitled "Transom".
Transom. An opening in a fire door frame above the door opening that is filled by a solid panel or with glazing material.
SUBSTANTIATION: NFPA 5000 does not have a definition for "Transom." This definition is taken verbatim from NFPA 80, Standard for Fire Doors and Windows, 1999 edition. Since transoms are an integral part of construction, the building code should include a definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Currently this term is not used in this document is those chapters which this technical committee has responsibility for. Therefore, it was determined that the addition of this definition is not necessary.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #848)
Committee: SAF-FUN

5000- 119 - (3-3.x Various Definitions): Accept in Principle
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Delete the following definitions:
3.3.1 Accepted Engineering Practice
3.3.2 Accessory Building
3.3.24.1 Building, Accessory
3.3.9 Arcade
3.3.21 Bay Window
3.3.24.5 Building, Private
3.3.24.5 Building, Public
3.3.29 Cast Stone
3.3.30 Cellar
3.3.40 Court, Enclosed
3.3.44 Display Sign, and Annex note A.3.3.44.
3.3.55 Engineer, Licensed
3.3.72.1 Garage, Automotive Service
3.3.72.2 Garage, Basement Parking
3.3.95 LP Fuel
3.3.96 LP Gas
3.3.105 Nonconforming
3.3.111.1 Partition, Partial Height
SUBSTANTIATION: These defined terms do not appear in the body of the code or the annex, based on an electronic search of the Proposed Draft.
COMMITTEE ACTION: Accept in Principle.
Do not delete the definitions now.
COMMITTEE STATEMENT: The SAF-FUN committee intends that at the ROC-development stage, with help from staff, the NFPA 5000 draft will be searched. Definitions of terms not used in the Code will be deleted.
The SAF-FUN committee is receptive to having the Technical Correlating Committee on the Building Code (i.e., the TCC) add a TCC note to this proposal in the ROP so as to generate a public comment in the TCC's name requesting SAF-FUN to address the subject at the ROC-preparation stage.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1174)
Committee: SAF-FIR

5000- 120 - (3-3.x Various Definitions (New)): Accept in Principle
SUBMITTER: Vickie Lovell, InterCode Inc./Rep. International Fire Stop Council
RECOMMENDATION: Add definitions to Chapter 3 as follows:
Joint.
Construction Joints. A linear opening in or between adjacent fire-resistive assemblies that is designed to allow independent movement of the building in any plane caused by wind loads, seismic activity, thermal expansion or contraction, or any other loading.
Control Joints. The linear void between or within two adjacent floor, wall or ceiling assemblies designed to relieve stresses and to prevent or control cracking due to drying shrinkage or normal building temperature change in large wall, ceiling and floor areas.
Perimeter Joint. The linear void located between the juxtaposed exterior wall assembly and the floor assembly to accommodate carious movement induced by thermal differentials, seismic activity, wind loads and misalignments during construction.
Curtain Wall Assembly. Either a rated or non-rated, non-bearing exterior wall assembly secured to and supported by the structural members of the building.
Draft Stop. A continuous membrane used to subdivide large concealed spaces, such as attics, to restrict the passage of smoke, heat, and flames. In noncombustible construction, a fireblock may consist of any approved material which will restrict the movement of flame. In combustible construction, a fireblock may be constructed of lumber or other approved materials which will limit the spread of fire within the concealed space.
Fireblock. A material, barrier, or construction installed in small concealed spaces, or between structural elements of a building to prevent the extension of fire for an unspecified period of time within the cavity of a wall, ceiling, stair, a furred space, and similar locations. In noncombustible construction, a fireblock may consist of any approved material which will restrict the movement of flame. In combustible construction, a fireblock may be constructed of lumber or other approved materials which will limit the spread of fire within the concealed space.
Penetration -
Through-Penetrations. Openings that pass through both sides of a vertical or horizontal fire resistance rated assembly to accommodate cables, cable trays, conduits, pipes, wires, and similar items. Blank openings and openings for ducts, chimneys, vents, and similar items may also be through-penetrations.
Membrane Penetrations. Openings made through one side (wall or ceiling membrane) of a fire resistance rated assembly to accommodate cables, cable trays, cabinets, conduits, electrical fixtures and outlets, pipes, sprinklers, wires, and similar items.
Perimeter Joint System. The combination of the exterior wall assembly, perimeter joint protection, and the floor assembly that provides fire resistance to prevent the passage of fire from floor to floor at the building's exterior.
SUBSTANTIATION: None.
COMMITTEE ACTION: Accept in Principle.
Add:
3.3.xx Joint. A linear opening in or between adjacent assemblies that is designed to allow independent movement of the building.
3.3.xx Draft Stop. A continuous membrane used to subdivide concealed spaces to restrict the passage of smoke and heat.
3.3.xx Fireblock. A material, barrier, or construction installed in concealed spaces to prevent the extension of fire for an unspecified period of time.
3.3.xx Penetration
3.3.xx.1* Through-Penetrations. Openings for penetrations that pass through both sides of a vertical or horizontal fire resistance-rated assembly.
A.3.3.xx.1 Through-Penetrations. Blank openings and openings for ducts, chimneys, vents, and similar items may also be through-penetrations. This identifies those openings that are to accommodate

cables, cable trays, cabinets, conduits, electrical fixtures and outlets, pipes, wires, vents and similar items.

3.3.xx.2* Membrane Penetrations. Openings for penetrations made through one side (wall or ceiling membrane) of a fire resistance rated assembly.

A.3.3.xx.2 Membrane Penetrations. This identifies those openings that are to accommodate cables, cable trays, cabinets, conduits, electrical fixtures and outlets, pipes, wires, vents and similar items.

COMMITTEE STATEMENT: It was determined that a generic term for joint is perferred over the individual definitions for each type as used within this document. Related technical committee activity can be found in Committee Proposal 5000-532 (Log #CP604).

The action taken on the term "curtain wall assembly" was taken to be consistent with the Committee Action taken on Proposal 5000-123 (Log #649a) by another technical committee.

The revisions for penetrations was done for clarification. The annex notes have been added to capture those elements of the proposal which are not necessary to be included in the definition but should be included as information.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #1073a)

Committee: BLD-MAT

5000- 121 - (3-3.x Various Definitions (New)): Accept in Principle

SUBMITTER: Kenneth E. Bland, American Forest & Paper Associatin

RECOMMENDATION: Add the following definitions to Chapter 3:

Accreditation Body. An approved, third-party organization which is independent of the grading and inspection agencies, and the lumber mills, and which initially accredits and subsequently monitors, on a continuing basis, the competency and performance of a grading or inspection agency related to carrying out specific tasks.

Fiberboard. A fibrous, homogeneous panel made from lignocellulosic fibers (usually wood or cane) and having a density of less than 31 pounds per cubic foot (497 kg/m^3) but more than 10 pounds per cubic foot (160 kg/m^3).

Fire-Retardant Treated Wood. Any wood product which complies with NFPA 703, Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials.

Grade (Lumber). The classification of lumber in regard to strength and utility in accordance with USDOC PS 20-94 and the grading rules of an approved lumber rules writing agency.

Hardboard. A fibrous-felted, homogeneous panel made from lignocellulosic fibers consolidated under heat and pressure in a hot press to a density not less than 31 pounds per cubic foot (497 kg/m^3).

Nominal Size (Lumber). The commercial size designation of width and depth, in standard sawn lumber and glued laminated lumber grades; somewhat larger than the standard net size of dressed lumber, in accordance with USDOC PS 20-94 for sawn lumber and in accordance with the AF&PA NDS for glued laminated lumber.

Particleboard. A generic term for a panel primarily composed of cellulosic materials (usually wood), generally in the form of discrete pieces or particles, as distinguished from fibers. The cellulosic material is combined with synthetic resin or other suitable bonding system by a process in which the interparticle bond is created by the bonding system under heat and pressure.

Preservative-treated Wood. Wood (including plywood) pressure-treated with preservatives in accordance with the standards of the American Wood Preservers Association (AWPA).

Structural Glued Laminated Timber. Any member comprising an assembly of laminations of lumber in which the grain of all laminations is approximately parallel longitudinally, in which the laminations are bonded with adhesives.

Wood Structural Panel. A panel manufactured from veneers; or wood strands or wafers; or a combination of veneer and wood strands or wafers bonded together with waterproof synthetic resins or other suitable bonding systems. Examples of wood structural panels are:

Composite Panels. A structural panel that is made of layers of veneer and wood-based material;

Oriented Strand Board (OSB). A mat-formed wood structural panel product composed of thin rectangular wood strands or wafers arranged in oriented layers and bonded with waterproof adhesive; and,

Plywood. A wood structural panel comprised of plies of wood veneer arranged in cross-aligned layers.

SUBSTANTIATION: 1. The technical provisions of the draft Chapter 44 in NFPA 5000 are incomplete and inconsistent with current practice.

2. The reference standards are outdated, and other standards needed in the design and construction of buildings are not included.

COMMITTEE ACTION: Accept in Principle.

COMMITTEE STATEMENT: These definitions were incorporated into Proposal 5000-1348 (Log #1073). See committee statement on Proposal 5000-1348 (Log #1073) for further information.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

NOT RETURNED: 1 Thomas

(Log #CP2032)

Committee: SAF-AXM

5000- 122 - (3.3.xx Various Definitions): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-AXM requesting that the TC give consideration to Mr. Messersmith's comment on affirmative so as to make any needed changes.

SUBMITTER: Technical Committee on Assembly Occupancies and Membrane Structures

RECOMMENDATION: Add definitions to Section 3.3 as follows (the paragraph numbers are from NFPA 101 - the definitions will be renumbered as necessary for NFPA 5000). Where a different definition of the term already exists in the NFPA 5000 draft that was circulated to solicit public proposals, delete the draft definition in lieu of the revised definition being added by this proposal.

3.3.6* Aisle Accessway. The initial portion of an exit access that leads to an aisle.

A.3.3.6 Aisle Accessway. *Aisle accessway* is the term used for the previously unnamed means of egress component leading to an aisle or other means of egress. For example, circulation space between parallel rows of seats having a width of 1 ft to 2 ft (0.3 m to 0.6 m) and a length not exceeding 100 ft (30 m) is an aisle accessway. Some of the circulation space between tables or seats in restaurants might be considered aisle accessway.

Depending on the width of aisle accessway, which is influenced by its length and expected utilization, the movement of a person through the aisle accessway might require others to change their individual speed of movement, alter their postures, move their chairs out of the way, or proceed ahead of the person.

3.3.23 Bleachers. A grandstand in which the seats are not provided with backrests.

3.3.25.8* Building, Special Amusement. A building that is temporary, permanent, or mobile that contains a device or system that conveys passengers or provides a walkway along, around, or over a course in any direction as a form of amusement arranged so that the egress path is not readily apparent due to visual or audio distractions or an intentionally confounded egress path, or is not readily available due to the mode of conveyance through the building or structure.

A.3.3.25.8 Building, Special Amusement. Such structures include amusements such as a haunted house, a roller coaster-type ride within a building, a multilevel play structure within a building, a submarine ride, and similar amusements where the occupants are not in the open air.

3.3.57 Exhibit. A space or portable structure used for the display of products or services.
3.3.58 Exhibitor. An individual or entity engaged in the display of the products or services offered.
3.3.64 Exposition. An event in which the display of products or services is organized to bring together the provider and user of the products or services.
3.3.65 Exposition Facility. A convention center, hotel, or other building at which exposition events are held.

3.3.84 Fly Gallery. A raised floor area above a stage from which the movement of scenery and operation of other stage effects are controlled.
3.3.89* Grandstand. A structure that provides tiered or stepped seating.
A.3.3.89 Grandstand. Where the term *grandstand* is preceded by an adjective denoting a material, it means a grandstand the essential members of which, exclusive of seating, are of the material designated.
3.3.90 Gridiron. The structural framing over a stage supporting equipment for hanging or flying scenery and other stage effects.
3.3.116 Life Safety Evaluation. A written review dealing with the adequacy of life safety features relative to fire, storm, collapse, crowd behavior, and other related safety considerations.
3.3.134.2* Occupancy, Assembly. An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship, entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.
A.3.3.134.2 Occupancy, Assembly. Assembly occupancies might include the following:
(1) Armories
(2) Assembly halls
(3) Auditoriums
(4) Bowling lanes
(5) Club rooms
(6) College and university classrooms, 50 persons and over
(7) Conference rooms
(8) Courtrooms
(9) Dance halls
(10) Drinking establishments
(11) Exhibition halls
(12) Gymnasiums
(13) Libraries
(14) Mortuary chapels
(15) Motion picture theaters
(16) Museums
(17) Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
(18) Places of religious worship
(19) Pool rooms
(20) Recreation piers
(21) Restaurants
(22) Skating rinks
(23) Special amusement buildings regardless of occupant load
(24) Theaters
Assembly occupancies are characterized by the presence or potential presence of crowds with attendant panic hazard in case of fire or other emergency. They are generally open or occasionally open to the public, and the occupants, who are present voluntarily, are not ordinarily subject to discipline or control. Such buildings are ordinarily occupied by able-bodied persons and are not used for sleeping purposes. Special conference rooms, snack areas, and other areas incidental to, and under the control of, the management of other occupancies, such as offices, fall under the 50-person limitation. Restaurants and drinking establishments with an occupant load of fewer than 50 persons should be classified as mercantile occupancies. For special amusement buildings, see 15.4.7.
3.3.134.11 Occupancy, Multipurpose Assembly. An assembly room designed to accommodate temporarily any of several possible assembly uses.
3.3.147 Pinrail. A rail on or above a stage through which belaying pins are inserted and to which lines are fastened.
3.3.149* Platform. The raised area within a building used for the presentation of music, plays, or other entertainment.
A.3.3.149 Platform. Platforms also include the head tables for special guests; the raised area for lecturers and speakers; boxing and wrestling rings; theater-in-the-round; and for similar purposes wherein there are no overhead drops, pieces of scenery, or stage effects other than lighting and a screening valance. A platform is not intended to be prohibited from using a curtain as a valance to screen or hide the electric conduit, lighting track, or similar fixtures, nor is a platform prohibited from using curtains that are used to obscure the back wall of the stage; a curtain between the auditorium and the stage (grand or house curtain), a maximum of four leg drops; or a valance to screen light panels, plumbing, and similar equipment from view.
3.3.149.1 Platform, Temporary. A platform erected within an area for not more than 30 days.
3.3.171* Seating, Festival. A form of audience/spectator accommodation in which no seating, other than a floor or ground surface, is provided for the audience/spectators gathered to observe a performance.
A.3.3.171 Seating, Festival. Festival seating describes situations in assembly occupancies where live entertainment events are held that are expected to result in overcrowding and high audience density that can compromise public safety. It is not the intent to apply the term *festival seating* to exhibitions; sports events; dances; conventions; and bona fide political, religious, and educational events. Assembly occupancies with 15 ft^2 (1.4 m^2) or more per person should not be considered festival seating.
3.3.172 Seating, Folding and Telescopic. A structure that is used for tiered seating of persons and whose overall shape and size can be reduced, without being dismantled, for purposes of moving or storing.
3.3.173 Seating, Smoke-Protected Assembly. Seating served by means of egress that is not subject to smoke accumulation within or under the structure.
3.3.191 Stage. A space within a building used for entertainment and utilizing drops or scenery or other stage effects.
3.3.191.1 Stage, Legitimate. A stage with a height greater than 50 ft (15 m) measured from the lowest point on the stage floor to the highest point of the roof or floor deck above.
3.3.191.2 Stage, Regular. A stage with a height of 50 ft (15 m) or less measured from the lowest point on the deck above.
3.3.197.4 Structure, Multilevel Play. A structure that consists of tubes, slides, crawling areas, and jumping areas that is located within a building and is used for climbing and entertainment, generally by children.
3.3.201* Tent. A temporary structure, the covering of which is made of pliable material that achieves its support by mechanical means such as beams, columns, poles, or arches, or by rope or cables, or both.
A.3.3.201 Tent. A tent might also include a temporary tensioned-membrane structure.
3.3.201.1 Tent, Private Party. A tent erected in the yard of a private residence for entertainment, recreation, dining, a reception, or similar function.
3.3.209 Wall, Proscenium. The wall that separates the stage from the auditorium or house.

SUBSTANTIATION: The terms (for which definitions are being added) are used by the assembly occupancy chapter. The definitions come from the NFPA 101 Life Safety Code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
COMMENT ON AFFIRMATIVE:
MESSERSMITH: In the definition of "stage, regular," the words "the stage floor to the highest point of" appear to be missing following the word "on." See similar wording in the definition of "stage, legitimate."

(Log #649a)
Committee: SAF-FIR

5000- 123 - (3-3.x Wall, Curtain Wall Assembly (New)): Reject
SUBMITTER: Matthias J. Mulvey, Thermafiber
RECOMMENDATION: Add new text as follows:
Wall, Curtain Wall Assembly. Either a rated or non-rated, non-bearing exterior wall assembly secured to and supported by the structural members of the building.
SUBSTANTIATION: Curtain walls are an integral part of modern construction. A definition of Curtain Wall Assembly is needed in NFPA 5000.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Currently this term is not used in this document is those chapters which this technical committee has responsibility for. Therefore, it was determined that the addition of this definition is not necessary.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #649b)
Committee: BLD-STR

5000- 124 - (3-3.x Wall, Curtain Wall Assembly (New)): Reject
SUBMITTER: Matthias J. Mulvey, Thermafiber
RECOMMENDATION: Add new text as follows:
Wall, Curtain Wall Assembly. Either a rated or non-rated, non-bearing exterior wall assembly secured to and supported by the structural members of the building.
SUBSTANTIATION: Curtain walls are an integral part of modern construction. A definition of Curtain Wall Assembly is needed in NFPA 5000.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee agreed that curtain wall assemblies are covered adequately in the text where needed. A separate definition is not required.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #650)
Committee: SAF-FIR

5000- 125 - (3-3.x Wall, Curtain Wall Perimeter Fire Containment (New)): Accept in Principle
SUBMITTER: Matthias J. Mulvey, Thermafiber
RECOMMENDATION: Add new text as follows:
Wall, Curtain Wall Perimeter Fire Containment. An assembly fire rated for the time required by the buildings construction classification comprised of the following elements: (1) an exterior curtain wall, (2) a floor assembly and (3) the perimeter joint protection installed between the curtain wall and the floor. The purpose of the installation of the containment is to maintain the required floor rating at the exterior perimeter of the building. A curtain wall perimeter fire containment assembly creates a barrier to impede the vertical spread of fire from floor of origin to the floors above, at the buildings exterior perimeter.
SUBSTANTIATION: Curtain Walls Perimeter Fire Containment is an integral part of modern building construction. A definition of Curtain Wall Assembly is needed in NFPA 5000.
COMMITTEE ACTION: Accept in Principle.
Revise text:
3.3.xx* Wall, Curtain Wall Perimeter Fire Containment. A fire resistance-rated assembly consisting of: (1) an exterior curtain wall, (2) a floor assembly and (3) the perimeter joint protection installed between the curtain wall and the floor.
COMMITTEE STATEMENT: The revised definition removes the reference to the building construction and only address what is necessary to define the term. Related technical committee activity can be found in Committee Proposal 5000-534 (Log #CP601).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 25
NEGATIVE: 2
NOT RETURNED: 1 Barker
EXPLANATION OF NEGATIVE:
FRANCIS: I am changing my ballot to a negative ballot:
After reading Mr. Humble's negative, I re-examined the text and find that it does indeed imply that the "curtain wall system" is an assembly. This is not what was contemplated by the committee.
HUMBLE: I support efforts to strengthen the interface between curtain walls and rated floor systems, but without knowing how to comply this proposal goes too far by simply requiring a rated assembly.
In addition, the proposal appears to mandate that if a building with a two (2) hour floor rating has a curtain wall, so to would the curtain wall have to be rated for two (2) hours.

(Log #633)
Committee: BLD-STR

5000- 126 - (3-3.x Various Definitions (New)): Accept
TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR requesting that the numerous definitions in the proposal be revised for agreement with the definitions of the same terms as shown in the draft of Chapter 3 that appears at the end of this report. The draft chapter has been revised for general compliance with the NFPA Manual of Style. Also:
(1) the definition "FEMA. Federal Emergency Management Agency." should not be added to Chapter 3 because it is not a definition. The subject can be addressed in the Flood Chapter 100 with a statement that explains that FEMA means the Federal Emergency Management Agency.
(2) the definition of Historic Building per this proposal should be resolved by SAF-FUN to determine which definition should be used. The definition of "Building, Historic" contained in Proposal 5000-79 (Log #CP2044) by SAF-FUN (and repeated in the draft of Chapter 3 that appears at the end of this report) is preferable and should meet all group's needs for a definition.
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Add the following new definitions:
Base Flood. The flood having a 1 percent chance of being equaled or exceeded in any given year.
Base Flood Elevation (BFE). The elevation of the base flood, including wave height, relative to the datum specified on a jurisdiction's flood hazard map.
Design Flood. The greater of either: 1) the base flood, or 2) the flood so designated by the jurisdiction as its regulatory flood, with a 1 percent chance, or less, of being equaled or exceeded in any given year.
Design Flood Elevation (DFE). The elevation of the design flood, including wave height, relative to the datum specified on a jurisdiction's flood hazard map.
Development. Any man-made changes to improved or unimproved real estate, including but not limited to buildings or other structures, temporary or permanent storage or materials, mining, dredging, filling, grading, paving, excavation, drilling or other land disturbing activities.

Dry Floodproofing. Any combination of structural and non-structural alterations which result in a building or structure, including attendant utility and sanitary facilities, being substantially impermeable to the passage of water.

FEMA. Federal Emergency Management Agency.

Flood. A general and temporary condition of partial or complete inundation of normally dry land by: 1) the overflow of inland or tidal waters, or 2) the rapid accumulation of surface waters from any source.

Flood Boundary and Floodway Map (FBFM). An official map of a jurisdiction, on which the Federal Emergency Management Agency has delineated flood hazard zones and floodway boundaries for the jurisdiction.

Flood Damage Resistant Material. Any construction material capable of direct and prolonged contact with floodwaters, without sustaining any damage that requires more than cosmetic repairs.

Flood Hazard and Boundary Map (FHBM). An official map of a jurisdiction, on which FEMA has delineated special flood hazard areas for the jurisdiction.

Flood Hazard Area. The greater of either: 1) the Special Flood Hazard Area shown on the Flood Insurance Rate Map, or 2) the area subject to flooding during the design flood and shown on a jurisdiction's flood hazard map.

Flood Hazard Map. A map delineating the flood hazard area and adopted by a jurisdiction.

Flood Insurance Rate Map (FIRM). An official map of a jurisdiction, on which FEMA has delineated special flood hazard areas and risk premium zones applicable to the jurisdiction. For the purposes of this Code, the term "Flood Insurance Rate Map" shall be meant to include the Flood Boundary and Floodway Map, and the Flood Hazard and Boundary Map.

Flood Insurance Study. An official report provided to a jurisdiction by the Federal Emergency Management Agency, which accompanies and serves as the technical basis for the Flood Insurance Rate Map.

Floodway. The channel of a river, creek or other watercourse, and the adjacent land area, that must be reserved in order to pass the base flood discharge without cumulatively raising the water surface elevation more than a designated height. The term "regulatory floodway" shall be considered equivalent to the term "floodway."

Functionally Dependent Facility. For all matters related to flood resistant design and construction, any facility that cannot be used for its intended purpose unless it is located or carried out in close proximity to water. The term shall include docking or port facilities necessary for the loading or unloading of cargo or passengers, shipbuilding or ship repair. The term does not include long-term storage, manufacture, sales or service facilities.

High Velocity Wave Action. Condition present during the base flood where wave heights are greater than or equal to 3.0 ft or where wave runup elevations exceed 3.0 ft above grade. Areas subject to high velocity wave action are designated on the Flood Insurance Rate Map or flood hazard map as Zone V, VE, VO, or V1-30.

Historic Building. A building which is listed in the National Register of Historic Places, designated as historic under an appropriate state or local law, or determined by the U. S. Secretary of the Interior to contribute to the historical significance of a registered historic district.

Load, Flood. See ASCE 7-98.

Lowest Floor. For all matters related to flood resistant design and construction, the floor of the lowest enclosed area of a building or structure. An unfinished or flood resistant enclosure, used solely for vehicle parking, building access or limited storage, shall not be considered the lowest floor, provided the enclosed area is not constructed so as to render the building or structure in violation of the flood-related provisions of the Code.

Special Flood Hazard Area. The land area subject to flooding by the base flood, and depicted on the Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AO, AR, AH, V, VE, V1-30 or VO.

Start of Construction. For all matters related to flood resistant design and construction, the date of permit issuance for new construction or substantial improvements to an existing structure, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns. Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), or the installation of streets and walkways, or the excavation for a basement, footings, piers or foundations, or the erection of temporary forms, or the installation of accessory buildings such as garages or sheds not occupied as dwelling units and not part of the main building. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor or other structural part of the building, whether or not that alteration affects the exterior dimensions of the building.

Substantial Damage. For buildings and structures located wholly or partly within the flood hazard area, damage of any origin whereby the cost of restoring the building or structure to its pre-damage condition would equal or exceed 50 percent of the market value of the building or structure before the damage occurred.

Substantial Improvement. For buildings and structures located wholly or partly within the flood hazard area, any repair, addition, reconstruction, rehabilitation or improvement of the building or structure, the cost of which equals or exceeds 50 percent of the market value of the building or structure before the alteration is started. If a building or structure has sustained substantial damage, any repairs or reconstruction shall be considered substantial improvement regardless of the actual work performed. Substantial improvement, however, does not include the following: 1) any project or improvement of a building or structure required to correct existing health, sanitary or safety code violations identified by the AHJ, and that are the minimum necessary to assure safe living conditions, or 2) any alteration of a historic building or structure provided that the alteration will not preclude the continued designation as a historic building or structure.

Variance. A grant of relief from a provision or provisions of these Code, which permits construction in a manner which would otherwise be prohibited.

SUBSTANTIATION: Makes code definitions compliant with National Flood Insurance Program regulations, SEI/ASCE 7-98 (Minimum Design Loads for Buildings and Other Structures) and SEI/ASCE 24-98 (Flood Resistant Design and Construction) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #79)

Committee: SAF-FUN

5000- 127 - (3-3.1, 3.3.10, 3.3.55): Reject

SUBMITTER: J.R. Carroll, Urbana, IL

RECOMMENDATION: • I have received the draft of NFPA 5000.

- I am a member of NFPA. I am a retired Professional Engineer.
- I am a Commissioner of the Illinois Building Commission.
- I am not sure that we need another Building Code although I believe that I understand why NFPA is moving.
- There must be a way for ICC and NFPA to coordinate and cooperate on a single code.

SUBSTANTIATION: • Chapters 14 and 34 are extremely weak at this time.

• Paragraphs 3.3.1, 3.3.10, and 3.3.55 need to be coordinated. Individuals are "licensed" (1.13.3.1.3 and 4) firms are registered.
• Paragraph 3.3.104 misspelled title.
• Congratulations on a great beginning.

COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter has not recommended any text.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #174)
Committee: SAF-FUN

5000- 128 - (3-3.1 Architect, Registered; Engineer, Licensed and 3.3.55): Accept in Principle
SUBMITTER: John E. Kampmeyer, Triad Fire Protection Engineering Corp./Rep. National Society of Professional Engineers
RECOMMENDATION: Revise text as follows:
3.3.10 Architect, Registered. A person licensed to practice architecture in a state, subject to all laws and limitations imposed by the state, commonwealth or province.
3.3.55 Engineer, ~~Licensed~~ Professional. A person licensed to practice engineering in a state, commonwealth or province subject to all laws and limitations imposed by the state, commonwealth or province.
SUBSTANTIATION: The change provides consistent definitions for architects and engineers.
COMMITTEE ACTION: Accept in Principle.
Revise text as follows:
3.3.10 Architect, Registered. A person licensed to practice architecture in a jurisdiction ~~state~~, subject to all laws and limitations imposed by the jurisdiction ~~state~~.
3.3.55 Engineer, ~~Licensed~~ Professional. A person licensed to practice engineering in a jurisdiction ~~state~~, subject to all laws and limitations imposed by the jurisdiction ~~state~~.
COMMITTEE STATEMENT: The term "jurisdiction" captures the concept without having to include a list of similar terms.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #751)
Committee: SAF-MEA

5000- 129 - (3-3.4 Aisle (New)): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new Section 3.3.4 to read as follows, renumber present Section 3.3.4 and 3.3.5 and renumber the subsequent sections accordingly:
3.3.3* Aisle. An enclosed passageway that forms part of the exit access and provides an open and unobstructed path of egress travel to another aisle, a corridor, or an exit.
A.3.3.4 Aisle. An aisle may be bounded on one side only, but not both sides, by ceiling height or higher partitions along the path of travel. Typically, aisles are bordered by seating, furniture, or less than ceiling height partitions.
SUBSTANTIATION: A definition is needed for aisle so that it can be clearly differentiated from a corridor since both provide paths of egress travel within a building. Obviously, the applicable code requirements are different and as such the code should clearly define the terms so the code can be properly applied. We have also submitted another proposal that introduces a definition for corridor to be consistent with this proposed definition for aisle.
COMMITTEE ACTION: Accept in Principle.
Add a new definition to read as follows
3.3.x* Aisle. An unenclosed path of travel that forms part of the exit access and provides an open and unobstructed path of egress travel to another aisle, a corridor, a vomitory, or an exit.
A.3.3.x Aisle. An aisle might be bounded on one side only, but not both sides, by ceiling height or higher partitions along the path of travel. Typically, aisles are bordered by seating, furniture, or less than ceiling height partitions.
COMMITTEE STATEMENT: The committee action accomplishes what the submitter requested but revises the wording for clarity.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 26
NOT RETURNED: 2 DeVries, Woodward
COMMENT ON AFFIRMATIVE:
ELVOVE: A definition for "aisles" is useful and the proposed definition is a good start. However, the proponent is encouraged to broaden his definition to include aisles between storage racks as well as coordinate his definition with current text in the Assembly occupancy chapter (e.g., melding with aisle accessway requirements).

(Log #798)
Committee: SAF-FUN

5000- 130 - (3-3.7 ANSI, ASTM): Accept
SUBMITTER: John Taecker, Underwriters Laboratories Inc.
RECOMMENDATION: Delete the following text:
~~3.3.7 ANSI. American National Standards Institute.~~
~~3.3.13 ASTM. American Society for Testing and Materials.~~
SUBSTANTIATION: Definitions should not include the acronyms of publishers or referenced documents. Chapter 2 will provide the full name of each publisher's acronym.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #416)
Committee: SAF-FUN

5000- 131 - (3-3.10 Architect, Registered): Reject
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Interior Design Alliance
RECOMMENDATION: Delete the following text:
~~3.3.10 Architect, Registered. A person licensed to practice architecture in a state, subject to all laws and limitations imposed by the state.~~
SUBSTANTIATION: This is a companion change which introduces the phrase Registered Design Professional.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The term is used in the Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #531a)
Committee: BLD-STR

5000- 132 - (3-3.11 Area, Gross Floor): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a second sentence:
"Where there are no exterior walls, the gross floor area shall include the usable space under the roof."

SUBSTANTIATION: Some occupancies, including certain agricultural facilities and performance pavilions, have no exterior walls but should be considered to have a floor area.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee agreed that there is no need for the additional second sentence for use in the structural chapters of NFPA 5000.

However, the Technical Committee recognized that this may be a Means of Egress issue and recommends that the TCC consider reassigning it to the appropriate Technical Committee.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #531b)
Committee: SAF-MEA

5000- 133 - (3-3.11 Area, Gross Floor): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a second sentence:
"Where there are no exterior walls, the gross floor area shall include the usable space under the roof."
SUBSTANTIATION: Some occupancies, including certain agricultural facilities and performance pavilions, have no exterior walls but should be considered to have a floor area.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed text is deficient in that it mentions only usable space and doesn't address partially roofed-over areas.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 24
NEGATIVE: 2
NOT RETURNED: 2 DeVries, Woodward
EXPLANATION OF NEGATIVE:
ELVOVE: Although this definition may not be perfect, it is still useful as the existing definition doesn't adequately address buildings without exterior walls.
FIXEN: Agree with committee statement on all negative votes.

(Log #532)
Committee: SAF-FIR

5000- 134 - (3-3.14 Atrium): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add to the end of this definition:
"covered malls, or other openings permitted by Chapter 9 of this Code."
SUBSTANTIATION: As written, the definition of atrium includes convenience openings and mini-atriums, which have their own requirements in Chapter 9, as well as covered malls, which are addressed in Chapter 26.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The current definition is taken from the NFPA 101 document. It is not clear how the proposed wording would satisfy the intent of the submitter. The current definition has been used in the NFPA 101 document without any problems.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #498)
Committee: SAF-FUN

5000- 135 - (3-3.19 Balcony): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete definition of Balcony.
SUBSTANTIATION: The current definition includes only a deck area that extends from a bulkhead. By my interpretation, this would not include guestroom balconies in hotels, since the exterior wall isn't a bulkhead. The term is also used to describe upper levels in assembly buildings. Therefore, the definition doesn't work.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #382)
Committee: SAF-FUN

5000- 136 - (3-3.20 Basement): Reject
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Revise text to read as follows:
3.3.20 Basement. ~~Story of a building between floor and ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling.~~ A story of a building or structure having one-half or more of its height below ground level and to which access for fire-fighting purposes is unduly restricted.
SUBSTANTIATION: The revised definition is the current definition of "Basement" used by NFPA 30, NFPA 30A, and NFPA 30B.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-138 (Log #853). The submitter's definiton complicates the issue by addressing fire-fighter access.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #533)
Committee: SAF-FUN

5000- 137 - (3-3.20 Basement):
TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this proposal be changed from 'Accept in Principle' to 'Reject'. Also, see the TCC note on 5000-138 (Log#853).
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Use the IBC definition of basement.
SUBSTANTIATION: The definition in the draft only applies if the "level" is partly above and partly below grade. What happens if it is completely below grade? What about sloping sites? Also, the Appendix note for "story" does not track with the definition of basement.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-138 (Log #853).
COMMITTEE STATEMENT: The action on the referenced proposal correlates the definitions problem addressed by the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #853)
Committee: BLD-STR

5000- 138 - (3-3.20 Basement and Story, 3.3.131 and A-3.3.131): Reject

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR requesting them to resolve the correlation issue over the use of the term 'basement'. This includes development of a workable, useable definition for this term that can be applied by all committees.

SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.

RECOMMENDATION: Revise text as follows:

3.3.20 Basement. ~~Story of a building between floor and ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling.~~ Any story that has more than 50 percent of the total area of the building's perimeter below grade. (1:2-1.16)

3.3.131* Story. Part of a building between a floor and the next floor or roof above. A mezzanine is considered a story when it exceeds 1/3 of the area of the floor immediately below. A penthouse is considered a story when it exceeds 1/3 of the roof area. A basement used for human occupancy is considered a story.

~~A.3.3.131 Story. A mezzanine is considered a story when it exceeds 1/3 of the area of the floor immediately below. A penthouse is considered a story when it exceeds 1/3 of the roof area. A basement used for human occupancy is considered a story.~~

SUBSTANTIATION: This proposal accomplished the following:

1. Adds the definition of "Basement" from NFPA 1, which does not include the confusing reference to "partly below and partly above grade" reference in the existing definition.
2. Moves requirements determining what constitutes a story from the Annex to the body of the code.
3. The revised definition makes Section 7.3.2.1 easier to apply.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The Technical Committee felt that these criteria are not appropriate for placement in the definition chapter, Chapter 3. Instead, this information, if required, should be placed in the body of the text.

Committee Proposal 5000-391 (Log #CP1007), Section 7.4.4 incorporates a similar concept on mezzanines; however, the Technical Committee agreed that the references to 'basements' and 'penthouses' were not necessary in the term 'story'. In fact, the term penthouse is not used Committee Proposal 5000-1269 (Log #CP1005), Chapter 36.

The Technical Committee agreed that the definition of basement already in the text is adequate. Additionally, the proponent's recommended text is not clear – perimeter is not an area measurement.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #98)
Committee: SAF-FUN

5000- 139 - (3-3.20 Basement and 3.3.131 Story, A.3.3.131):

TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this proposal be changed from 'Accept in Principle' to 'Reject'. Also, see the TCC note on 5000-138 (Log#853)

SUBMITTER: Catherine L. Stashak, Des Plaines Fire Dept., IL

RECOMMENDATION: Revise 3.3.20 Basement and 3.3.131* Story definitions as follow:

3.3.20 Basement. Story of a building between floor and floor immediately above ceiling, partly below and partly above grade, located so that the vertical distance from grade to the floor below is more ~~less~~ than the vertical distance from grade to the floor immediately above ~~ceiling~~.

3.3.131 ~~3.3.131*~~ Story. Part of a building meeting any of the following:

1. A portion located between the upper surface of a floor and the upper surface of the ~~next~~ floor or roof next above.
2. A mezzanine exceeding 1/3 of the area of the floor immediately below.
3. A penthouse exceeding 1/3 the roof area.
4. A basement used for human occupancy.

~~A.3.3.131 Story. A mezzanine is considered a story when it exceeds 1/3 of the area of the floor immediately below. A penthouse is considered a story when it exceeds 1/3 of the roof area. A basement used for human occupancy is considered a story.~~

SUBSTANTIATION: I serve as chair of the Life Safety Technical Committee on Educational and Day-Care Occupancies. A task group of the technical committee met and drafted the proposed revisions. The subject was not balloted through the full technical committee, so I am submitting the proposal in my name.

These definitions are needed for purposes of applying the heights and areas requirements.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-138 (Log #853).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #962)
Committee: SAF-FUN

5000- 140 - (3-3.24 Building): Reject

SUBMITTER: Kenneth E. Bush, Office of the Maryland State Fire Marshal

RECOMMENDATION: Add a new sentence to Paragraph 3.3.24 as follows: "Buildings shall be designated by separate structures or each portion of a structure which is separated from other portions by approved fire walls."

SUBSTANTIATION: This proposal seeks to identify the exact limitations to define separate buildings for the application of other requirements of this Code, including, but not limited to height and area restrictions and extent of required fire suppression systems. The design and construction of fire walls, especially with regard to structural stability, extent and continuity, and opening protectives provide for sufficient justification to permit these walls to designate separate buildings. Separate structures with exterior wall construction and distance separations which otherwise meet the requirements oft his Code should also be considered as separate buildings.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: A requirement should not be part of a definition. The subject is adequately covered in 8.3.1.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1077)
Committee: SAF-FUN

5000- 141 - (3-3.24 Building): Reject

SUBMITTER: Mark Kluver, Portland Cement Association

RECOMMENDATION: Revise 3.3.24 to read as follows:

3.3.24 Building. A structure used or intended for supporting or sheltering any use or occupancy. Where such a structure is subdivided into two or more portions by one or more fire walls, each such portion is considered a separate building for the purpose of applying this code.

SUBSTANTIATION: Fire walls have traditionally been used in the model codes and in BCMC reports to provide separate building status. Since this requirement is necessary for the implementation of several provisions in the code (e.g., types of construction, heights and areas,

automatic sprinkler thresholds) it would appear it should be a part of the "building" definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: A definition does not need such additional clarifying language. The subject is adequately covered in 8.3.1.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #926)
Committee: SAF-FUN

5000- 142 - (3-3.24.7 Building, Unsafe): Accept in Principle
SUBMITTER: George M. Lanier, Rome Fire Department
RECOMMENDATION: This refers to a definition for Unsafe Building that is not in Chapter 3. It is in 1.12.3.1.
SUBSTANTIATION: There is a need to move the definition or to reference the applicable definition location.
COMMITTEE ACTION: Accept in Principle.
Delete 3.3.24.7 as follows:
~~3.3.24.7 Building, Unsafe. See Unsafe Building.~~
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #928)
Committee: SAF-FUN

5000- 143 - (3-3.24.7 Unsafe Building): Accept in Principle
SUBMITTER: George M. Lanier, Rome Fire Department
RECOMMENDATION: This refers to a definition for Unsafe Building that is not in Chapter 3. It is in 1.12.3.1.
SUBSTANTIATION: There is a need to move the definition or to reference the applicable definition location.
COMMITTEE ACTION: Accept in Principle.
Delete 3.3.24.7 as follows:
~~3.3.24.7 Building, Unsafe. See Unsafe Building.~~
COMMITTEE STATEMENT: The committee action should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #849)
Committee: BLD-STR

5000- 144 - (3-3.26 3.3.94, 3.3.x, Building Line, Lot Line, Property Line (New)): Reject
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Add and revise the following definitions:
3.3.26 Building Line. See Lot ~~Property~~ Line.
3.3.94 Lot Line. Line dividing one lot from another, or from a street or other public space.
3.3.X Property Line. See Lot Line.
SUBSTANTIATION: Lot line is defined in 3.3.94, and appears to be used synonymously with building line and property line. Property line is not currently defined. The terms building line, lot line and property line are all used in the code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee noted that the term 'lot line' is not used currently in the NFPA 5000 draft or in any of the Technical Committee's proposals. Additionally, this is a circular definition.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #383)
Committee: SAF-MER

5000- 145 - (3-3.27 Bulk Merchandising Retail Building): Accept in Principle
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Add a new definition for Bulk Merchandising Retail Building (as follows) to 3.3.27, and renumber remaining definitions.
"A building where the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 3.7 m (12 ft) in storage height."
SUBSTANTIATION: NFPA 101 Mercantile Occupancies provides a definition for these occupancies, which should also be clarified in the building code.
COMMITTEE ACTION: Accept in Principle.
Revise 3.3.xx, Bulk Merchandising Retail Building as follows:
3.3.xx Bulk Merchandising Retail Building. A building in which the sales area includes the storage of combustible materials on pallets, in solid piles, or in racks in excess of 3.7 m (12 ft) in storage height.
COMMITTEE STATEMENT: The definition was inadvertently omitted in the original draft and should be included. The definition proposed is the same as the one which is found in the NFPA 101 document.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #752)
Committee: SAF-MEA

5000- 146 - (3-3.38 Corridor (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new Section 3.3.38 to read as follows, renumber present Section 3.3.38 as 3.3.39 and renumber the subsequent sections accordingly:
3.3.38 Corridor. An enclosed exit access component that defines and provides a path of egress travel to an exit.
SUBSTANTIATION: Since the code specifies requirements for corridors, it is necessary to provide a definition so that a corridor can be clearly differentiated from other means of egress elements such as an aisle. As a matter of fact, we have submitted another proposal which includes a new definition for aisle. It is important to distinguish the fact that a corridor truly restricts the movement of occupants n the means of egress in order to reach an exit. This creates a whole set of challenges which are significantly different from an aisle which is open to the space from which egress is being made. We believe this definition clearly conveys the intent of what a corridor is so that the code can properly regulate it. It is also consistent with at least one of the national model building codes.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's proposed definition is flawed and creates more problems than it solves.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 24
NEGATIVE: 2
NOT RETURNED: 2 DeVries, Woodward
EXPLANATION OF NEGATIVE:
ELVOVE: A definition for "corridors" is useful and the proposed definition, though not perfect, is a good start.

FIXEN: See my Explanation of Negative for Proposal 5000-133 (Log #531b).

(Log #418)
Committee: SAF-FUN

5000- 147 - (3-3.55 Engineer, Licensed): Reject
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Interior Design Alliance
RECOMMENDATION: Delete text as follows:
~~3.3.55 Engineer, Licensed. A person licensed to practice engineering in a state, subject to all laws and limitations imposed by the state.~~
SUBSTANTIATION: This is a companion change to a change which introduces the phrase Registered Design Professional.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The term is used in the Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #739)
Committee: SAF-FUN

5000- 148 - (3-3.59 Explosive (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. American Pyrotechnics Association
RECOMMENDATION: Add a new definition for "Explosive" to read as follows and designate as Section 3.3.59 and renumber present Section 3.3.59 and all subsequent sections accordingly:
3.3.59 Explosive. A chemical that causes a sudden almost instantaneous release of pressure, gas and heat when subjected to sudden, shock, pressure, or high temperatures or a material or chemical, other than a blasting agent, that is commonly used or intended to be used for the purpose of producing an explosive effect.
SUBSTANTIATION: This definition is taken directly from Section 206 of the 2000 Uniform Fire Code. We believe it is necessary in order to properly interpret and enforce the proposed requirements in the NFPA 5000 Draft. It is also necessary to clarify that term that is proposed to be used another proposal to add a new definition for "explosive materials" in order to further clarify the new definitions proposed in a separate proposal for fireworks, 1.3g and fireworks, 1.4g. In turn these are necessary in order to properly interpret and enforce a proposal that provides for specific requirements to regulate fireworks.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: A definition of Explosive is being adopted by Proposal 5000-313 (Log #CP2045). The definition adopted is that from NFPA 495 which is the NFPA preferred definition.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #736)
Committee: SAF-IND

5000- 149 - (3-3.59 Explosive Materials (New)): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. American Pyrotechnics Association
RECOMMENDATION: Add a new definition for "Explosive Materials" to read as follows and designate as Section 3.3.59 and renumber present Section 3.3.59 and all subsequent sections accordingly.
3.3.59 Explosive Materials. Explosives, blasting agents and detonators including, but not limited to, dynamite and other high explosives; slurries, emulsions and water gels; black powder and pellet powder; initiating explosives; detonators and blasting caps; safety fuses; squibs; detonating cord; igniter cord; ingiters and fireworks, 1.3G.
SUBSTANTIATION: This definition is taken directly from Section 206 of the 2000 Uniform Fire Code. We believe it is necessary in order to properly interpret and enforce the proposed requirements in the NFPA 5000 Draft. It is also necessary to further clarify the new definitions proposed in a separate proposal for fireworks, 1.3g and fireworks, 1.4g. In turn these are necessary in order to properly interpret and enforce a proposal that provides for specific requirements to regulate fireworks.
COMMITTEE ACTION: Accept in Principle.
See Committee Proposal 5000-1232 (Log #CP905) for related technical committee action.
COMMITTEE STATEMENT: The technical committee was assigned the responsibilities for developing the text associated with requirements pertaining to Chapter 33 on Hazardous Occupancies. The action taken on this committee proposal should address this item.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #312)
Committee: SAF-FIR

5000- 150 - (3-3.61 Fire Door): Accept
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Delete the current text and insert a new definition to read:
Fire Door. The door component of a fire door assembly.
SUBSTANTIATION: This is the definition of a fire door in NFPA 80. The current definition is for a fire door assembly.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #799)
Committee: SAF-FIR

5000- 151 - (3-3.61 Fire Door and Fire Door Assembly, 3.3.62): Accept
TCC NOTE: The Technical Correlating Committee (TCC) directs that public comments on this proposal be submitted in the TCC's name to BLD-MAT, BLD-SYS, SAF-FUN, SAF-MEA, SAF-FUR, SAF-BSF, SAF-AXM, SAF-END, SAF-HEA, SAF-DET, SAF-RES, SAF-BCF, SAF-MER and SAF-IND requesting that the TC review and revise, as necessary, its use of the term Fire Door as raised by Mr. Koffel's comment on affirmative.
SUBMITTER: John Taecker, Underwriters Laboratories Inc.
RECOMMENDATION: Revise text to read as follows:
3.3.61 Fire Door. ~~A door assembly rated in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies, and installed in accordance with NFPA 80, Standard for Fire Doors and Fire Windows.~~ The door component of a fire door assembly (80:1-4)
3.3.62 Fire Door Assembly. Any combination of a fire door, a frame, hardware, and other accessories that together provide a specific degree of fire protection to the opening. 80: 10-4)
SUBSTANTIATION: A "fire door" is not an assembly, but a component of an assembly. The new proposed definition for fire door is extracted from NFPA 80. The current definition in NFPA 5000 for fire door assembly is extracted from NFPA 80.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

COMMENT ON AFFIRMATIVE:
KOFFEL: While technically correct the action on this item requires coordination throughout Chapter 8 and other chapters of the Code. While 8.7.6 is entitled Fire Door Assemblies in other sections (8.7.1, 8.7.5, and 8.7.5.1 to name a few), including sections outside of Chapter 8, use the phrase "fire door" but should be referring to the entire assembly.

(Log #313)
Committee: SAF-FIR

5000- 152 - (3-3.62 Fire Door Assembly): Reject
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Add to the end of the existing sentence:
"A fire door assembly rated in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies and installed and maintained in accordance with NFPA 80, Standard for Fire Doors and Fire Windows."
SUBSTANTIATION: This takes the existing fire door definition and adds it to the end of the assembly definition with the addition of and maintained since NFPA 80 has maintenance requirements.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The introduction of this proposed text is not appropriate for this document as NFPA 1 would address the maintenance of these elements. This action is consistent with the Committee Action on Proposals 5000-151 (Log #799) and 5000-150 (Log #312).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #775)
Committee: SAF-FIR

5000- 153 - (3-3.62 Fire Door Assembly): Reject
SUBMITTER: James F. McMullen, The McMullen Company, Inc./Rep. O'Keeeffe's Inc.
RECOMMENDATION: Revise text of Section 3.3.62, Fire Door Assembly, as follows:
"Any combination of a fire door, ~~a~~ door frame, frame and glazing for side light and/or transom, hardware, and other accessories that together provide a specific degree of fire protection to the opening, to which a fire door assembly was exposed and for which it successfully met all acceptance criteria as determined in accordance with NFPA 252, Standard Methods of Fire Tests of Door Assemblies."
SUBSTANTIATION: The current definition in Section 3.3.62 does not include a test standard for fire door assemblies. NFPA 252, Standard Methods of Fire Tests of Door Assemblies. is the nationally recognized standard. This proposal adopts that standard into the definition of Fire Door Assembly. It further clarifies the definition of Fire Door Assembly.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The provision for establishing the test procedure with a definition is not appropriate. The appropriate fire test is defined within the text of Chapter 8. Related committee activity can be found in committee proposal 5000-430 (Log CP#608) and in proposal 5000-157 (Log #38).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #240)
Committee: SAF-FIR

5000- 154 - (3-3.63 Fire Resistance Rating.): Accept in Principle
SUBMITTER: Michael Gardner, Gypsum Association
RECOMMENDATION: Revise Section 3.3.63 to read as follows:
"Fire Resistance Rating. The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with the test procedures of NFPA 251, Standard Methods of Tests of Fire Endurance of Building Construction and Materials or ASTM E 119, Test Methods for Fire Tests of Building Construction and Materials."
SUBSTANTIATION: While many building materials and systems are fire-tested in accordance with the requirements of NFPA 251, it is also the case that many are fire-tested using the criteria established by the ASTM E 119 test.
Model building code material testing requirements have traditionally been written around the use of the E 119 test. While the two standards - NFPA 251 and ASTM E 119 - are generally viewed as interchangeable, without a specific reference to E 119 in NFPA 5000 one could be left with a situation where a static interpretation of an NFPA 5000 document written solely to reference the NFPA 251 test would prohibit the use of a material tested exclusively to the E 119 test.
In addition, very few building code officials are familiar with the NFPA 251 document. Most building officials, however, have a comfortable working relationship with the ASTM E 119 standard having seen it referenced in existing model code documents for many years. Not referencing ASTM E 119 would seem to lead to a situation where the NFPA 5000 document will be viewed as less user-friendly than other model code documents.
At present, NFPA 251 and ASTM E 119 contain content that is almost identical. The two standards are currently being harmonized to make their subject matter completely identical, a process that, when complete, will create two standards that are indistinguishable in content and differ only in presentation format. The process is scheduled to be completed within two years.
COMMITTEE ACTION: Accept in Principle.
Revise to read as follows:
Fire Resistance Rating. The time in minutes or hours that materials or assemblies have withstood a fire exposure as determined by the tests, or methods based on tests, prescribed by this code.
COMMITTEE STATEMENT: The definition was revised to be generic in nature so that it could recognize other acceptable methods for determining a fire resistance rating for an assembly or product without specifying it within the definition. This would also recognize the analytical methods for calculating fire resistance ratings. The revisions to 8.2 will provide the necessary actions as it relates to this proposal. Related technical committee activity can be found in Committee Proposal 5000-430 (Log #CP608).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 25
NEGATIVE: 2
NOT RETURNED: 1 Barker
EXPLANATION OF NEGATIVE:
FRANCIS: I am voting in the negative on this issue because the proponent on this item has raised a valid point. There is a slight but important difference between NFPA 251 and ASTM E119. To compel all materials to meet the NFPA 251 standard would ignore this inherent difference. These standards are in the process of being 'harmonized'. In doing so, it is believed that the difference might disappear. But even if that were so, the committee heard compelling arguments that field experience has found that where the code says "NFPA 251", no other standard is accepted. Furthermore, the committee heard compelling arguments that the edition of a given standard has been grounds for refusal in the field. Taken together, there would be a huge problem of being held to only the 1999 NFPA 251. This would have the impact of forcing thousands of products to be retested under the NFPA 251 test. The alternate tests must be included in the code text until such time as the standards themselves have been harmonized.
KLEIN: Change my vote to negative based on Mr. Francis' comment.

(Log #833)
Committee: SAF-FIR

5000- 155 - (3-3.63 Fire Resistance Rating): Accept in Principle
SUBMITTER: Howard Hooper, Underwriters Laboratories Inc.
RECOMMENDATION: Revise text as follows:
3.3.63 Fire Resistance Rating. The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with ~~the test procedures of NFPA 251, Standard methods of tests of Fire Endurance of Building Construction and Materials~~ Chapter 8.
SUBSTANTIATION: There are several different standards which are used to establish fire resistance ratings. These standards are referenced in Chapter 8.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-154 (Log #240) for related committee action.
COMMITTEE STATEMENT: The Proposal 5000-154 (Log #240) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 26
NEGATIVE: 1
NOT RETURNED: 1 Barker
EXPLANATION OF NEGATIVE:
FRANCIS: See my Explanation of Negative on Proposal 5000-154 (Log #240).

(Log #1074)
Committee: SAF-FIR

5000- 156 - (3-3.63 Fire Resistance Rating): Accept in Principle
SUBMITTER: Kuma Sumathipala, American Forest & Paper Association
RECOMMENDATION: Revise text to read as follows:
3.3.63 Fire Resistance Rating. The time, in minutes or hours, that materials or assemblies have withstood a fire exposure as established in accordance with the test procedures of NFPA 251, Standard Methods of Tests of Fire Endurance of Building Construction and materials or ASTM E119 Standard Test Method for Fire Tests of Building Construction and Materials.
SUBSTANTIATION: The two test protocols, NFPA 251, Standard Methods of Tests of Fire Endurance of Building Construction and Materials, and ASTM E119 Standard Test Method for Fire Tests of Building Construction and Materials are very similar if not identical. NFPA 251 and the predecessor to ASTM E119, ASTM C19 dates back to 1918. Referencing only NFPA 251 could make some of the existing fire endurance tests, were the testing laboratory has reference ASTM E119, obsolete.
NOTE: Corresponding changes are needed for the following statements: 8.2.7, 8.5.5, 15.4.5.7(e), 35.2.1, 47.5.22 and 47.5.2.3.
COMMITTEE ACTION: Accept in Principle.
See proposal 5000-154 (Log #240) for related committee action.
COMMITTEE STATEMENT: The proposal 5000-154 (Log #240) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 26
NEGATIVE: 1
NOT RETURNED: 1 Barker
EXPLANATION OF NEGATIVE:
FRANCIS: See my Explanation of Negative on Proposal 5000-154 (Log #240).

(Log #38)
Committee: SAF-FIR

5000- 157 - (3-3.63 Floor Fire Door Assembly (New)): Accept
SUBMITTER: Donald W. Belles, Koffel Assoc., Inc./Rep. Bilco Company
RECOMMENDATION: Add a new definition for floor fire door assembly and renumber existing 3.3.63 and subsequent paragraphs as follows:
3.3.63 Floor Fire Door Assembly. A combination of a fire door, a frame, hardware, and other accessories, installed in a horizontal plane, which together provide a specific degree of fire protection to a through opening in a fire rated floor.
SUBSTANTIATION: The proposed revision adds a new section to NFPA 5000 to regulate floor fire doors protecting openings in fire rated floors. Floor fire doors are not explicitly regulated by NFPA 5000. In the absence of specific provisions, questions arise when an opening is created through a fire rated floor to provide access to an adjacent story. Should the opening be protected by a fire door in accordance with Section 8.7.5 or should Sections 9.1 and 8.1 be followed? The provisions of Section 8.7.5 would seem to be inappropriate since the fire door is to installed horizontally in a floor system that is required to resist heat transfer. Section 8.7.5 mandates (via reference to NFPA 252 and NFPA 80) that fire doors be tested in a vertical orientation, and there is no limit on temperature rise for the unexposed surface of the doors except for stair enclosures. Section 8.4.2.6 details protection methods for a variety of types of penetrations in fire rated floor assemblies and mandates that the fire performance of floor penetrations be determined in accordance with NFPA 251 (ASTM E119). However, none of existing sections specifically addresses the use of fire doors for the protection of openings in floors.
The NFPA Fire Test Committee is currently developing a new floor fire door test standard - NFPA 288. NFPA 288 is scheduled for confirmation by the membership during the Annual Meeting 2001. Evaluation of floor fire doors in accordance with NFPA 288 would be consistent with requirements found in reference standard NFPA 80, Section 11.2.1.1 Further, the NFPA 5000 Section 8.4.2.6.2 requires wire, cable, cable trays, and the like penetrating floors to be tested in accordance with NFPA 251 or as a through penetration system in accordance with ASTM E814. Through penetration systems must resist flame and heat transfer. To be consistent with the existing provisions of the NFPA 5000, floor fire doors should be required to resist the passage of both flame and heat as determined in accordance with NFPA 288.
Floor fire doors have recently been listed by two laboratories. These fire doors are to protect through-penetrations in fire rated floors. Floor fire doors are being listed to two different criteria. In one case the door is designed to limit heat transfer to the non-fire side of the assembly, whereas in the second case the floor fire door does not limit heat transfer. Floor fire doors should be tested to the same criteria as the floor. NFPA 251 specifies the details for testing fire rated floors. According to NFPA 251, floors must remain in place supporting an applied load, preventing the spread of flames and must resist heat transfer sufficient to raise the temperature on the unexposed surface more than 250oF above ambient. In summary, floor fire doors should be evaluated against the same performance as that required for the floor.
COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #314)
Committee: SAF-FIR

5000- 158 - (3-3.64 Fire Resistive Construction): Accept in Principle
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Revise text to read as follows:
Fire Resistive Construction. A type of building construction ~~as defined~~ listed in NFPA 220, Standard on Types of Building Construction having a demonstrated ability to inhibit fire growth.
SUBSTANTIATION: NFPA 220 does not actually define types of fire resistive construction, it classifies levels of fire resistance.
COMMITTEE ACTION: Accept in Principle.
Delete the definition in total without substitution.
COMMITTEE STATEMENT: The definition was determined as not being necessary. The proposed text is not the intended application as used in 8.3.1 and therefore would not be appropriate to retain.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #534)
Committee: SAF-FIR

5000- 159 - (3-3.66 Fire Stop): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: No proposed language.
SUBSTANTIATION: Reconsider definition of fire stop. Is it intended to cover traditional fire stopping in combustible concealed spaces (often called fire blocking) as well as through and membrane penetration fire stops.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: This proposal was rejected without prejudice as there was no recommendation provided for the technical committee to consider. Related technical committee activity can be found in Committee Proposal 5000-537 (Log #CP606).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #315)
Committee: SAF-FIR

5000- 160 - (3-3.68 Fire Window): Accept in Principle
TCC NOTE: The Technical Correlating Committee (TCC) directs that the action on this proposal be supplemented so that in addition to creating the definition of "Fire Window Assembly," the definition of "Fire Window" that appeared as 3.3.68 in the draft be deleted. The submitter intended his definition to modify that of draft 3.3.68; the TC's Committee Statement advised that it is inappropriate to reference specific standards within the definition. Deletion should meet both the submitter's and TC's intent. Further, the Technical Correlating Committee (TCC) directs that public comments on this proposal be submitted in the TCC's name to BLD-MAT, BLD-STR, BLD-SYS, SAF-FUN, SAF-MEA, SAF-FUR, SAF-BSF, SAF-AXM, SAF-END, SAF-HEA, SAF-DET, SAF-RES, SAF-BCF, SAF-MER and SAF-IND requesting that the TC review and revise, as necessary, its use of the term Fire Window Assembly as raised by Mr. Koffel's comment on affirmative.
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Revise text to read as follows:
Fire Window Assembly. A window or glass block assembly having a fire rating. A window assembly is rated in accordance with NFPA 257, Standard on Fire Tests for Window and Glass Block Assemblies, and installed in accordance with NFPA 80, Standard for Fire Doors and Fire Windows.
SUBSTANTIATION: The definition now incorporates the NFPA 80 definition.
COMMITTEE ACTION: Accept in Principle.
Add the following definition:
3.3.xx Fire Window Assembly. A window or glass block assembly having a fire rating.
COMMITTEE STATEMENT: The definition correlates with the definition of NFPA 80. The remaining text which identifies the testing method and the installation standard is not appropriate for inclusion in a definition. This information is addressed in the text of Chapter 8.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker
COMMENT ON AFFIRMATIVE:
KOFFEL: As with Proposal 5000-151 (Log #799), the definition is technically correct the action requires coordination throughout Chapter 8 and other chapters of the Code.

(Log #665)
Committee: SAF-AXM

5000- 161 - (3-3.68 Fly Space): Reject
SUBMITTER: John C. Snook, Thermotex Industries, Inc.
RECOMMENDATION: Add text to read as follows:
"Fly Space is the distance from the floor of a stage to the underside of the grid system."
SUBSTANTIATION: Definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The term Fly Space is not used in the Code.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #735a)
Committee: SAF-MER

5000- 162 - (3-3.69 Fireworks, 1.3G, Fireworks, 1.4G, 3.3.70 (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. American Pyrotechnics Association
RECOMMENDATION: Add new definitions for "Fireworks, 1.3G" and "Fireworks, 1.4G" to read as follows and designate as new Sections 3.3.69 and 3.3.70 and renumber present Sections 3.3.69 and 3.3.70 and all subsequent sections accordingly.
3.3.69 Fireworks, 1.3G (also known as Display Fireworks) are fireworks devices, which are explosive materials, designed primarily to produce visible or audible effects by combustion, deflagration or detonation. Fireworks, 1.3G include, but are not limited to, firecrackers containing more than 2 grains (130 milligrams) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces that exceed the limits for classification as fireworks, 1.4G.
3.370 Fireworks, 1.4G (also known as Consumer Fireworks) are fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Firework, 1.4G, which comply with the construction, chemical composition and DOT labeling requirements for fireworks, 1.4G are not explosive materials for the purpose of this code.
SUBSTANTIATION: These proposed definitions for fireworks, 1.3G and 1.4G are taken directly from the 2000 Uniform Fire Code. They are necessary in order to properly interpret and enforce the requirements proposed for the regulations of such fireworks by other proposals we have submitted. It is essential that the different types of fireworks be differentiated from each other since fireworks, 1.4G are not considered explosive materials whereas fireworks, 1.3G are, thus, requiring the application of different fire safety criteria.
COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The terms as they are proposed are not included in the chapters that this technical committee has responsibilities for. It is the understanding that Chapter 33, Hazardous Occupancy, will provide the necessary references for these terms and their application.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
ABSTENTION: 1
EXPLANATION OF ABSTENTION:
THORNBERRY: See my Explanation of Abstention on Proposal 5000-1063 (Log #58).

(Log #735b)
Committee: SAF-IND

5000- 163 - (3-3.69 Fireworks, 1.3G, Fireworks, 1.4G, 3.3.70 (new) (New)): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc.
RECOMMENDATION: Add new definitions for "Fireworks, 1.3G" and "Fireworks, 1.4G" to read as follows and designate as new Sections 3.3.69 and 3.3.70 and renumber present Sections 3.3.69 and 3.3.70 and all subsequent sections accordingly.
3.3.69 Fireworks, 1.3G (also known as Display Fireworks) are fireworks devices, which are explosive materials, designed primarily to produce visible or audible effects by combustion, deflagration or detonation. Fireworks, 1.3G include, but are not limited to, firecrackers containing more than 2 grains (130 milligrams) of explosive composition, aerial shells containing more than 40 grams of pyrotechnic composition and other display pieces that exceed the limits for classification as fireworks, 1.4G.
3.370 Fireworks, 1.4G (also known as Consumer Fireworks) are fireworks devices containing restricted amounts of pyrotechnic composition designed primarily to produce visible or audible effects by combustion. Firework, 1.4G, which comply with the construction, chemical composition and DOT labeling requirements for fireworks, 1.4G are not explosive materials for the purpose of this code.
SUBSTANTIATION: These proposed definitions for fireworks, 1.3G and 1.4G are taken directly from the 2000 Uniform Fire Code. They are necessary in order to properly interpret and enforce the requirements proposed for the regulations of such fireworks by other proposals we have submitted. It is essential that the different types of fireworks be differentiated from each other since fireworks, 1.4G are not considered explosive materials whereas fireworks, 1.3G are, thus, requiring the application of different fire safety criteria.
COMMITTEE ACTION: Accept in Principle.
See Committee Proposal 5000-1232 (Log #CP905) for related technical committee action.
COMMITTEE STATEMENT: The technical committee was assigned the responsibilities for developing the text associated with requirements pertaining to Chapter 33 on Hazardous Occupancies. The action taken on this committee proposal should address this item.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #876a)
Committee: SAF-MER

5000- 164 - (3-3.69 Flexible Office (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new section 3.3.69 to read as follows and renumber existing Section 3.3.69 as 3.3.70:
3.3.69 Flexible Office. The interior portion of a building used for business purposes which serves a single tenant and in which various height partitions are used, allowing visual access by the occupants to large areas of ceiling throughout the space. The majority of partitions, where used are nonpermanent. Corridors serving more than one tenant, elevator shafts, stairway enclosures, shaft enclosures, mechanical rooms, and toilet rooms shall not be considered part of a flexible office.
SUBSTANTIATION: This code change focuses on the use of flexible offices since that is the major interior design configuration for which BIFMA members manufacture their office partition systems. BIFMA estimates that 240,000,000 square feet of flexible office space are successfully installed each year either in new office facilities or in the retrofitting or reoccupancy of existing buildings. They have become extremely popular in an effort to address today's business needs for maximum flexibility and the cost-effective use of available space and office furniture, while minimizing modifications to the permanent building elements. There are also significant tax advantages available to the users of flexible office space where nonpermanent partitions are installed.
This proposed new section 27.4.3, Flexible Open Plan offices, attempt to consolidate all of the appropriate building code requirements that affect the design and layout for a flexible office space. This will make the code more user friendly and easier to apply by designers and easier to review by plan checkers.
Basically, this compilation of proposed code requirements in the NFPA 5000 draft does not contain anything significantly different except for the following:
1. A requirement for a 1-hour tenant separation between flexible offices and adjacent spaces even if the office space is less than 3,000 sq. ft in area.
2. The ANSI/BIFMA x5.6 Stability Test is specified for determining the structural stability and integrity of nonpermanent partitions more than 6 feet in height based on the performance criteria of that consensus standard in lieu of the present requirement for a 5 psf lateral distributed load which, incidentally, does not apply to partitions less than 6 feet in height. This standard has been specifically developed for office furniture partition systems and is used by the industry to test and label such systems. Underwriters Laboratories Inc. Standard for Safety, UL 1288, Office Furnishing , also successfully utilizes the ANSI/BIFMA x5.6 stability test and has done so for many years in testing and listing such systems for use in flexible offices.
3. The UL 1288 standard is also referenced as the appropriate method for determining the combustibility of prefabricated nonpermanent partitions used in flexible offices. Section 18 of that standard contains very specific testing criteria for determining the flame spread classification of the composite panel assembly, as well as determining the combustibility of the plastic trim and components that go into the partitions based on the parameters established within that standard.
In summary, we believe that the 2002 edition of NFPA 5000 should contain special provisions for flexible offices in order to recognize a very common design practice being successfully used in the office environment today.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: This action is for consistency with the Committee Action on Proposal 5000-1105 (Log #876).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
ABSTENTION: 1
EXPLANATION OF ABSTENTION:
THORNBERRY: See my Explanation of Abstention on Proposal 5000-1063 (Log #58).

(Log #754)
Committee: BLD-STR

5000- 165 - (3-3.69 Floor, Low Profile Raised (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new Section 3.3.69 to read as follows, renumber present Section 3.3.69 as 3.3.70 and renumber the subsequent sections accordingly:

3.3.69 Floor, Low Profile Raised. A manufactured floor assembly system having a total height not greater than 4 in. above the structural floor slab or deck on which it is installed where the vertical space in between is intended to provide for the installation of power, voice, and data services and is not used as a plenum. Such floors are not considered part of the building structure.

SUBSTANTIATION: In another proposal which addressed the requirements fro flexible offices we are proposing to provide regulations for low profile raised floors. These floors are different from the typical raised floors one finds in computer room installations since they are very low in height and are not used as plenums. Therefore, they pose a different fire safety hazard/risk which is also different form another type of raised floor which is simply one installed directly on wood sleepers to provide a nailing surface on top of concrete, for example, to receive carpet or for accent to a building interior. Thus, this definition is necessary in order to clearly convey what these low profile raised floors are for the purpose of regulating them in this code.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The proponent for Proposal 5000-165 (Log #754) informed the Technical Committee that the text relating to this definition was rejected by the Mercantile and Business Technical Committee. Consequently, this definition is no longer required.

Note to TCC: In the future, the Technical Committee strongly recommends that definitions remain with their associated proposal. Both proposals and comments should not be separated by NFPA staff. If possible, proposals and comments should indicate if they have been passed on to other Technical Committees for action.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #609)

Committee: SAF-FUN

5000- 166 - (3-3.71 Fuel Gas): Reject

SUBMITTER: James Ranfone, American Gas Assn.

RECOMMENDATION: Revise text to read as follows:

3.3.71 Fuel Gas: Include natural gas, manufactured gas, liquefied petroleum (LP) gas in the vapor phase only, liquefied petroleum gas-air mixtures, and mixtures of these gases, plus gas-air mixtures within the flammable range, with the fuel gas or the flammable component of a mixture being a commercially distributed product.

SUBSTANTIATION: The proposed NFPA Building Code does not contain a definition for the term "fuel gas" which is used in the code. The proposed definition is taken from the Z223.1/NFPA 54, National Fuel Gas Code.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Definition not needed. The term is used only in the title of NFPA 54.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1068)

Committee: SAF-FUN

5000- 167 - (3-3.71 Fuel Gas (New)): Reject

SUBMITTER: Bruce J. Swiecicki, National Propane Gas Association

RECOMMENDATION: Add a new definition to read as follows:

3.3.71 Fuel Gas. Include natural gas, manufactured gas, liquefied petroleum (LP) gas in the vapor phase only, liquefied petroleum gas-air mixtures, and mixtures of these gases, plus gas-air mixtures within the flammable range, with the fuel gas or the flammable component of a mixture being a commercially distributed produce.

SUBSTANTIATION: The proposed NFPA Building Code does not contain a definition for the term "fuel gas" which is used in the code. The proposed definition is taken from the Z223.1/NFPA 54, National Fuel Gas Code.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Definition not needed. The term is used only in the title of NFPA 54.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #82)

Committee: SAF-IND

5000- 168 - (3-3.72.2): Reject

SUBMITTER: Charles Nelson, Fowlkes and Assoc.

RECOMMENDATION: 3.3.72.2 "Garage, Basement Parking" definition is incomplete or incorrect. See 3.3.72.4.

SUBSTANTIATION: In order to be "user friendly" the entire code format should be consistent with the IBC.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: This term is not currently used within this document and is not needed.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #83)

Committee: BLD-STR

5000- 169 - (3-3.73 Grade): Reject

SUBMITTER: Charles Nelson, Fowlkes and Assoc.

RECOMMENDATION: 3.3.73 "Grade": 10 ft is not reasonable where the property line is less than 10 ft; from the building wall or where there is a zero lot line (or a party wall) on one or more sides.

SUBSTANTIATION: In order to be "user friendly" the entire code format should be consistent with the IBC.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The Technical Committee chose to reject this proposal because it is not in proper code language. The proponent does not provide a clear recommendation or a technically sound substantiation.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #535)

Committee: SAF-FUN

5000- 170 - (3-3.75 Ground Floor): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: No proposed wording.

SUBSTANTIATION: Definition of ground floor needs to be coordinated with definition of basement. As currently worded, there are examples where a space would not classify as either a ground floor a basement. If so, what is it?

COMMITTEE ACTION: Accept in Principle.

Delete 3.3.75 definition as follows:

~~3.3.75 Ground Floor. Floor of a building located not more than 2 feet below nor more than 6 feet above grade.~~

COMMITTEE STATEMENT: The definition is not needed. The term is used only in 39.6 where the words "first or ground floor" define the term enough that it is not ambiguous.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #666)
Committee: SAF-AXM

5000- 171 - (3-3.87 Legitimate Stage): Reject
SUBMITTER: John C. Snook, Thermotex Industries, Inc.
RECOMMENDATION: Add text to read as follows:
"Legitimate Stage is a stage wherein curtains, drops, leg drops, scenery, lighting devices and other stage effects are retractable either horizontally or vertically and the available fly space exceeds 20 feet."
SUBSTANTIATION: 1. The legitimate stage does not refer to the cabaret, vaudeville, movie theater type facility. It is the stage on which "broadway" type productions require the changing of scenery, backdrops, electrical lighting, and special effects. These stages in high schools, universities and other public facilities having a fly space that exceed 20 feet with the same trappings as found in large theater productions need to be recognized as legitimate stages. Below 20 feet, full blown productions are limited in scope.
2. It is the raising of scenery/stage settings or legitimate stages which create the potential for the obstruction of the operation of sprinkler systems and adds to the fire load of readily available combustible materials.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Code will use the NFPA's preferred definition of Legitimate Stage from NFPA 101. See Committee Proposal 5000-122 (Log #CP2032).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #368)
Committee: SAF-FUN

5000- 172 - (3-3.89 Limited-Combustible Material): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. W. R. Grace & Company
RECOMMENDATION: Add a new definition designated as new Section 3.3.89 to read as follows and renumber the present Section 3.3.89 and all subsequent sections accordingly:
3.3.89 Limited-Combustible Material. A building construction material not complying with the definition of noncombustible material that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259, Standard Test Method for Potential Heat of Building Materials, and complies with (a) or (b):
(a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1/8 in. (3.2 mm) that has a flame spread index not greater than 50; and
(b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible. (220:2-1)
SUBSTANTIATION: This proposal simply extracts the definition for limited-combustible material from NFPA 220 Section 2-1 and incorporates it as a definition in the NFPA 5000, Building Code. This definition is needed since the term limit "limited-combustible material" is referenced in the description of the types of construction for example. It is also used elsewhere in the Code and needs to be defined herein.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-173 (Log #1192).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1192)
Committee: SAF-FUN

5000- 173 - (3-3.89 Limited-Combustible Material): Accept in Principle
SUBMITTER: James K. Lathrop, Koffel Assoc., Inc./Rep. Society of Plastics Industry/Fluoropolymers Division
RECOMMENDATION: Add a new definition to Section 3.3 as 3.3.89, renumbering existing 3.3.89 and subsequent definitions as follows:
3.3.89 Limited-Combustible Material. A building construction material not complying with the definition of noncombustible material that, in the form in which it is used, has a potential heat value not exceeding 3500 Btu/lb (8141 kJ/kg), where tested in accordance with NFPA 259, Standard Test Method for Potential Heat of Building Materials, and complies with (a) or (b): (a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of 1/8 in. (3.2 mm) that has a flame spread index not greater than 50; and (b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread index greater than 25 nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread index greater than 25 nor evidence of continued progressive combustion. (Materials subject to increase in combustibility or flame spread index beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible.)
SUBSTANTIATION: The terms limited combustible material are used in Chapter 7 with respect to allowable materials in certain construction types - see Sections 7.2.3.2, 7.2.3.3, 7.2.3.4, and 7.2.3.5. The term should be defined within NFPA 5000.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-79 (Log #CP2044).
COMMITTEE STATEMENT: The referenced proposal adds the definition of Limited-Combustible from NFPA 101-2000.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #893)
Committee: BLD-STR

5000- 174 - (3-3.94 Property Line, Horizontal Separation and 3.3.126): Accept
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance for Codes and Standards (MACS)
RECOMMENDATION: Revise Section 3.3.94 as follows, redesignate as section 3.3.119 (New), and renumber the present Section 3.3.119 and all of the subsequent sections accordingly:

3.3.~~94~~119 ~~Lot~~ Property Line. Line dividing one lot from another, or from a street or other public space.

Revise Section 3.3.126 as follows:

3.3.126 Separation, Horizontal. Permanent open space between a building wall and the ~~lot~~ property line or the center line of a facing street, alley or public way. When two or more buildings are located on the same lot, the horizontal separation of the wall shall be measured from an imaginary line drawn at a distance from the facing wall equal to the horizontal separation applicable for that wall.

SUBSTANTIATION: The term "lot line" is not used int he code. However, the term "property line" is used, for example, in Sections 6.3.3.1, 7.2.3.5 Exception No. 1, 35.3.8 Exception No. 5, 31, 4.5, 31.5.3, 31.5.4, 31.5.5, 52.1.1 and 52.1.3.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #537)

Committee: SAF-FUN

5000- 175 - (3-3.101 Mezzanine): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Revise definition of mezzanine to include appendix language.

SUBSTANTIATION: The appendix language appears to be mandatory.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-176 (Log #850).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #850)

Committee: SAF-FUN

5000- 176 - (3-3.101 Mezzanine / Mezzanine Floor, A.3.3.101): Accept in Principle

SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.

RECOMMENDATION: Revise text as follows:

3.3.101* Mezzanine/Mezzanine Floor. ~~Intermediate floor placed in a room or story of a building.~~ An intermediate level between the floor and the ceiling of any room or space.

~~A.3.3.101 Mezzanine/Mezzanine Floor, When the total area of a mezzanine is more than 1/3 of the total area of the room or floor, it is considered a story.~~

SUBSTANTIATION: The proposed definition of mezzanine is from NFPA 101, which more accurately references the use of the term in this Code. The annex note includes a requirement, which is not appropriate for the Annex. In addition the 1/3 area requirement is already covered in Section 7.2.3.7.1.2, so the annex note is not needed.

COMMITTEE ACTION: Accept in Principle.

Revise text as follows:

3.3.101* Mezzanine. ~~/Mezzanine Floor Intermediate floor placed in a room or story of a building.~~ An intermediate level between the floor and the ceiling of any room or space.

~~A.3.3.101 Mezzanine/Mezzanine Floor, When the total area of a mezzanine is more than 1/3 of the total area of the room or floor, it is considered a story.~~

COMMITTEE STATEMENT: The committee action does what the submitter requested, but shortens the term to "mezzanine" as used in the Code.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #536)

Committee: SAF-FUN

5000- 177 - (3-3.101 Mezzanine/Mezzanine Floor): Accept in Principle in Part

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Revise text to read:

"An intermediate floor placed in a room or story of a building, which constitutes no more than 1/3 of the area of the room or story. Delete Appendix note."

SUBSTANTIATION: The appendix note adds further mandatory language. This is not within the NFPA Style Manual.

COMMITTEE ACTION: Accept in Principle in Part.

See Proposal 5000-176 (Log #850).

COMMITTEE STATEMENT: The action on the referenced proposal deletes the annex note. The 1/3 criterion should not be part of a definition. It is adequately covered in 7.2.3.7.1.2.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #566)

Committee: BLD-MAT

5000- 178 - (3-3.104 Nominal Dimension (Metal)): Accept

SUBMITTER: Daniel M. McGee, Consulting Engineer/Rep. Metal Construction Association

RECOMMENDATION: Add the following definition:

3.3.104 Nominal Dimension (Metal). A specified dimension or weight plus or minus the specified manufacturing tolerance for the material or product.

SUBSTANTIATION: The above definition is proposed to clarify that indicated dimensions or weights recognize that accepted manufacturing tolerances either over or under the specified dimension are acceptable.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

NOT RETURNED: 1 Thomas

COMMENT ON AFFIRMATIVE:

GARDNER: To be consistent with the intent of 5000-80 (Log #1102), this definition should be placed in Chapter 43 and referenced by Chapter 3. The definition appears to be intended for use with metal products only.

(Log #495)

Committee: BLD-STR

5000- 179 - (3-3.104 Non-combustible): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Use the NFPA 101 definition for non-combustible.

SUBSTANTIATION: The definition in 101 refers to a standard for testing non-combustibility. There are a couple of problems with the proposed definition:

1. No referenced test.
2. As I read Part C, it would allow certain textile materials and foam plastics that are specifically addressed as a hazard in Chapter 10 to be considered as non-combustible. Class A flame spread is not necessarily non-combustible.

COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 5000-180 (Log #126).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #126)
Committee: BLD-STR

5000- 180 - (3-3.104 Noncombustible): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR, requesting that the definition of Noncombustible Material be revised for agreement with the definition of the same term as shown in 3.3.303 of the draft of Chapter 3 that appears at the end of this report. The draft chapter has been revised for general compliance with the NFPA Manual of Style.
SUBMITTER: Peter J. Gore Willse, Industrial Risk Insurers
RECOMMENDATION: Revise the definition of Noncombustible to conform with NFPA Glossary of Terms and NFPA 220 as follows:
Noncombustible Material. A material that, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.
SUBSTANTIATION: The definition indicated does not conform to the definitions listed in NFPA Glossary of Terms and NFPA 220.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #857)
Committee: BLD-STR

5000- 181 - (3-3.104 Noncombustible): Accept in Principle
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Replace the definition of noncombustible with the following:
3.3.104 Noncombustible. A material that, in the form in which it is used and under the conditions anticipated, does not ignite, burn, support combustion,m or release flammable vapors, when subjected to fire or heat. Materials that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 Degrees C, shall be considered noncombustible materials. (220:2-1)
SUBSTANTIATION: This replaces the existing definition of noncombustible with a definition extracted from NFPA 220.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 5000-180 (Log #126).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #889)
Committee: BLD-STR

5000- 182 - (3-3.104 Noncombustible): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance for Codes and Standards (MACS)
RECOMMENDATION: Revise text as follows:
3.3.104 Noncombustible Material. Material that ~~which~~, in the form in which it is used and under the conditions anticipated, ~~falls into one of the following groups (a), (b) or (c). Material shall not be classed as noncombustible when it is subject to increase in combustibility or flamespread rating beyond the limits established herein, through effects of age, moisture or other atmospheric condition.~~
~~(a) Materials no part of which~~ will not ignite, ~~and~~ burn, support combustion, or release flammable vapors when subjected to fire or heat.
~~(b) Materials having a structural base of noncombustible material as defined in paragraph (a), with a surfacing not over 1/8 inch thick having a flamespread rating of not over 50.~~
~~(c)~~ Materials ~~other than those described in paragraphs (a) and (b) having a flamespread rating not over 25 without evidence of continued progressive combustion, and of such composition that surfaces that would be exposed by cutting through the material in any way would not have a flamespread rating over 25 without evidence of continued progressive combustion.~~ that are reported as passing ASTM E 136, Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750°C shall not be considered noncombustible materials.
~~As used in paragraphs (a), (b) and (c), flamespread rating refers to the rating obtained when the material is tested in accordance with NFPA 255.~~
SUBSTANTIATION: This proposal simply substitutes the NFPA 220 definition for "noncombustible material" into the present definition contained in the NFPA 5000 Draft. The present definition for "noncombustible material" in the Draft is not longer used by any of the national model building codes. Since this is an NFPA code we believe that it is very important that it be consistent with one of its key reference standards NFPA 220.
COMMITTEE ACTION: Accept in Principle.
COMMITTEE STATEMENT: See Committee Action on Proposal 5000-180 (Log #126).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #384)
Committee: SAF-MER

5000- 183 - (3-3.106.10 Occupancy, Mercantile): Reject

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-MER requesting that the TC give consideration to Mr. Tabar's explanation of negative with respect to whether retail storage is within the committee's scope and action to the contrary on Proposal 5000-145 (Log #383).
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Replace proposed definition with new clarification for Mercantile Occupancy as follows:
3.3.106.10 Occupancy, Mercantile. ~~An occupancy used for the display and sale of merchandise.~~ The occupancy or use of a building or structure or that portion thereof used for the wholesale or retail display, storage, and merchandising of goods or wares.
SUBSTANTIATION: The Mercantile Occupancy definition used in NFPA 30, Flammable and Combustible Liquids Code, is more complete.
COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: It was determined that the current definition adequately addresses the application for the NFPA 5000 document. The proposed definition adds the reference to storage which is not within the scope of this chapter. Also the definition establishes a list of selling activity such as retail and warehouse which was determined not necessary. The current text maintains a generic reference for this activity.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
NEGATIVE: 1
EXPLANATION OF NEGATIVE:
TABAR: The Committee Statement that retail "storage" is "not with the scope of this chapter is a contradiction to Committee Action on Proposal 5000-145 (Log #383). In Proposal 5000-145 (Log #383), the Committee accepted proposed text which clarified that a "Bulk Merchandise Retail Building" includes "...the storage of combustible materials...[etc.]." By failing to recognize that small retailers "store" consumer products in "backstock areas" separated by one one-hour rated walls, confusion will arise in the application of the Code. "Mercantile occupancies" include as part of these operations in the "backstock storage areas". The point at which a backstock storage area becomes a "General Purpose" or other type of warehouse is a matter, which should be clarified by separate proposals, if this is the desire of the Committee. Alternatively, other NFPA codes provide further clarifications on these delineations.
The Committee Action also represents unfair treatment of small retailers by leaving open the possibility for backstock storage areas being considered as "warehousing" or industrial storage occupancies, which is not the case. For example, a hardware, automotive parts, or shoe store has long been considered to be a mercantile occupancy...not a mercantile + industrial storage occupancy.

(Log #316)
Committee: SAF-MEA

5000- 184 - (3-3.109 Panic Hardware): Accept in Principle
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Revise text to read as follows:
~~Panic~~ Exit Hardware. A door-latching assembly incorporating a device that releases the latch upon the application of a force in the direction of egress travel. Fire rated and labeled doors have fire exit hardware. Doors with no fire rating have panic hardware.
SUBSTANTIATION: The term does not clearly define the different types of builder's hardware used for latching exit doors.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-79 (Log #CP2044) by the SAF-FUN committee.
COMMITTEE STATEMENT: The referenced proposal, by the SAF-FUN committee, creates Chapter 3 on definitions. It retains the definition of "Panic Hardware" and supplements it with a definition of "Fire Exit Hardware." The two definitions, taken together, accomplish what the submitter requested.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 26
NOT RETURNED: 2 DeVries, Woodward

(Log #317)
Committee: SAF-FIR

5000- 185 - (3-3.110 Parapet): Reject
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Revise text to read as follows:
Parapet. That part of a wall entirely above the roof line. Fire rated parapets are constructed in accordance with NFPA 221.
SUBSTANTIATION: The definition serves no real purpose unless it is used to define that parapets in other than decorative or aesthetic applications are for fire resistance.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed text is a requirement and should not be incorporated into a definition. It is recognized that it is possible that this definition may not be necessary and additional review of the entire document is necessary to see how the term is applied. This will be done during the comment phase.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #497)
Committee: SAF-FUN

5000- 186 - (3-3.111 Basement): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete reference to Basement.
SUBSTANTIATION: The current definition of basement classifies it as a story. If that is retained, it need not be in this definition.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-138 (Log #853).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #756a)
Committee: BLD-STR

5000- 187 - (3-3.111.1 Partition, Nonpermanent (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new Section 3.3.111.1 to read as follows, renumber present 3.3.111.1 as 3.3.111.2 and renumber the subsequent sections accordingly.
3.3.111.1* Partition, Nonpermanent. A partition that can be moved or relocated without damaging its components parts so that it can be reused immediately without the need for repairs or replacement of component parts.
A.3.3.111.1 Partition, Nonpermanent. Nonpermanent partitions are also known as demountable, movable, or relocatable. They are typically used in flexible office spaces where the tenants desire the flexibility to reconfigure their work spaces and office layouts to meet their evolving needs for the effective and efficient use of the space. These partitions are also nonbearing.
SUBSTANTIATION: Presently, the code has no definition for nonpermanent partition nor is the term used. Instead the term temporary partition is used and can be found, for example, in Footnote 1 to Table 8.1. However, we believe the term nonpermanent better conveys the intent of the type of partitions being used that are being regulated by Footnote 1. Furthermore, we have developed another proposal which will contain detailed regulations for flexible offices which generally use these types of nonpermanent partitions and have incorporated that terminology with in that proposal. Therefore, we feel it is appropriate to include the definition in the NFPA 5000, NFPA Building Code at this time.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proponent for Proposal 5000-187 (Log #756a) informed the Technical Committee that the text relating to this definition was rejected by the Fire Protection Features Technical Committee. Consequently, this definition is no longer required.
Note to TCC: In the future, the Technical Committee strongly recommends that definitions remain with their associated proposal. Both proposals and comments should not be separated by NFPA staff. If possible, proposals and comments should indicate if they have been passed on to other Technical Committees for action.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #756b)
Committee: SAF-FIR

5000- 188 - (3-3.111.1 Partition, Nonpermanent (New)): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International
RECOMMENDATION: Add a new Section 3.3.111.1 to read as follows, renumber present 3.3.111.1 as 3.3.111.2 and renumber the subsequent sections accordingly.
3.3.111.1* Partition, Nonpermanent. A partition that can be moved or relocated without damaging its components parts so that it can be reused immediately without the need for repairs or replacement of component parts.
A.3.3.111.1 Partition, Nonpermanent. Nonpermanent partitions are also known as demountable, movable, or relocatable. They are typically used in flexible office spaces where the tenants desire the flexibility to reconfigure their work spaces and office layouts to meet their evolving needs for the effective and efficient use of the space. These partitions are also nonbearing.
SUBSTANTIATION: Presently, the code has no definition for nonpermanent partition nor is the term used. Instead the term temporary partition is used and can be found, for example, in Footnote 1 to Table 8.1. However, we believe the term nonpermanent better conveys the intent of the type of partitions being used that are being regulated by Footnote 1. Furthermore, we have developed another proposal which will contain detailed regulations for flexible offices which generally use these types of nonpermanent partitions and have incorporated that terminology with in that proposal. Therefore, we feel it is appropriate to include the definition in the NFPA 5000, NFPA Building Code at this time.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See action was taken for consistency with the action of rejection taken on proposal 5000-1105 (Log #876).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #675)
Committee: SAF-FIR

5000- 189 - (3-3.113 Penetration): Accept in Principle
SUBMITTER: Joseph B. Zicherman, IFT Inc./Fire Cause Analysis/Rep. Plastic Pipe and Fitting Association
RECOMMENDATION: Add the following new definition and renumber definitions accordingly:
3.3.113 Penetration. An opening that partially or completely traverses a fire-resistance rated assembly perpendicular to its length and width.
SUBSTANTIATION: This definition is needed to support the text of Chapter 8 related to penetrations of walls, partitions, and floor-ceiling and roof-ceiling assemblies in fire-resistive construction.
COMMITTEE ACTION: Accept in Principle.
See Committee Action on Proposal 5000-120 (Log #1174) for related committee action.
COMMITTEE STATEMENT: The Committee Action on Proposal 5000-120 (Log #1174) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #676)
Committee: SAF-FIR

5000- 190 - (3-3.114 Penetration, Membrane): Accept in Principle
SUBMITTER: Joseph B. Zicherman, IFT Inc./Fire Cause Analysis/Rep. Plastic Pipe and Fitting Association
RECOMMENDATION: Add the following new definition and renumber definitions accordingly:
3.3.114 Penetration, Membrane. An opening in a vertical or horizontal fire-resistive assembly that does not traverse the entire assembly.
SUBSTANTIATION: This definition is needed to support the text of Chapter 8 related to penetration of walls, partitions, and floor-ceiling and roof-assemblies in fire-resistive construction.
COMMITTEE ACTION: Accept in Principle.
See Committee Action on Proposal 5000-120 (Log #1174) for related committee action.
COMMITTEE STATEMENT: The Committee Action on Proposal 5000-120 (Log #1174) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #677)
Committee: SAF-FIR

5000- 191 - (3-3.115 Penetration, Through): Accept in Principle
SUBMITTER: Joseph B. Zicherman, IFT Inc./Fire Cause Analysis/Rep. Plastic Pipe and Fitting Association
RECOMMENDATION: Add the following new definition and renumber definitions accordingly:
3.3.115 Penetration, Through. An opening in a vertical or horizontal fire-resistive assembly that traverses the entire assembly.
SUBSTANTIATION: This definition is needed to support the text of Chapter 8 related to penetration of walls, partitions, and floor-ceiling and roof-assemblies in fire-resistive construction.
COMMITTEE ACTION: Accept in Principle.
See Committee Action on Proposal 5000-120 (Log #1174) for related committee action.
COMMITTEE STATEMENT: The Committee Action on Proposal 5000-120 (Log #1174) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #417)
Committee: SAF-FUN

5000- 192 - (3-3.120 Registered Design Professional (New)): Accept in Principle
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Interior Design Alliance
RECOMMENDATION: Add new text to read as follows:
3.3.120 Registered Design Professional. An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.
SUBSTANTIATION: The practice of design is regulated by statute and licensing boards in each state or jurisdiction. The boards determine who may provide what design services and what the qualifications are in terms of education, experience and examination of the various design professionals. Since many states or jurisdictions recognize professions other than architects and engineers, the NFPA Building Code should not limit who may provide what design service,

as this may be in conflict with existing regulations. Rather, the term "Registered Design Professional" should be used throughout the code to eliminate the conflicts that may occur between the NFPA Code and other regulations.

The proposed definition indicates that the individual must be properly registered or licensed. In addition to determining the qualifications for the individuals, the licensing boards also require that the individual practice within their area of expertise. If a design professional practices outside their respective area of expertise or fails to practice in accordance with recognized design practices, the licensing boards have the power to properly discipline the individual.

The proposed definition is consistent with the definition that is used throughout the family of International Codes. Several years of consideration went into the present language and the NFPA Building Code would be improved by using this previous work.

COMMITTEE ACTION: Accept in Principle.

Add new text to read as follows:

3.3.120 Registered Design Professional. An individual who is registered or licensed to practice his/her respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

COMMITTEE STATEMENT: The committee action presents an editorial revision to the definition the submitter recommended.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 15

ABSTENTION: 1

NOT RETURNED: 3 Gallagher, Groner, Tamim

EXPLANATION OF ABSTENTION:

LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #CP2046)

Committee: SAF-FUN

5000- 193 - (3-3.120 Registered Design Professional (New)): Accept

SUBMITTER: Technical Committee on Fundamentals

RECOMMENDATION: Add a definition as follows:

3.3.120 Registered Design Professional. An individual who is registered or licensed to practice his/her respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

SUBSTANTIATION: The practice of design is regulated by statute and licensing boards in each state or jurisdiction. The boards determine who may provide what design services and what the qualifications are in terms of education, experience and examination for the various design professionals. Since many states or jurisdictions recognize professions other than architects and engineers, the NFPA Building Code should not limit who may provide what design service, as this may be in conflict with existing regulations. Rather, the term "Registered Design Professional" should be used throughout the code to eliminate the conflicts that may occur between the NFPA Code and other regulations.

The proposed definition indicates that the individual must be properly registered or licensed. In addition to determining the qualifications for the individuals, the licensing boards also require that the individual practice within their area of expertise. If a design professional practices outside their respective area of expertise or fails to practice in accordance with recognized design practices, the licensing boards have the power to properly discipline the individual.

The proposed definition is consistent with the definition that is used throughout the family of International Codes. Several years of consideration went into the present language and the NFPA Building Code would be improved by using this previous work.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 15

ABSTENTION: 1

NOT RETURNED: 3 Gallagher, Groner, Tamim

EXPLANATION OF ABSTENTION:

LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #538)

Committee: BLD-STR

5000- 194 - (3-3.126 Separation, Horizontal): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Revise the end of the definition to read as follows:

"the horizontal separation shall be measured from an imaginary line drawn at a distance from the buildings so that exterior wall ratings of the buildings are in accordance with this Code."

SUBSTANTIATION: The definition currently includes the term it is defining within the definition.

COMMITTEE ACTION: Accept in Principle.

COMMITTEE STATEMENT: See Committee Action on Proposal 5000-195 (Log #890).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #890)

Committee: BLD-STR

5000- 195 - (3-3.126 Separation, Horizontal): Accept in Principle

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to BLD-STR requesting that the definition of Separation, Horizontal in the Committee Action be revised for agreement with the definition of the same term as shown in 3.3.406 in the draft of Chapter 3 that appears at the end of this report. The draft chapter has been revised for general compliance with the NFPA Manual of Style.

SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance for Codes and Standards (MACS)

RECOMMENDATION: Revise text as follows:

3.3.126 Separation, Horizontal. The width of the permanent open space as measured horizontally between a building exterior wall and the adjacent lot line or the center line of a facing street, alley or public way. Where two or more buildings are located on the same lot, the horizontal separation of the exterior wall shall be measured from an imaginary line drawn at a distance from the facing exterior wall of the adjacent building that is equal to the horizontal separation applicable for that wall based on its fire resistance rating and protection of openings.

SUBSTANTIATION: This is basically a clarification of the definition for "horizontal separation." This is necessary in order to properly interpret and enforce the requirements for exterior wall fire resistance ratings and protection of openings.

COMMITTEE ACTION: Accept in Principle.

Modify text accordingly:

3.3.126 Separation, Horizontal. The width of the permanent open space as measured horizontally between a building exterior wall and the adjacent property line or the center line of a facing street, alley or public way. Where two or more buildings are located on the same lot, the horizontal separation ~~of the exterior wall~~ shall be measured from

an imaginary line drawn at a distance from the facing exterior wall of the adjacent building that is equal to the horizontal separation applicable for that wall based on its fire resistance rating and protection of openings.

COMMITTEE STATEMENT: The Technical Committee incorporated the majority of the proponent's recommendation. They also modified text to incorporate change in terminology from 'lot line' to 'property line.' Additionally, the Technical Committee agreed that horizontal separation is a width measurement, and the exterior wall language is not needed.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #539)
Committee: SAF-FIR

5000- 196 - (3-3.127 Shaft): Reject

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Definition needs to be corrected.

SUBSTANTIATION: None provided.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: See Committee Action on Proposal 5000-197 (Log #895) for related committee action.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #895)
Committee: SAF-FIR

5000- 197 - (3-3.127 Shaft): Accept

SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance for Codes and Standards (MACS)

RECOMMENDATION: Revise text:

3.3.127 Shaft. An enclosed space extending through one or more stories and connecting vertical openings through two or more ~~in~~ successive floors of a building or through ~~or~~ floors and roof.

SUBSTANTIATION: Editorial corrections.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 27

NOT RETURNED: 1 Barker

(Log #929)
Committee: SAF-MEA

5000- 198 - (3-3.128 Special Signs): Reject

SUBMITTER: James D. Amy, Jr., Findlay, OH

RECOMMENDATION: New text:

3.3.128 Special Signs, Signs containing egress information, directional or otherwise, that assist occupants in decision-making during egress. These would include, but not be limited to, elevator signs, stair indicators, "NO EXIT" signs, and map placards provided within rooms.

Statement of Problem: No definition for "special signs" is provided although such a definition might improve the readers' understanding of how these signs are linked together, that they work together to assist occupants in safe egress.

SUBSTANTIATION: In Section 4.5.3.3 Awareness of Egress System, the Life Safety Code requires that "Every exit shall be clearly visible, or the route to reach every exist shall be conspicuously indicated. Each means of egress, in its entirety, shall be arranged or marked so that the way to a place of safety is indicated in a clear manner." Although some of these markings, such as exit signs, are far more familiar and implicitly understood by all, each of the markings falls under the umbrellas of a sign providing "egress information" and assists occupants in making their decisions about which path to use to reach an exit and successfully escape the building. As such, each marking is important and efforts must be made to ensure that all will be available for occupants to use and read under normal and emergency conditions to fulfill the requirement that the "ay to a place of safety is indicated in a clear manner." Such signs are already grouped in Section 12.10.8, Special Signs but lack a definition to help understand the reader how they are linked together. This would be corrected by the proposed new text.

It is not the intention of the submitter to imply that "special signs" is the appropriate term but it the already exiting term used in 12.10.8 of the code. Perhaps "Egress Information Signs" might be more appropriate.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The submitter's proposed definition would serve to confuse rather than clarify. It is not needed based on the action taken on Proposal 5000-701 (Log #CP104).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 25

NEGATIVE: 1

NOT RETURNED: 2 DeVries, Woodward

EXPLANATION OF NEGATIVE:

FIXEN: See my Explanation of Negative for Proposal 5000-133 (Log #531b).

(Log #169)
Committee: SAF-AXM

5000- 199 - (3-3.128 Stage): Reject

SUBMITTER: Karl G. Ruling, Entertainment Services and Technology Assn.

RECOMMENDATION: 3.3.128 Stage. Partly enclosed portion of an assembly building, designed or used for presentation of plays, demonstrations or ohter entertainment, wherein scenery, drops, lighting, or other effects may be installed or used. ~~and where the distance between the top of the opening and ceiling above the stage is more than 5 feet.~~

SUBSTANTIATION: The definition of "stage" given in section 3.3.128 is needlessly restrictive and does not seem to define some things that most people would call a stage. The definition is similar to the definition given in ANSI/NFPA 101-2000, section 3.3.191 except that in NFPA 5000 a "stage" is partially enclosed and has a ceiling over the stage at such a height that "the distance between the top of the opening and the ceiling above the stage is more than 5 feet." It is unclear then what to call a stage on which plays and musicals are presented if the distance from the top of the proscenium arch to the ceiling above the stage is 5 feet or less.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The definition that the submitter asks be revised has been superceded by the definition of Stage being added by Committee Proposal 5000-122 (Log #CP2032).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 19

(Log #410)
Committee: SAF-AXM

5000- 200 - (3-3.128 Stage): Reject

SUBMITTER: Jay C. Stone, Risk International & Associates, Inc.

RECOMMENDATION: Revise to read as follows:

"Stage (Legitimate/Regular)."

SUBSTANTIATION: Add parenthetical (Legitimate/Regular) to conform with use of wording throughout the document.

COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The definition in the draft has been superceded by the definitions being added by Committee Proposal 5000-122 (Log #CP2032).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #1161)
Committee: SAF-AXM

5000- 201 - (3-3.128 Stage, 15.4.5.3): Accept in Principle
SUBMITTER: Jerrold Gorrell, Theatre Safety Programs
RECOMMENDATION: None provided.
SUBSTANTIATION: I have been unable to locate where legitimate stage is defined.
Issue: Definition of stage types. Trying to define fire load by calling them a regular stage and legitimate stage is a severe misuse of terms.
A legitimate stage/theatre is defined by The Oxford Dictionary and Thesaurus as: constituting or related to serious drama as distinct from musical comedy, revue, etc. In other words it is a concept, not a physical facility.
Although these terms have been incorrectly/inappropriately used in the 101 Life Safety Code for some time, now is the time to correct this error and define stage type by fire load (the real issue) which relates to area, height and volume of the stage and contents. These definitions also do not deal well with thrust and other non-traditional performing space designs.
I am aware of at least one space which meets the definition of a regular stage - in fact has 0 height above the proscenium opening (or what would be called the proscenium opening) and can have a larger fire load than the 2600 seat theatre on the same complex that has a 90' grid iron and the roof is nearly 110' above the 5,000 sq. ft. stage floor.
Since this is a building code these definitions will encourage bad design. You can provide for a high fly space by making a high proscenium opening and providing a large valance just behind the opening to mask the flown pieces (scenery). A high fire load could be present, but it is still a regular stage.
This all presupposes a particular type of theatre/stage design, which while common, is only one of infinite possibilities. The way this is currently written limits design flexibility and will cause unnecessary conflict between theatre designers and AHJ's while not getting to the core of the problem.
The committee needs to find a way to deal with these issues.
COMMITTEE ACTION: Accept in Principle.
See Committee Proposal 5000-122 (Log #CP2032).
COMMITTEE STATEMENT: The referenced proposal adds definitions that should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19

(Log #852)
Committee: SAF-BSF

5000- 202 - (3-3.130 Standpipe System): Accept
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Substitute the definition of "Standpipe System" for "Standpipe" as follows:
~~3.3.130 Standpipe. The riser portion of the system piping that delivers the water supply for hose connections, and sprinklers on combined systems, vertically from floor to floor.~~
3.3.130 Standpipe System. An arrangement of piping, valves, hose connections, and allied equipment installed in a building or structure, with the hose connections located in such a manner that water can be discharged in streams or spray patterns through attached hose and nozzles, for the purpose of extinguishing a fire, thereby protecting a building or structure and its contents in addition to protecting the occupants. This is accomplished by means of connections to water supply systems or by means of pumps, tanks, and other equipment necessary to provide an adequate supply of water to the hose connections. (14:1-4.28)
SUBSTANTIATION: The existing definition of standpipe which was extracted from NFPA 14 is incomplete when used in the building code, since it refers to "the system piping" but does not identify which piping system. This may be confusing for code users not familiar with NFPA 14. The definition of Standpipe Systems that is being proposed has been extracted from NFPA 14, and better describes the Chapter 11 references to standpipes.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 21
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21

(Log #540)
Committee: SAF-FUN

5000- 203 - (3-3.136 Studio, Motion Picture): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Change title of definition to Studio, Motion Picture or Television.
SUBSTANTIATION: The definition includes television studios. The term is misleading without this change. Question: Is this term used anywhere in the Code?
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-313 (Log #CP2045).
COMMITTEE STATEMENT: The referenced proposal deletes the definition of "Studio, Motion Picture" and inserts the NFPA 140 definition of "Studio, Production."
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #519)
Committee: SAF-IND

5000- 204 - (3-3.139 Tower): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Use the NFPA 101 definition for Tower.
SUBSTANTIATION: This definition is poorly written and provides no real definition. "Having emphasis on the vertical" sounds like "Valley-Girl-Speak".
COMMITTEE ACTION: Accept.
Revise the text to read as follows:
3.3.139 Tower. An enclosed independent structure or portion of a building with elevated levels for support of equipment or occupied for observation, control, operation, signaling, or similar limited use where (1) the elevated levels are provided to allow adequate observation or line-of-sight for personnel or equipment, and (2) the levels within the tower below the observation level and equipment room for that level are not occupied.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #503)
Committee: SAF-FUN

5000- 205 - (3-3.140 Value/Valuation): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise text to read as follows:
"Estimated cost to build, alter, or replace the building in kind, based on costs as determined by this Code."
SUBSTANTIATION: Value or valuation is used in Chapter 1 for new buildings as well as existing. Therefore, the definition must include both.

COMMITTEE ACTION: Accept in Principle.

Delete the 3.3.140 definition as follows:

~~3.3.140 Value/Valuation. Estimated cost to replace the building in kind, based on current replacement costs as determined by this Code.~~

COMMITTEE STATEMENT: The defintion is not needed. The value/valuation thresholds have been deleted from Chapter 1.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP1006)

Committee: BLD-STR

5000- 206 - (3-3.141 Bearing Wall, Nonbearing Wall): Accept

SUBMITTER: Technical Committee on Structures and Construction

RECOMMENDATION: Utilize ASCE 7 definitions on Load Bearing and Non-Load Bearing Walls as follows:

Bearing Wall: Any wall meeting either of the following classifications:

1. Any metal or wood stud wall that supports more than 100 lbs/linear foot of vertical load in addition to its own weight.
2. Any concrete or masonry wall that supports more than 200 lbs/linear foot of vertical load in addition to its own weight.

Nonbearing Wall: A wall that is not a bearing wall.

SUBSTANTIATION: The Technical Committee feels that these industry accepted definitions are appropriate for use in this code.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #502)

Committee: BLD-STR

5000- 207 - (3-3.141 Wall, Bearing): Reject

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Revise text to read as follows:

Wall, Bearing. Wall supporting a ~~vertical~~ load in addition to its own weight.

SUBSTANTIATION: If a wall supports a floor or a roof, it is bearing. The current definition would not address that case.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The Technical Committee felt that this definition would reclassify too many nonbearing walls as bearing walls without suitable technical substantiation.

However, the Technical Committee agreed that the definitions for both bearing and nonbearing walls needed work. The committee is in favor of using the defintions found in ASCE 7-98. See Committee Proposal 5000-206 (Log #CP1006).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #757)

Committee: BLD-STR

5000- 208 - (3-3.141 Wall, Bearing and Wall, Nonbearing and 3.3.147): Reject

SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. BIFMA International

RECOMMENDATION: Revise text to read as follows:

3.3.141 Wall, Bearing. Walk supporting a vertical <u>building design</u> load in addition to its own weight.

3.3.147 Wall, Nonbearing. Walk supports no vertical <u>building design</u> load other than its own weight.

SUBSTANTIATION: See Section 37.4.2.7 for an example of the use of the term "design load." This proposed wording should help to minimize potentia misinterpretations about partitions used to support shelving, decorative materials, or work surfaces being classified as bearing walls when they are actually nonbearing (nonstructural) walls.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: While the definitions for both bearing and nonbearing walls need work, the Technical Committee agreed that this proposal does not really fix the problem. The committee is in favor of using the defintions found in ASCE 7-98. See Committee Proposal 5000-206 (Log #CP1006).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 21

ABSTENTION: 1

NOT RETURNED: 2 Collins, Rossberg

EXPLANATION OF ABSTENTION:

SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #318)

Committee: SAF-FIR

5000- 209 - (3-3.143 Wall, Fire): Accept

SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting

RECOMMENDATION: Apply the NFPA 221 definitions as follows:

Fire Wall. A wall separating buildings or subdividing a building to prevent the spread of fire and having a fire resistance rating and structural stability.

SUBSTANTIATION: The NFPA 221 definition is accepted and complete.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 26

NEGATIVE: 1

NOT RETURNED: 1 Barker

EXPLANATION OF NEGATIVE:

KLUVER:The definition for FIRE WALL should be revised to read as follows: "A wall separating buildings ~~or subdividing a building~~ to prevent the spread of fire and having a fire resistance rating and structural stability. The purpose of a fire wall is to subdivide a structure to create separate buildings. The phrase "or subdividing a building" may give the code user the opinion that a building can be subdivided with fire walls, but not create separate buildings for the purpose of applying the fire protective features of the code. The phrase being deleted is obviously not needed, and will be confusing.

(Log #520)

Committee: SAF-FIR

5000- 210 - (3-3.143 Wall, Fire): Accept in Principle

SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.

RECOMMENDATION: Change title to Wall, Fire Division.

SUBSTANTIATION: Section 8.3 provides requirements for Fire Division Walls. The code should be consistent.

COMMITTEE ACTION: Accept in Principle.

See Committee Action on Proposal 5000-209 (Log #318) for related committee action.

COMMITTEE STATEMENT: The Committee Action on Proposal 5000-209 (Log #318) addresses the subject of this proposal and should satisfy the intent of the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 28
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 27
NOT RETURNED: 1 Barker

(Log #504)
Committee: BLD-STR

5000- 211 - (3-3.147 Wall, Nonbearing): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise text to read as follows:
Wall, Non-bearing. Wall that supports no ~~vertical~~ load other than its weight.
SUBSTANTIATION: A wall that supports a floor or roof is a bearing wall.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee felt that this definition is too strict without suitable technical substantiation.
However, the Technical Committee agreed that the definitions for both bearing and nonbearing walls needed work. The committee is in favor of using the defintions found in ASCE 7 -98. See Committee Proposal 5000-206 (Log #CP1006).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #858)
Committee: BLD-STR

5000- 212 - (3-3.148 Wall, Panel): Accept
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Revise text as follows:
3.3.148 Wall Panel ~~Wall, Panel.~~ Nonbearing wall built between columns and piers wholly supported at each story.
SUBSTANTIATION: This is probably a simple typo, but the code does not reference the term "Panel Wall" and Chapter 25 has many references to "Wall Panels". This proposal simply removes the comma in the definition.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #567a)
Committee: BLD-MAT

5000- 213 - (3-3.149 Wall, Metal Composite Panel): Accept
SUBMITTER: Daniel M. McGee, Consulting Engineer/Rep. Metal Construction Association
RECOMMENDATION: Add the following definition:
3.3.149 Wall, Metal Composite Panel. Nonbearing wall built between columns and piers wholly supported at each story and comprised of an exterior and interior metal panel housing a foam or other insulating material.
SUBSTANTIATION: New materials and methods of construction should be recognized in the Code as well as the older traditional materials and methods.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 20
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 1 Thomas
COMMENT ON AFFIRMATIVE:
GARDNER: See my Comment on Affirmative on Proposal 5000-178 (Log #566).

(Log #567b)
Committee: BLD-STR

5000- 214 - (3-3.149 Wall, Metal Composite Panel): Reject
SUBMITTER: Daniel M. McGee, Consulting Engineer/Rep. Metal Construction Association
RECOMMENDATION: Add the following definition:
3.3.149 Wall, Metal Composite Panel. Nonbearing wall built between columns and piers wholly supported at each story and comprised of an exterior and interior metal panel housing a foam or other insulating material.
SUBSTANTIATION: New materials and methods of construction should be recognized in the Code as well as the older traditional materials and methods.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The Technical Committee rejected this proposal because it is simply not necessary to define every possible wall configuration.
Additionally, the Technical Committee noted that there was no indication of where this definition is being used in NFPA 5000.
Note to TCC: In the future, the Technical Committee strongly recommends that definitions remain with their associated proposal. Both proposals and comments should not be separated by NFPA staff. If possible, proposals and comments should indicate if they have been passed on to other Technical Committees for action.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 24
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
ABSTENTION: 1
NOT RETURNED: 2 Collins, Rossberg
EXPLANATION OF ABSTENTION:
SUTTON: See my Explanation of Abstention on Proposal 5000-24 (Log #625).

(Log #541)
Committee: SAF-FUN

5000- 215 - (3-3.150 Waterway): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Either combine the appendix note with the body of the Code, or delete the definition.
SUBSTANTIATION: Appendix notes should not contain mandatory language. If the term "waterways" is used later in this code, the definition has to include the information in the appendix note.
COMMITTEE ACTION: Accept in Principle.
Delete the 3.3.150 definition and its annex item as follow:
~~3.3.150* Waterway. Channel of water not less than 20 feet wide and navigable by small boats.~~
~~A.3.3.150 Waterway. For the purpose of determining allowable floor area but not exit arrangement, waterways are considered as streets.~~
COMMITTEE STATEMENT: See substantiation for Proposal 5000-215 (Log #541).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #856)
Committee: SAF-FUN

5000- 216 - (3-3.150 Waterway): Accept
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Delete the following definition and Annex note:
~~3.3.150* Waterway. Channel of water not less than 20 feet wide and navigable by small boats.~~
~~A.3.3.150 Waterway. For the purpose of determining allowable floor area but not exit arrangement, waterways are considered as streets.~~
SUBSTANTIATION: The term "Waterway" is not used in the code, except in the definition and corresponding Annex note. If it is desired to allow separations due to adjacent waterways to be used as a basis for increasing allowable floor areas, this should be indicated in Section 7.5, not in a totally unrelated definition, which is not likely to be located by the code user. If requirements for waterways were added to that section, then the definition would not be inappropriate.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1096)
Committee: SAF-FUN

5000- 217 - (3-3.150 Waterway and A.3.3.150): Accept
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete 3.3.150 Waterway and A.3.3.150 Waterway.
SUBSTANTIATION: No apparent use of the terminology to the building code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #855)
Committee: SAF-FUN

5000- 218 - (3-3.151 Writing): Accept
SUBMITTER: Howard Hopper, Underwriters Laboratories Inc.
RECOMMENDATION: Delete the following definition:
~~3.3.151 Writing. Includes handwriting, typewriting, printing, photo offset or any other form of reproduction in legible symbols or characters.~~
SUBSTANTIATION: The code does require certain information to be provided in writing. However, the term "Writing" is not currently defined in model building codes or NFPA 101. What constitutes an acceptable written notice should be determined by the Authority Having Jurisdiction and not be mandated in the code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #542)
Committee: SAF-FUN

5000- 219 - (3-3.153 Yard): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Revise text to read:
"Yard. An open...to the sky, on the lot on which the building is located, except where specifically provided by the Code."
SUBSTANTIATION: It appears that the "except" clause is intended to modify the location on the lot, not the requirement for openness.
COMMITTEE ACTION: Accept in Principle.
Revise 3.3.153 as follows:
3.3.153 Yard. An open, unoccupied space other than a court, unobstructed from the ground to the sky~~, except where specifically providied by the Code,~~ on the lot on which a building is situated.
COMMITTEE STATEMENT: The revised definition comes from the NFPA 101 Life Safety Code. The NFPA 101 definition is the NFPA preferred definition.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #19)
Committee: SAF-FUN

5000- 220 - (Chapters 4, 10, 12, 17, 20, 21, 22, 23, 25, 26, 27): Accept in Principle
SUBMITTER: John C. Harrington, FM Global
RECOMMENDATION: Each of these chapters includes text directly lifted out of NFPA 101. Within NFPA 101, an asterisk (*) follows much of this material indicating that explanatory material on the paragraph can be found in Annex A of NFPA 101. However, the accompanying Annex A material referred to has not been included with the NFPA 5000 Building Code for the above referenced Chapters.
SUBSTANTIATION: Referenced material within this code has not been included.
COMMITTEE ACTION: Accept in Principle.
See various committee proposals for the individual chapters.
COMMITTEE STATEMENT: The committee-generated proposal for each chapter of the Code is to include the appropriate annex text.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2054)
Committee: SAF-FUN

5000- 221 - (Chapter 4): Accept
SUBMITTER: Technical Committee on Fundamentals
RECOMMENDATION: Create a Chapter 4 General Requirements to read as follows:

Chapter 4
General

4.1 Goals and Objectives
4.2 Assumption
4.3 Building Design and Life Safety Compliance Options
4.4 Fundamental Life Safety Requirements
4.5 General Requirements
4.1* Goals and Objectives.
4.1.1* Goals. The goals of this *Code* are safety, health, building usability and public welfare.
4.1.2* Objectives. To achieve the goals stated in 4.1.1, the goals and objectives of 4.1.3 through 4.1.6 shall be satisfied.
4.1.3 Safety. The safety goal of this *Code* is intended to reduce the probability of injury or death from fire, structural failure, building use, and unwanted entry.
4.1.3.1 Safety from Fire
4.1.3.1.1* Safety from Fire Goal. The fire safety goal of this *Code* is:
(1) to provide an environment for the occupants inside or near a building that is reasonably safe from fire and similar emergencies
(2) to protect fire fighters and emergency responders
4.1.3.1.2 Safety from Fire Objectives.

4.1.3.1.2.1 Buildings shall be designed and constructed to protect the occupants, not intimate with the initial fire development, for the time needed to evacuate, relocate or defend in place.
4.1.3.1.2.2* Buildings shall be designed and constructed to provide reasonable safety for fire fighters and emergency responders during search and rescue operations.
4.1.3.1.2.3 Buildings shall be designed and constructed to reasonably protect adjacent persons and buildings from injury, death or substantial damage as a result of a fire.
4.1.3.1.2.4 Buildings shall be designed and constructed to provide reasonable access to the building for emergency responders.
4.1.3.2 Safety from Structural Failure.
4.1.3.2.1* Safety from Structural Failure Goals.
The safety from structural failure goals of this *Code* are to provide a high confidence of a low probability of structural failure resulting in local or global collapse, or creation of falling debris hazards that could threaten life under any load or combination of loads that the structure could reasonably be anticipated to experience; and to provide a high confidence that the structure will be capable of resisting regularly occurring loads and combinations of loads without significant damage or degradation.
4.1.3.2.2 Safety from Structural Failure Objectives.
4.1.3.2.2.1* Buildings shall be designed and constructed to withstand the dead weight of the building and its contents together with those live, impact, soil and hydrostatic pressure, rain, flood, snow, and ice loads specified in Chapter 37 as well as those loads due to earthquake and wind that are expected to regularly affect the building without damage or excessive deformation or deflection.
4.1.3.2.2.2* Buildings and their components shall be designed and constructed such that there is a low likelihood of failure under the extreme levels of live, earthquake, rain, flood, ice, impact, soil and hydrostatic pressure, snow and wind loading that might be anticipated to occur during the building life.
4.1.3.2.2.3 Buildings and building components shall be designed and constructed to reasonably protect pedestrians, and persons in adjacent buildings or structures, from injury or death as a result of a structural failure.
4.1.3.3 Safety During Building Use.
4.1.3.3.1* Safety During Building Use Goal. The safety during building use goal of this *Code* is to provide an environment for the occupants of the building that is reasonably safe during the normal use of the building.
4.1.3.3.2 Safety During Building Use Objectives.
4.1.3.3.2.1 Buildings shall be designed and constructed to reduce the probability of death or injury from falling during normal use.
4.1.3.3.2.2 Buildings shall be designed and constructed to provide for reasonably safe crowd movement during emergency and non-emergency conditions.
4.1.3.3.2.3 Buildings shall be designed and constructed to provide reasonable safety for occupants and workers during construction and demolition.
4.1.3.3.2.4 Buildings shall be designed and constructed to provide reasonable notification to occupants of emergency situations.
4.1.3.3.2.5 Buildings shall be designed and constructed to provide reasonable signage to identify hazards, means of egress and other building safety features.
4.1.3.3.2.6 Buildings shall be designed and constructed to provide reasonable safety from occupants coming in contact with glazing or similar frangible construction materials during normal use of the building.
4.1.3.4 Safety from Unwanted Entry.
4.1.3.4.1 Safety from Unwanted Entry Goal. The safety from unwanted entry goal of this *Code* is to provide an environment for the occupants of the building that is reasonably safe from unwanted entry during the use of the building.
4.1.3.4.2* Safety from Unwanted Entry Objective. Buildings shall be designed and constructed to provide reasonably safety for occupants from unwanted entry into the building or portion of the building.
4.1.3.5 Safety from Hazardous Materials. Facilities containing high hazard contents shall have the goal of protecting people and property from the consequences of unauthorized discharges, fires and explosions involving hazardous materials. Designs shall minimize the risk of such events and shall minimize the consequences of such events should they occur.
4.1.4 Health. The health goal of this *Code* is intended to reduce the probability of an illness or injury caused by the indoor environment, vibrations and noise, surface water, release of hazardous materials, excessive moisture, inadequate light or inadequate sanitation facilities.
4.1.4.1 Indoor Environment.
4.1.4.1.1* Indoor Environment Goal. The indoor environment goal of this *Code* is to provide an environment for occupants of the building that is reasonably safe from contaminants in the indoor environment during the normal use of the building.
4.1.4.1.2 Indoor Environment Objectives.
4.1.4.1.2.1 Buildings shall be designed and constructed to reduce the probability of levels of airborne contaminants in the indoor air that could cause illness or injury to the occupants.
4.1.4.1.2.2 Buildings shall be designed and constructed to provide reasonable levels of air, temperature and moisture to reduce the probability of illness for occupants.
4.1.4.2 Noise and Vibrations
4.1.4.2.1* Noise and Vibrations Goal. The noise and vibration goal of this *Code* is to provide an environment for the occupant that is reasonably safe from airborne and impact noise and from unacceptably high levels of vibration during the normal use of the building.
4.1.4.2.2 Noise and Vibration Objectives.
4.1.4.2.2.1* Buildings shall be designed and constructed to reduce the probability that, during the normal use of the building, occupants will not be exposed to unreasonable levels of noise originating in adjacent spaces inside or outside the building.
4.1.4.2.2.2* Buildings shall be designed and constructed to ensure that, during the normal use of the building, occupants will not be exposed to unreasonable levels of vibration originating inside or outside the building.
4.1.4.3 Surface Water Entry.
4.1.4.3.1 Surface Water Entry Goal. The surface water entry goal of this *Code* is to prevent surface water from entering or accumulating in buildings and building systems, unless they are specifically designed and constructed to accommodate surface water entry.
4.1.4.3.2* Surface Water Entry Objectives. Buildings shall be designed and constructed to reduce the probability of entry of surface water that could unreasonably affect the health and safety of occupants of the building.
4.1.4.3.2.1 Buildings and structures shall resist flotation, collapse and permanent lateral movement during the design flood.
4.1.4.3.2.2 Buildings and structures shall be constructed by methods and practices that minimize flood damages during the design flood.
4.1.4.3.2.3 Buildings and structures shall be constructed with materials resistant to flood damage below the design flood elevation.
4.1.4.3.2.4 Building systems shall be designed and/or located so as to prevent floodwaters from entering or accumulating within the components during design flood conditions.
4.1.4.4 Control of Contaminants.
4.1.4.4.1 Control of Contaminants Goal. The control of contaminants goal of this *Code* is to provide an environment for the occupants of the building that is:
(1) reasonably safe from substances that could constitute a hazard to the health of the occupants
(2) reasonably free of unwanted odors and excess moisture
4.1.4.4.2 Control of Contaminants Objective. Buildings shall be designed and constructed to reduce concentrations of contaminants, unwanted odors and excess moisture, during normal use of the building, to quantities that do not unreasonably affect the health and safety, nor irritate a substantial portion, of occupants.
4.1.4.5 Lighting.
4.1.4.5.1 Lighting Goal. The lighting goal of this *Code* is to provide an environment for the occupants of the building that offers reasonable illumination, either natural, artificial or both, to reduce the probability of an illness or injury.

4.1.4.5.2 Lighting Objectives.
4.1.4.5.2.1 Buildings shall be designed and constructed to provide natural or artificial light in all spaces of the building at reasonable levels to reduce the probability of illness or injury to occupants.
4.1.4.5.2.2 Habitable spaces in buildings shall be designed and constructed to provide reasonable levels of natural light to reduce the probability of illness or injury to occupants.
4.1.4.6 Sanitation.
4.1.4.6.1* Sanitation Goal. The sanitation goal of this *Code* is to reduce the probability of illness caused by insufficient sanitation or personal hygiene facilities.
4.1.4.6.2 Sanitation Objective. Buildings shall be designed and constructed with reasonable sanitary facilities for personal hygiene so as to reduce the probability of illness for occupants of the building.
4.1.5 Usability. The usability goal of this *Code* is intended to reduce the probability that all potential occupants of a building are unreasonably impeded in the access to or the reasonable use of a building, consistent with its normal function, and that the building is capable of functioning at the level for which it was designed.
4.1.5.1 Accessibility.
4.1.5.1.1 Accessibility Goal. The accessibility goal of this *Code* is intended to ensure that all persons, including those with physical or sensory limitations, have reasonable access to a building and the facilities it contains.
4.1.5.1.2 Accessibility Objective.
Buildings shall be designed and constructed to provide reasonable access to the building and its facilities for all persons, including those with physical or sensory limitations.
4.1.5.2 Barrier Free Use.
4.1.5.2.1 Barrier Free Use Goal. The barrier free use goal of this *Code* is intended to ensure that all persons, including those with physical or sensory limitations, will not be unreasonably impeded from circulation within a building and will have reasonable use of facilities within a building.
4.1.5.2.2 Barrier Free Use Objectives.
4.1.5.2.2.1 Buildings shall be designed and constructed to provide reasonable circulation within the building for all persons, including those with physical or sensory limitations.
4.1.5.2.2.2 Buildings shall be designed and constructed to provide reasonable use of facilities within the building for all persons, including those with physical or sensory limitations.
4.1.5.3 Function.
4.1.5.3.1* Function Goal. The function goal of this *Code* is intended to ensure that a building and its systems, features and construction, throughout its life, provide reasonable capability of operation to satisfy the other goals of this *Code*.
4.1.5.3.2* Function Objective. Buildings shall be designed and constructed to provide reasonable assurance that its systems, features and construction will be capable of performing their intended use to satisfy the objectives of this *Code*.
4.1.6* Public Welfare. The public welfare goal of this *Code* is intended to ensure that the design, construction and operation of the building is consistent with the reasonable expectations of society with respect to energy conservation, cultural heritage preservation, mission continuity and environment.
4.1.6.1 Energy Efficiency.
4.1.6.1.1 Energy Efficiency Goal. The energy efficiency goal of this *Code* is to ensure that a building, in its design, construction and operation, utilizes energy efficiently.
4.1.6.1.2 Energy Efficiency Objective. Buildings shall be designed and constructed to be reasonably efficient in the use of energy from depletable sources.
4.1.6.2 Cultural Heritage.
4.1.6.2.1 Cultural Heritage Goal. The cultural heritage goal of this *Code* is to ensure that reasonable care in design and construction is provided to preserve the original quality or character of a historic building, structure or site.
4.1.6.2.2 Cultural Heritage Objective. Buildings shall be designed and constructed to reasonably preserve the original quality or character of a heritage building, structure or site.
4.1.6.3 Mission Continuity.
4.1.6.3.1* Mission Continuity Goal. The mission continuity goal of this *Code* is to ensure that the building, in its design and construction, can reasonably continue to function for its intended purpose following the impact of fire, earthquake, flood, and other internal or external loads.
4.1.6.3.2* Mission Continuity Objective. Buildings that provide a public welfare role for a community shall be designed and constructed to provide reasonable assurance of continued function following the impact of fire, earthquake, flood, and other internal or external loads.
4.1.6.4 Environment.
4.1.6.4.1 Environment Goal. The environment goal of this *Code* is to ensure that a building, in its design and construction, does not unreasonably, negatively impact on the environment.
4.1.6.4.2* Environment Objective. Buildings shall be designed and constructed to reasonably assure that the probability of harm to the external environment surrounding the building is minimized.
4.2 Assumption.
4.2.1* Single Fire Source. The fire protection methods of this *Code* assume that there will not be multiple simultaneous fire incidents. This assumption shall not preclude the evaluation of multiple design fire scenarios as required by Section 5.5 for performance-based designs.
4.3 Building Design and Life Safety Compliance Options.
4.3.1 Options. Building design meeting the goals and objectives of Section 4.1 shall be provided in accordance with either of the following:
(1) The prescriptive-based provisions per 4.3.2
(2) The performance-based provisions per 4.3.3.
4.3.2 Prescriptive-Based Option.
4.3.2.1 A prescriptive-based building design shall be in accordance with Chapters 1 through 4 and Chapters 6 through 54 of this *Code*.
4.3.2.2 Where specific requirements contained in Chapters 15 through 54 differ from general requirements contained in Chapters 1 through 4 and Chapters 6 through 14, the requirements of Chapters 15 through 54 shall govern.
4.3.3 Performance-Based Option.
4.3.3.1 A performance-based building design shall be in accordance with Chapters 1 through 5 of this *Code*.
4.3.3.2 Prescriptive requirements shall be permitted to be used as part of the performance approach, if they, in conjunction with the performance features, meet the overall goals and objectives of this *Code*.
4.4 Fundamental Life Safety Requirements.
4.4.1 Multiple Safeguards. The design of every building or structure intended for human occupancy shall be such that reliance for property conservation and safety to life does not depend solely on any single safeguard. Additional safeguard(s) shall be provided for property conservation and life safety in case any single safeguard is ineffective due to inappropriate human actions, building failure, or system failure.
4.4.2 Appropriateness of Safeguards. Every building or structure shall be provided with means of egress and other safeguards of the kinds, numbers, locations, and capacities appropriate to the individual building or structure, with due regard to the following:
(1) Character of the occupancy
(2) Capabilities of the occupants
(3) Number of persons exposed
(4) Fire protection available
(5) Height and type of construction of the building or structure
(6) Other factors necessary to provide occupants with a reasonable degree of safety
(7) Other factors necessary to protect the building and contents from damage
4.4.3 Means of Egress.
4.4.3.1 Number of Means of Egress. Two means of egress, as a minimum, shall be provided in every building or structure, section, and area where size, occupancy, and arrangement endanger occupants attempting to use a single means of egress that is blocked by fire or smoke. The two means of egress shall be arranged to minimize the

possibility that both might be rendered impassable by the same emergency condition.
4.4.3.2 Unobstructed Egress. In every occupied building or structure, means of egress from all parts of the building shall be maintained free and unobstructed. No lock or fastening shall be permitted that prevents free escape from the inside of any building other than in health care occupancies and detention and correctional occupancies where staff are continually on duty and effective provisions are made to remove occupants in case of fire or other emergency. Means of egress shall be accessible to the extent necessary to ensure reasonable safety for occupants having impaired mobility.
4.4.3.3 Awareness of Egress System. Every exit shall be clearly visible, or the route to reach every exit shall be conspicuously indicated. Each means of egress, in its entirety, shall be arranged or marked so that the way to a place of safety is indicated in a clear manner.
4.4.3.4 Lighting. Where artificial illumination is needed in a building or structure, egress facilities shall be included in the lighting design.
4.4.4* Occupant Notification. In every building or structure of such size, arrangement, or occupancy that a fire itself might not provide adequate occupant warning, fire alarm facilities shall be provided where necessary to warn occupants of the existence of fire.
4.4.5 Vertical Openings. Every vertical opening between the floors of a building shall be suitably enclosed or protected, as necessary, to afford reasonable safety to occupants while using the means of egress and to prevent spread of fire, smoke, or fumes through vertical openings from floor to floor before occupants have entered exits.
4.4.6 System Design/Installation. Any fire protection system, building service equipment, feature of protection, or safeguard provided for life safety shall be designed, installed, and approved in accordance with applicable NFPA codes and standards.
4.4.7 Maintenance. Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be maintained unless the *Code* exempts such maintenance.
4.5 General Requirements.
4.5.1 Authority Having Jurisdiction.
4.5.1.1 The authority having jurisdiction shall determine whether the provisions of this *Code* are met.
4.5.1.2 Any requirements that are essential for the safety of building occupants and that are not specifically provided for by this *Code* shall be determined by the authority having jurisdiction.
4.5.1.3 Where it is evident that a reasonable degree of safety is provided, any requirement shall be permitted to be modified if its application would be hazardous under normal occupancy conditions in the judgment of the authority having jurisdiction.
4.5.2 Historic Buildings. The provisions of this *Code* shall be permitted to be modified by the authority having jurisdiction for buildings or structures identified and classified as historic buildings or structures where it is evident that a reasonable degree of safety and property protection is provided.
4.5.3 Provisions in Excess of Code Requirements. Nothing in this *Code* shall be construed to prohibit a better type of building construction, an additional means of egress, or an otherwise safer condition than that specified by the minimum requirements of this *Code*.
4.5.4 Conditions for Occupancy.
4.5.4.1 No new construction or existing building shall be occupied in whole or in part in violation of the provisions of this *Code* unless the following conditions exist:
(1) A plan of correction has been approved.
(2) The occupancy classification remains the same.
(3) No serious life safety hazard exists as judged by the authority having jurisdiction.
4.5.4.2 Where compliance with this *Code* is effected by means of a performance-based design, the owner shall annually certify compliance with the conditions and limitations of the design by submitting a warrant of fitness acceptable to the authority having jurisdiction. The warrant of fitness shall attest that the building features, systems, and use have been inspected and confirmed to remain consistent with design specifications outlined in the documentation required by Section 5.8 and that they continue to satisfy the goals and objectives specified in Section 4.1. *(See Chapter 5.)*
4.5.5 Construction, Repair, and Improvement Operations.
4.5.5.1* Buildings or portions of buildings shall be permitted to be occupied during construction, repair, alterations, or additions only where required means of egress and required fire protection features are in place and continuously maintained for the portion occupied or where alternative life safety measures and building protection measures acceptable to the authority having jurisdiction are in place.
4.5.5.2* In buildings under construction, adequate escape facilities shall be maintained at all times for the use of construction workers. Escape facilities shall consist of doors, walkways, stairs, ramps, fire escapes, ladders, or other approved means or devices arranged in accordance with the general principles of the *Code* insofar as they can reasonably be applied to buildings under construction.
4.5.5.3 Flammable or explosive substances or equipment for repairs or alterations shall be permitted in a building while the building is occupied if the condition of use and safeguards provided do not create any additional danger or impediment to egress beyond the normally permissible conditions in the building.
4.5.6* Changes of Occupancy.
4.5.6.1 In any building or structure, whether or not a physical alteration is needed, a change from one occupancy classification to another shall be permitted only where such a structure, building, or portion thereof conforms with the requirements of this *Code* that apply to new construction for the proposed new use, except as follows:
(a) Where, in the opinion of the AHJ, the proposed occupancy or change in use is not more hazardous than the existing use, based on life safety and fire risk, the AHJ shall be permitted to approve such change of occupancy provided compliance with the requirements of this *Code* for buildings of like occupancy or use are specifically incorporated to safeguard the life, health, and welfare of persons.
(b) Change of tenants or ownership shall not be construed to be a change of occupancy classification where the nature of use and assigned occupancy classification remain the same. When a building or part thereof has been vacant for a period of six months or more, a new certificate of occupancy shall be obtained before tenancy begins.
4.5.6.2 Where specifically permitted elsewhere in the *Code*, existing construction features shall be permitted to be continued in use in conversions.
4.5.7 Maintenance and Testing.
4.5.7.1 Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, or other feature shall thereafter be continuously maintained in accordance with applicable NFPA requirements or as directed by the authority having jurisdiction.
4.5.7.2* Existing life safety features obvious to the public, if not required by the *Code*, shall be either maintained or removed.
4.5.7.3 Equipment requiring periodic testing or operation to ensure its maintenance shall be tested or operated as specified elsewhere in this *Code* or as directed by the authority having jurisdiction.
4.5.7.4 Maintenance and testing shall be under the supervision of a responsible person who shall ensure that testing and maintenance are made at specified intervals in accordance with applicable NFPA standards or as directed by the authority having jurisdiction.

CHAPTER 4 ANNEX

A.4.1 The overall goals of this *Code* are presented in 4.1.1. These overall goals are treated in greater depth in 4.1.3 through 4.1.6. In each of these subsections, an overall goal for the subsection is defined, specific goals relating to the overall goal are presented next, and the objectives that relate to the specific goal follow. This format is intended to enhance the usability of the *Code*.
A.4.1.1 These highest level goals are intentionally general in nature. Each includes a broad spectrum of topics as shown in 4.1.3. Property protection is not included as a highest level goal; it is contained in

most of the other goals as it impacts on safety, health, building usability and public welfare.
It is important to recognize the difference between the safety and health goals. Safety is intended to indicate a need for protection against immediate or short duration hazards such as a fire, structural failure or a hazardous chemical spill. Health is intended to indicate a need for protection against longer term hazards such as the growth of molds, vibrations, noise, or contamination of air or water at sub-toxic levels, that would not cause immediate problems for building occupants but could have long term effects on the health of occupants.
Many of the aspects of goals could appear under more than one highest-level goal. For example, while protection against excessive moisture has been included under the health goal, it could also relate to the safety goal if moisture were to cause corrosion or rot of building structural elements.
A.4.1.2 The objectives apply regardless of which option a user of the *Code* may select for a design — the performance-based option or the prescriptive-based option. The objectives are stated in more specific terms than the goals and tend to be more quantitative. The goals and objectives, taken together, form the broad, general targets at which a performance-based design can take aim. Specific criteria for design follow in Chapter 5.
A.4.1.3.1.1 The term reasonably safe from fire is defined by subsequent language in this *Code*, primarily in the objectives.
A.4.1.3.1.2.2 In many cases, the other provisions of the *Code* to provide safety for occupants will satisfy this goal for protection of emergency responders.
A.4.1.3.2.1 The extent of loading a structure might experience during its life is primarily a function of its geographic location, its configuration and its intended occupancy. Even given a geographic location, configuration and occupancy, the magnitude of specific loads that will be experienced by a structure in the future is uncertain and typically needs to be estimated in terms of the probability that more severe loading might be experienced. The appropriate probability of loading to be considered under this *Code* is a function of the certainty with which this loading and structural response to this loading can be estimated, the level of performance anticipated under the loading and the consequences of failure. Safety from structural failure objectives for this *Code* are enumerated in 4.1.3.2.2. Quantification of these objectives appears in Chapter 5, where these objectives are presented in the form of tolerable levels of damage (see 5.2.3) for various design loading scenarios (see 5.5.3).
For failure that results in a gross hazard to life safety, such as global structural collapse, or collapse of large portions of a structure, a 90% or greater level of confidence should be attained that the structure will not experience this behavior. For other adverse performance that does not result in a gross hazard to life safety a 50% or greater level of confidence should be attained that the structure will be able to meet the objectives.
A.4.1.3.2.2.1 Buildings that are designed and constructed with sufficient strength and stiffness to conform to requirements of Chapters 37, 38, 39, 40, 42, 43, 44, and 46, together with all standards referenced therein, are deemed to comply with this objective. Alternative means of demonstrating compliance with this objective are described in Chapter 5. This performance applies to the building structure as well as the nonstructural components and permanent fixtures.
A.4.1.3.2.2.2 Although structural failure is not anticipated under extreme loads, potentially extensive damage to structural and nonstructural components is anticipated under extreme earthquake loads and moderate damage to cladding may occur under extreme wind loads. Buildings that are designed and constructed with sufficient strength, stiffness and ductility to conform to requirements of Chapters 37, 38, 39, 40, 42, 43, 44, and 46, together with all standards referenced therein, are deemed to comply with this objective. Alternative means of demonstrating compliance with this objective are described in Chapter 5.
A.4.1.3.3.1 The term reasonably safe during normal use is defined by subsequent language in this *Code*, primarily in the objectives. Certain requirements, such as heights of guards and stair dimensions are provided to ensure that the occupants are safe during non-emergency use of the buildings. Failure to address these features could result in falls or other injuries to occupants in their normal day-to-day activities in the building.
A.4.1.3.4.2 This objective is directed at preventing unwanted entry into buildings or spaces in which occupants normally live, such as a home, apartment or apartment building. It is not directed at commercial buildings that may require enhanced security for business purposes or at buildings, such as jails or prisons, in which occupants are being detained.
A.4.1.4.1.1 The term reasonably safe from contaminants in the indoor environment is defined by subsequent language in this *Code*, primarily in the objectives. The indoor environment includes such topics as quality of indoor air and indoor climate.
A.4.1.4.2.1 The noise and vibrations goal of this *Code* is intended to relate to levels of noise, airborne or impact, and vibrations that could cause problems to the long term health of occupants. It is not intended to completely eliminate the transmission of noise and vibrations in a building.
A.4.1.4.2.2.1 This objective is directed at preventing unreasonable noise transmission into spaces in which occupants normally live such as a home, apartment or apartment building. It is not directed at commercial, industrial or similar buildings that are normally regulated by occupational health regulations.
A.4.1.4.2.2.2 This objective is directed at preventing unreasonable vibration in spaces in which occupants normally live such as a home, apartment or apartment building. It is not directed at commercial, industrial or similar buildings that are normally regulated by occupational health regulations.
A.4.1.4.3.2 The objectives of 4.1.4.3.2 represent the basic performance requirements of the National Flood Insurance Program (NFIP). More detailed guidance for translating these objectives into practice can be found in a series of reports and technical bulletins by the Federal Emergency Management Agency (available on FEMA's web site at www.FEMA.gov). For example, guidance on flood damage resistant materials (objective 4) can be found in Technical Bulletin 2-93, Flood-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas, and in Technical Bulletin 9-99, Corrosion Protection for Metal Connectors in Coastal Areas. Other technical bulletins cover topics on flood openings, breakaway walls, free-of-obstruction requirements, floodproofing, and elevator installation in flood-prone areas.
A.4.1.4.6.1 Note that, in providing personal hygiene facilities, such as water closets and sinks, the hazard to building occupants' health can be reduced. Beyond a certain number of facilities, the hazard to health may disappear and the provision of additional facilities would improve the amenity of the occupants, such as reducing waiting times, but not necessarily have any impact on health. It is the former situation that the *Code* is addressing.
A.4.1.5.3.1 The long term function of a building, in total, is not within the scope of this goal. This goal relates, however, to the long term, continued operation and effectiveness of the building to satisfy the goals of safety, health, usability and public welfare.
A.4.1.5.3.2 This objective is intended to apply to systems, features and construction that are provided in the building for the purpose of meeting the other objectives and is not intended to apply to non-required systems, features and construction.
A.4.1.6 The reasonable expectations of society are often articulated in other legislation and regulations, or in the expressed direction of public officials.
A.4.1.6.3.1 This goal is applicable to certain buildings that have been deemed to be necessary to the continued welfare of a community.
A.4.1.6.3.2 Examples of buildings that provide a public welfare role for a community might include hospitals, fire stations, evacuation centers and electrical generating plants. Also included are buildings with significant impact of the economic viability of the community. This objective is intended to ensure that such facilities are capable of maintaining their essential services following a disaster since the community's well-being may depend on that service being available.

A.4.1.6.4.2 This objective is intended to apply to those aspects of design and construction that may impact the later operation of the building with respect to such issues as emissions from heating/cooling equipment, solid waste disposal and water run-off from the building or site.
A.4.2.1 Additional assumptions that need to be identified for a performance-based design are addressed in Chapter 5.
A.4.4.4 Fire alarms alert occupants to initiate emergency procedures, facilitate orderly conduct of fire drills, and initiate response by emergency services.
A.4.5.6 Examples of changes from one occupancy subclassification to another subclassification of the same occupancy could include a change from a Class B to a Class A mercantile occupancy. Hospitals and nursing homes are both health care occupancies and are defined separately, but they are not established as separate suboccupancies; thus, a change from one to the other does not constitute a change of occupancy subclassification.
For example, a building was used as a hospital but has been closed for four years. It is again to be used as a hospital. As long as the building was not used as another occupancy during the time it was closed, it would be considered an existing hospital.
Hotels and apartments, although both residential occupancies, are treated separately, and a change from one to the other constitutes a change of occupancy.
A.4.5.7.2 Examples of such features include automatic sprinklers, fire alarm systems, standpipes, and portable fire extinguishers. The presence of a life safety feature, such as sprinklers or fire alarm devices, creates a reasonable expectation by the public that these safety features are functional. When systems are inoperable or taken out of service but the devices remain, they present a false sense of safety. Also, before taking any life safety features out of service, extreme care needs to be exercised to ensure that the feature is not required, was not originally provided as an alternative or equivalency, or is no longer required due to other new requirements in the current *Code*. It is not intended that the entire system or protection feature be removed. Instead, components such as sprinklers, initiating devices, notification appliances, standpipe hose, and exit systems should be removed to reduce the likelihood of relying on inoperable systems or features.
SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for all the material that is to appear in a new document. This proposal makes clear the SAF-FUN committee's choice of what is to be contained in Chapter 4 on general requirements. The draft incorporates the actions taken on the proposals on Chapter 4; includes editorial changes; and reflects changes made to materials from NFPA 101 by the committee so as to be appropriate for the building code.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #543)
Committee: SAF-FUN

5000- 222 - (4-1.1): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add new language that addresses property protection and fire fighter safety.
SUBSTANTIATION: This goal does not go any further than the Life Safety Code. The intent of the Building Code is to address additional goals.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: The action on the referenced proposal (especially paragraphs 4.1.3.1.1, 4.1.3.1.2.2, 4.1.3.1.2.3, and 4.1.6.3) should meet the submitter's intent. Property protection is covered under mission continuity.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #3)
Committee: SAF-FUN

5000- 223 - (4-1.3): Accept in Principle
SUBMITTER: Southern Regional Fire Code Dev. Committee
RECOMMENDATION: Add a new 4.1.2 and renumber the remaining sections:
4.1.2* Fire Fighter Safety. An additional goal is to protect fire fighters and emergency responders during search and rescue operations.
A.4.1.2 Buildings should be constructed and protected to allow fire fighters and emergency responders to search for and rescue occupants during fire conditions. Protection should prevent structural failure during the time needed to affect rescue.
SUBSTANTIATION: This submittal is consistent with the NFPA Board of Directors press release which stated "At its March 2000 meeting, the NFPA Board of Directors voted unanimously to go forward and directed the NFPA Standards Council to establish a new project for a consensus building code at its April 2000 meeting. In addition, the Board also committed to addressing firefighter safety in the development of the code.
This proposal clarifies that building elements need to be protected so that the roof, floor and other assemblies do not collapse and injure fire fighters during rescue operations. This is especially important if a performance based design is being used.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: The action on the referenced proposal (especially paragraphs 4.1.3.1.1, 4.1.3.1.2.2 and 4.1.3.1.2.3) should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #84)
Committee: SAF-FUN

5000- 224 - (4-2.1): Accept in Principle
SUBMITTER: Charles Nelson, Fowlkes and Assoc.
RECOMMENDATION: 4.2.1 "initial building event" is not defined.
SUBSTANTIATION: In order to be "user friendly" the entire code format should be consistent with the IBC.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: The term "initial building event" is no longer used. See the referenced proposal.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #635)
Committee: SAF-FUN

5000- 225 - (4-2.2): Accept in Principle
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers
RECOMMENDATION: Divide Structural Integrity section into hazard-specific subsections. See new section below for flood objectives.
4.2.2 Structural Integrity.
4.2.2.1 Fire. Structural integrity shall be maintained for the building occupants who are not intimate with the initial fire development.

4.2.2.2* Flood Hazard Areas. New construction of buildings and structures located wholly or partly within flood hazard areas established by section 100.3.2, including substantial improvements and restoration of substantial damage shall:
(1) be designed, constructed, connected and anchored to prevent flotation, collapse or permanent lateral movement due to the action of loads during the design flood, including hydrostatic loads, buoyancy, hydrodynamic loads, impact loads, and associated wind loads,
(2) be capable of withstanding the load combinations specified in Chapter 37,
(3) be constructed by methods and practices that minimize flood damages during the design flood,
(4) be constructed with materials resistant to flood damage below the design flood elevation,
A.4.2.2.2. The objectives described in this section represent the basic performance requirements of the National Flood Insurance Program (NFIP). More detailed guidance for translating these objectives into practice can be found in a series of reports and Technical Bulletins by the Federal Emergency Management Agency (available on FEMA's web site at www.FEMA.gov). For example, guidance on flood damage resistant materials (objective 4) can be found in Technical Bulletin 2-03, Flood-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas, and in Technical Bulletin 9-99, Corrosion Protection for Metal Connectors in Coastal Areas. Other Technical Bulletins cover topics on flood openings, breakaway walls, free-of-obstruction requirements, floodproofing, and elevator installation in floodprone areas.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (basic requirements for structural integrity) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Accept in Principle.
In the Chapter 4 draft created by Proposal 5000-221 (Log #CP2054), add an annex note A.4.1.4.3.2 as follows
A.4.1.4.3.2. The objectives of 4.1.4.3.2 represent the basic performance requirements of the National Flood Insurance Program (NFIP). More detailed guidance for translating these objectives into practice can be found in a series of reports and technical bulletins by the Federal Emergency Management Agency (available on FEMA's web site at www.FEMA.gov). For example, guidance on flood damage resistant materials (objective 4) can be found in Technical Bulletin 2-93, Flood-Resistant Materials Requirements for Buildings Located in Special Flood Hazard Areas, and in Technical Bulletin 9-99, Corrosion Protection for Metal Connectors in Coastal Areas. Other technical bulletins cover topics on flood openings, breakaway walls, free-of-obstruction requirements, floodproofing, and elevator installation in floodprone areas.
COMMITTEE STATEMENT: The subject is adequately covered in 4.1.4.3 as shown in the referenced proposal. The submitter's annex text adds useful information.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #718)
Committee: SAF-FUN

5000- 226 - (4-2.2): Accept in Principle in Part
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. W.R. Grace & Company
RECOMMENDATION: Revise text to read as follows:
4.2.2 Structural Integrity. The structural integrity of the building's structural frame, bearing walls, floors and roofs shall be maintained ~~for~~ to assure that the building occupants who are not intimate with the initial fire development can safely evacuate the building; or remain in an area of refuge until rescued by emergency response personnel or until the fire has been extinguished. The structural integrity of the building's structural frame, bearing walls, floors, roofs and exterior walls shall be maintained to minimize property damage to the building, its contents, and adjacent buildings and property and to allow emergency response personnel to perform interior and exterior fire fighting operations in a manner that does not pose extraordinary risk to their safety.
SUBSTANTIATION: This proposal expands on the performance objectives established for structural integrity. Apparently, the criteria presently contained in NFPA 5000 only minimally address the life safety of the building occupants based on the criteria presently contained in NFPA 101-2000. A building code addresses more than just life safety and should include property protection and fire fighter safety as suggested by the NFPA Board of Directors. Therefore, we have proposed additional performance criteria for this section. The additional performance criteria clarifies the structural integrity issue for life safety purposes and identifies those structural elements that are key to serving that function. It also precedes for the structural integrity of other structural elements and building components for the purpose of achieving property protection and a reasonable level of fire fighter (emergency response personnel) safety.
COMMITTEE ACTION: Accept in Principle in Part.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: Fire fighter safety is covered in the referenced proposal in 4.1.3.1.1 and 4.1.3.1.2.2. The submitter has not substantiated the need for providing for interior and exterior fire fighting operations.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #636)
Committee: SAF-FUN

5000- 227 - (4-2.3): Accept in Principle
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers
RECOMMENDATION: Add section on systems effectiveness for flood hazard areas to read as follows:
4.2.3 Systems Effectiveness. Systems, features, and construction techniques utilized to achieve the goals of Section 4.1 shall be effective in mitigating the hazard or condition for which they are being used, shall be reliable, shall be maintained to the level at which they are designed to operate, and shall remain operational.
4.2.3.1 Flood Hazard Areas. New construction of building and structures located wholly or partly within flood hazard areas established by Section 100.3.2, including substantial improvements and restoration of substantial damage, shall be constructed with fire protection, electrical, heating, ventilation, plumbing and air conditioning equipment, duct work and other service facilities that are designed and/or located so as to prevent flood waters from entering or accumulating within the components during design flood conditions.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-221 (Log #CP2054).
COMMITTEE STATEMENT: The action on the referenced proposal, especially that in 4.1.4.3.2.4, should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #544)
Committee: SAF-FUN

5000- 228 - (4-3.1): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: This section needs to be expanded to meet the expectations of a Building Code. That includes protection from wind, earthquakes, and other non-fire events.
SUBSTANTIATION: None.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter did not provide proposed language. However, the expansion of 4.2.1 is not needed because the combination of loads is addressed in 4.1.3.2.2.1 and doesn't need to be made an explicit assumption. The only explicit assumption identified by the committee is the single fire source. The annex text associated with 4.2.1 refers the user to Chapter 5 for treating all assumptions that are specific to a given design.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #719)
Committee: SAF-FUN

5000- 229 - (4-3.1): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. W R Grace & Company
RECOMMENDATION: Revise text to read as follows:
4.3.1* Single Fire Source. The protection methods of this code assume ~~a single~~ that there will not be multiple simultaneous fire incidents ~~source~~. This assumption shall not preclude the evaluation of multiple design fire scenarios as required by Section 5.5.
SUBSTANTIATION: The purpose of this proposal is to further clarify the intent of Section 4.3.1 regarding designing fire protection methods for a single fire source. We believe this section intends that the protection methods specified in this code are only attempting to mitigate the effects of a single fire occurrence at any given time during the life of the building. The real issue seems to be one of having to indicate that simultaneous fires such as those caused by arsonists are not contemplated in this code. We further clarify this concept by indicating that multiple design fire scenarios are still to be considered in a performance based design as specified in Section 5.5.
COMMITTEE ACTION: Accept in Principle.
Revise what is now 4.2.1 [based on Proposal 5000-221 (Log #CP2054)] as follows:
4.2.1* Single Fire Source. The fire protection methods of this Code assume that there will not be multiple simultaneous fire incidents. This assumption shall not preclude the evaluation of multiple design fire scenarios as required by Section 5.5 for performance-based designs.
COMMITTEE STATEMENT: The committee action adopts the submitter's text with additional editorial clarification.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #545)
Committee: SAF-FUN

5000- 230 - (4-4.3): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a sentence:
"Prescriptive requirements may be used as part of the performance approach, if they, in conjunction with the performance features meet the overall goals and objectives of this Code."
SUBSTANTIATION: If a designer chooses to use a Peformance approach, that does not preclude the use of some prescriptive features. It is incumbent upon the designer to indicate and document how these features work together.
COMMITTEE ACTION: Accept in Principle.
Add a sentence to what is now 4.3.3 [based on Proposal 5000-221 (Log #CP2054)] as follows:
4.3.3 Performance-based Option.
4.3.3.1 A performance-based building design shall be in accordance with Chapters 1 through 5 of the Code.
4.3.3.2 Prescriptive requirements shall be permitted to be used as part of the performance approach, if they, in conjunction with the performance features, meet the overall goals and objectives of this Code.
COMMITTEE STATEMENT: The committee action adopts the submitter's text with additional formatting per the Manual of Style.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #568)
Committee: SAF-FUN

5000- 231 - (4-5.1): Reject
SUBMITTER: Daniel M. McGee, Consulting Engineer/Rep. Metal Construction Association
RECOMMENDATION: Delete Section 4.5.1 Multiple Safeguards.
SUBSTANTIATION: The wording of Section 4.5.1 is such that it's misinterpretation could seriously impact building design. The statement, "not depend on and single safeguard." is vague. Does it preclude having only passive fire protection, or only automatic fire sprinklers? Are single fastener connections prohibited? Lawyers may make such interpretations.
Adequate provisions against progressive collapse or other hazards are believed to exist in the code or the referenced standards.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject language has been in NFPA 101 for decades without users experiencing problems.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #546)
Committee: SAF-FUN

5000- 232 - (4-5.3.1): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a reference to Chapter 12.
SUBSTANTIATION: As written, this section would require two means of egress from all spaces, regardless of occupant load.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Paragraph 4.4.3.1 [based on the numbering in Proposal 5000-221 (Log #CP2054)] does not require two means of egress for all buildings. The additional means of egress is required only where size, arrangement, etc. necessitate it.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1097)
Committee: SAF-FUN

5000- 233 - (4-5.3.1): Reject
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete section 4.5.3.1 Number of Means of Egress:
SUBSTANTIATION: This section appears to prohibit any building or space to a minimum of two means of egress. There are certain types of occupancies and buildings where a single means of egress are permitted.

COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Paragraph 4.4.3.1 [based on the numbering in Proposal 5000-221 (Log #CP2054)] does not require two means of egress for all buildings. The additional means of egress is required only where size, arrangement, etc. necessitate it.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #319)
Committee: SAF-FUN

5000- 234 - (4-5.3.3): Reject
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Change the subsection title to read:
"~~Awareness of Egress System~~ Egress Access."
SUBSTANTIATION: The term Awareness of Egress System is a foreign term. It appears all the body of the subsection is taken from NFPA 101-7.10.1.4 that addresses Egress Access.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The current title accurately reflects the subject of the paragraph. "Egress access" is not the subject, "awareness" is the subject.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #737)
Committee: SAF-FUN

5000- 235 - (4-5.5): Accept in Part
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance For Codes and Standards (MCAS)
RECOMMENDATION: Revise text to read as follows:
4.5.5 Vertical Openings. Every vertical opening ~~between the~~ through floors of a building shall be suitably enclosed or protected, as necessary, to afford reasonable safety to occupants while using the means of egress and to prevent spread of fire, smoke, or fumes through vertical openings from ~~floor~~ story to ~~floor~~ story before occupants have ~~entered exits~~ evacuated the building, to minimize property damage in stories beyond the story of fire origin, and to provide suitable staging areas and means for emergency response personnel to gain access to the fire for fire fighting purposes.
SUBSTANTIATION: This proposal accomplishes two things. First, it extends the performance threshold for the protection of vertical openings for the purpose of protecting building occupants from the time it would take then to enter an exit to the time it would take them to evacuate the building. We believe this is an important factor which needs to be incorporated into the NFPA 5000 Building Code to provide an adequate factor of safety for the evacuating occupants. Since and exit stairway also creates a vertical opening, it seems logical that the protection for that enclosure should be adequate to prevent smoke and fire from entering that enclosure until the occupants have evacuated the building. We are also especially concerned about the fire and hot gases that may reach multiple stories beyond the story of fire origin and expose the opening protectives into the exit stairways while the occupants remote from the fire floor are still trying to evacuate the building. This proposal would minimize that situation which greatly enhances the level of life safety provided for the building occupants.
Second, the concept of property protection is introduced to follow through with the NFPA Board of Directors support of that issue in their substantiation for promulgating NFPA 5000. While accomplishing property damage and the additional protection for the evacuating occupants, there will also be a degree of fire fighter safety provided for multistory buildings where fire fighters utilize the exit stair enclosures to gain access to the story of fire origin.
COMMITTEE ACTION: Accept in Part.
Revise what is now 4.4.5 [based on Proposal 5000-221 (Log #CP2054)] as follows:
4.4.5 Vertical Openings. Every vertical opening through floors of a building shall be suitably enclosed or protected, as necessary, to afford reasonable safety to occupants while using the means of egress and to prevent spread of fire, smoke, or fumes through vertical openings from story to story before occupants have evacuated the building.
COMMITTEE STATEMENT: The submitter's changes to the existing text add clarity. The submitter's text addressing property protection is not needed because the title of Section 4.4 is Fundamental Life Safety Requirements. Section 4.4 does not address property protection.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #151)
Committee: SAF-FUN

5000- 236 - (4-5.8 (New)): Reject
SUBMITTER: Martin H. Reiss, The RJA Group, Inc.
RECOMMENDATION: Add new text as follows:
"Special inspections and testing shall verify the operation of the fire protection design in its final condition for acceptance by the Authority Having Jurisdiction. The design documents shall provide the procedures and methods to be used and items subject to such inspections and tests. The special inspector shall submit and inspection and test report to the building official and registered design professional in charge."
SUBSTANTIATION: There is a critical need for inspections and testing of fire protection systems to verify the proper operation in their final installed condition. This is similar to the requirement in Sections 1704 and 909 of the IBC 2000.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject is adequately covered by 1.8.7.6.2.3. See Proposal 5000-1 (Log #CP2047).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #493)
Committee: SAF-FUN

5000- 237 - (4-5.8 (New)): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Add a new section:
"In high-rise buildings, covered mall buildings, buildings containing atria, and buildings with smoke control systems, special inspections and testing shall verify the operation of the fire protection design in its final condition for acceptance by the Authority Having Jurisdiction. The design documents shall provide the procedures and methods to be used and items subject to such inspections and tests. The special inspector shall submit an inspection and test report to the building official and registered design professional in charge."
SUBSTANTIATION: High-rise, malls, atriums, and other special buildings contain complicated fire protection systems which must be thoroughly tested individually, as well as together to confirm coordination. This is best done by people who are specialists in these fire protection systems, who can spend the time to adequately test (and retest) the systems. This will remove some burden from the local authorities. See related changes to Chapter 3 (definitions) and Section 11.8.
COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: The subject is adequately covered by 1.8.7.6.2.3. See Proposal 5000-1 (Log #CP2047).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #637)
Committee: SAF-FUN

5000- 238 - (4-6.2): Reject
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers
RECOMMENDATION: Add text to read as follows:
4.6.2* Historic Buildings. The provisions of this Code shall be permitted to be modified by the authority having jurisdiction for buildings or structures identified and classified as historic buildings or structures, where it is evident that a reasonable degree of safety and property protection is provided.
Exception: For historic buildings or structures located wholly or partly in flood hazard areas established by Section 100.3.2, modifications shall not be permitted where such modifications will preclude the structure's continued designation as a historic structure.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's language seems to say that changes are not permitted to accommodate the flood hazard if the building is historic. This is not correct.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #547)
Committee: SAF-FUN

5000- 239 - (4-6.3): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete or relocate this section to Chapter 54.
SUBSTANTIATION: This section will get lost in Chapter 4.
COMMITTEE ACTION: Accept in Principle.
Delete 4.6.3 which addresses "time allowed for compliance."
COMMITTEE STATEMENT: The text in draft paragraph 4.6.3 is an issue that belongs in a true exisitng buildings code (i.e., a maintenance code that applies even if there is no alteration of the existing building). NFPA 5000 will address new construction in its myriad chapters, and existing building alterations in Chapter 54, but will not have applicability to existing buildings that are not being altered. As such, the paragraph has been deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #548)
Committee: SAF-FUN

5000- 240 - (4-6.4): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete this section.
SUBSTANTIATION: If Chapter 54 is intended to apply, the base chapters should not eliminate its use. Also, the title of this section does not indicate its content.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The text in draft paragraph 4.6.4 is an issue that belongs in a true exisitng buildings code (i.e., a maintenance code that applies even if there is no alteration of the existing building). NFPA 5000 will address new construction in its myriad chapters, and existing building alterations in Chapter 54, but will not have applicability to existing buildings that are not being altered. As such, the paragraph has been deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1098)
Committee: SAF-FUN

5000- 241 - (4-6.4): Accept
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete Section 4.6.4 Referenced Publications.
SUBSTANTIATION: Existing building requirement are not in the scope of this code.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The text in draft paragraph 4.6.4 is an issue that belongs in a true exisitng buildings code (i.e., a maintenance code that applies even if there is no alteration of the existing building. NFPA 5000 will address new construction in its myriad chapters, and existing building alterations in Chapter 54, but will not have applicability to existing buildings that are not being altered. As such, the paragraph has been deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #638)
Committee: SAF-FUN

5000- 242 - (4-6.5): Reject
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. FEMA, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
4.6.5 Additions. Additions shall conform to the provisions for new construction, except as otherwise provided in Section 1.12.1 of this Code.
SUBSTANTIATION: Makes code provisions consistent with those of Section 1.12.1.1.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed text is not needed. The percentage of value triggers have been deleted from Chapter 1.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #549)
Committee: SAF-FUN

5000- 243 - (4-6.5 and 4.6.6): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete these sections.
SUBSTANTIATION: Covered by Section 1.12.1.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The committee action does what the submitter requested, but not for the reason that the submitter stated. The subject is covered in Chapter 54, not in 1.1.2.1.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #639)
Committee: SAF-FUN

5000- 244 - (4-6.6): Reject
TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that the subject of this proposal be revisited now that a draft of Chapter 100 Flood Resistant Design and Construction is available via Proposal 5000-1421 (Log #623).
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. FEMA, Mitigation Directorate
RECOMMENDATION: Revise text to read as follows:
4.6.6 Modernization or Renovation. Any alteration or...than those required for existing buildings.
Exception: For buildings or structures located in flood hazard areas established by Section 100.3.2, alterations or installation of new equipment constituting substantial improvement or restoration of substantial damage shall comply with the requirements of Section 1.12.1.1.1.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (administrative requirements) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject paragraph has been deleted via the action on Proposal 5000-243 (Log #549).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #550)
Committee: SAF-FUN

5000- 245 - (4-6.10): Accept
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Delete.
SUBSTANTIATION: Covered by Chapter 1.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The committee action does what the submitter requested, but not for the reason that the submitter stated. The subject is covered in Chapter 54, not in Chapter 1.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1099)
Committee: SAF-FUN

5000- 246 - (4-6.1.1): Reject
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete: "Whenever or" from the text.
SUBSTANTIATION: "Whenever" is a period of time, not a location and therefore should not be included in the building code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Some things are time specific, not just location specific.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2055)
Committee: SAF-FUN

5000- 247 - (Chapter 5): Accept
SUBMITTER: Technical Committee on Fundamentals
RECOMMENDATION: Create a Chapter 5 Performance-based Design Option to read as follows:

CHAPTER 5 PERFORMANCE-BASED OPTION

5.1* GENRAL REQUIREMENTS.
5.1.1 Application. The requirements of this chapter shall apply to buildings designed to the performance-based option permitted by Section 4.3.
5.1.2 Goals and Objectives. The performance-based design shall meet the goals and objectives of this Code in accordance with Section 4.1.
5.1.3* Independent Review. The authority having jurisdiction shall be permitted to require an approved, independent third-party to review the proposed design and provide an evaluation of the design to the authority having jurisdiction at the expense of the owner.
5.1.4 Sources of Data. Data sources shall be identified and documented for each input data requirement that must be met using a source other than a design scenario, an assumption, or a building design specification. The degree of conservatism reflected in such data shall be specified, and a justification for the source shall be provided.
5.1.5 Final Determination. The authority having jurisdiction shall make the final determination as to whether the performance objectives have been met.
5.1.6* Maintenance of Design Features. The design features required for the building to continue to meet the performance goals and objectives of this Code shall be maintained for the life of the building. Such performance goals and objectives shall include complying with all documented assumptions and design specifications. Any variations shall require the approval of the authority having jurisdiction prior to the actual change.
5.1.7 Special Definitions. (See Section 3.3.)
5.2 PERFORMANCE CRITERIA.
5.2.1 General. To achieve the goals and objectives of Section 4.1, a building design shall meet the performance criteria in Section 5.2.
5.2.2* Safety from Fire.
5.2.2.1 Equipment and fixtures in a building shall be designed and installed to reasonably prevent the ignition of construction materials and building contents.
5.2.2.2* Buildings shall be designed and constructed to reasonably prevent the spread of fire beyond the compartment of fire origin.
5.2.2.3 Buildings shall be designed and constructed to reasonably prevent structural failure under fire conditions for sufficient time to protect the occupants.
5.2.2.4 Means shall be provided to evacuate, relocate or defend in place occupants of buildings for sufficient time so that they are not exposed to instantaneous or cumulative untenable conditions from smoke, heat or flames.
5.2.2.5* Buildings shall be designed and constructed to reasonably prevent structural failure under fire conditions for sufficient time to enable fire fighters and emergency responders to conduct search and rescue operations.
5.2.2.6* Buildings shall be designed and constructed to reasonably prevent fire spread to adjacent buildings and structures for sufficient time for emergency responders to arrive on site and establish fire suppression operations.
5.2.2.7 Access shall be provided to enable fire apparatus to reach the principal building entrance for fire department use and to the fire emergency equipment provided for the building.
5.2.3 Safety from Structural Failure.
5.2.3.1* General. Buildings shall be designed and constructed to withstand combinations of dead, live, impact, soil and hydrostatic pressure, rain, flood, wind, ice, snow, and earthquake loads at the serviceability performance level, immediate occupancy performance level and without collapse as specified in 5.5.3 for the structural design scenarios.
5.2.3.2* Serviceability Performance. The serviceability level of performance shall be a state in which structural elements and nonstructural components shall not sustain detrimental cracking or

yielding, or degradation in strength, stiffness or fire resistance requiring repair. Structures shall not experience permanent deformation or deflection or deformation or deflection that is troubling to occupants or disruptive of building function. Nonstructural components and permanent fixtures and features shall not become displaced or dislodged.
5.2.3.3* Immediate Occupancy Performance. The immediate occupancy level of performance shall be a state in which minor, repairable cracking, yielding and permanent deformation of the structure and nonstructural elements shall be permitted to occur. However, the structure shall not sustain such degradation in configuration, stiffness, strength or fire resistance, that it is unsafe for continued occupancy.
5.2.3.4* Collapse Prevention Performance. Buildings shall be designed and constructed to reasonably prevent structural failure under extreme loads to enable emergency responders to affect occupant rescue and evacuate the building.
5.2.4 Safety During Building Use.
5.2.4.1 Measures shall be provided to prevent falls in locations where an occupant could fall 30 in. (760 mm) or more during the normal use of a building.
5.2.4.2 Stairs shall be designed and constructed in such a manner as to reasonably prevent falls by occupants.
5.2.4.3 In assembly buildings with occupant loads greater than 1000, measures shall be provided to reasonably prevent injury or death during the movement of crowds in emergency and non-emergency conditions.
5.2.4.4 During construction and demolition, measures shall be taken to ensure the safety of occupants and workers from fire and other hazards in the building undergoing construction or demolition and adjacent buildings that could be impacted by a hazard in the building undergoing construction and demolition.
5.2.4.5* Measures shall be provided to alert occupants to the presence of a fire or other emergency condition to provide sufficient time for occupants to evacuate, relocate or defend in place.
5.2.4.6 Signs shall be provided inside and outside buildings to identify means of egress, exits, emergency safety features, potential hazards, and features intended for the safety and for the amenity of occupants with physical or sensory limitations.
5.2.4.7 Glass or other similar frangible construction materials shall be installed in such a manner so that, should occupants potentially come in contact with it, it will:
a) resist impact without breaking,
b) break in such a manner that it will not cause injury, or
c) be protected from occupant impact.
5.2.5 Safety from Unwanted Entry. Dwelling units shall be provided with measures to reasonably prevent unwanted entry through doors, windows and similar openings in the exterior envelope of the dwelling unit for sufficient time for emergency responders to take appropriate action.
5.2.6 Indoor Environment.
5.2.6.1* Habitable spaces in buildings shall be provided with ventilation or other measures to limit the quantities of bacteria, pathogens and allergens in the indoor air to levels that will not cause injury or illness to occupants inside the building.
5.2.6.2* Habitable spaces in buildings shall be provided with sufficient quantities of heat, ventilation and moisture to reduce the probability of injury or illness to occupants.
5.2.7 Noise and Vibrations.
5.2.7.1 Dwelling units shall be separated from all other spaces in a building in which noise may be generated by a separation providing a sound transmission class (STC) rating of at least 45 and an impact insulation class (IIC) rating of at least 45.
5.2.7.2 The determination of STC shall be in accordance with ASTM E413, Classification for Rating Sound Insulation using results from measurements in accordance with either ASTM E90, Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions or ASTM E336, Measurement of Airborne Sound Insulation in Buildings.
5.2.7.3 The determination of IIC shall be in accordance with either ASTM E492, Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine or ASTM E1007, Field Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies and Associated Support Structures.
5.2.7.4 Floor systems and other elements susceptible to vibrations shall be designed and constructed so that there will be no significant adverse affects from vibrations in the occupied portions of buildings as determined using ANSI-S3.29-1983, Guide to the Evaluation of Human Exposure to Vibrations in Buildings.
5.2.8* Surface Water Entry. Buildings shall be designed and constructed to ensure that surface water will not enter or accumulate during the design flood, unless the building is designed to accommodate such surface water entry.
5.2.9 Control of Contaminants.
5.2.9.1 Buildings shall limit, or be provided with systems to reduce, concentrations in the building of contaminants, unwanted odors and excess moisture, during normal use of the building, to quantities that do not unreasonably affect the health and safety nor irritate a substantial portion of the occupants.
5.2.9.2 Strong concentrations of pollutants, odors and moisture shall be eliminated or collected at their point of origin and exhausted from the building; mild concentrations shall be diluted with outdoor air by natural or mechanical means.
5.2.10 Lighting.
5.2.10.1 Spaces in buildings intended for use by occupants shall be provided with artificial or natural light so that the average illuminance at floor level is not less than 2 foot-candle (20 lux).
5.2.10.2* Habitable spaces in dwelling units shall be provided with natural light to ensure an average illuminance at floor level of not less than 6 foot-candle (60 lux).
5.2.11 Sanitation.
5.2.11.1 Buildings shall be provided with sanitary fixtures for personal hygiene of sufficient number and type appropriate for the expected numbers and capabilities of occupants and use of the building.
5.2.11.2* Buildings shall be provided with a potable water supply of sufficient capacity for consumption, hygiene and food preparation.
5.2.11.3* Buildings shall be provided with appropriate means to remove all wastewater from sanitary fixtures and other plumbing and similar facilities in the building.
5.2.12 Accessibility.
5.2.12.1* Buildings shall be provided with appropriate access to at least 50% of the exterior entrances for all occupants, including those with physical or sensory limitations.
5.2.12.2 Buildings shall be provided with horizontal and vertical circulation facilities appropriate for the safe and unimpeded movement and egress of all building occupants, including those with physical or sensory limitations.
5.2.12.3 Facilities intended for occupant health, safety and amenity in buildings shall be accessible to all occupants, including those with physical or sensory limitations.
5.2.13 Function. Building, construction, facilities and equipment required by this Code shall be designed, constructed and installed in such a manner that minimizes the risk of failure, when required, during the occupancy of the building.
5.2.14* Energy Efficiency. Buildings shall be provided with means to efficiently use energy from non-renewable sources.
5.2.15 Cultural Heritage.
5.2.15.1* Additions, alterations and renovations in culturally significant buildings and structures shall be undertaken so as to preserve their original quality or character and so that, if the additions, alterations or renovations were removed in the future, the essential form and integrity of the original building or structure would be essentially unchanged.
5.2.15.2 For historic buildings or structures located in whole or in part in flood hazard areas established by 100.3.2, work on the building or structure shall be permitted provided:
(1) the proposed work will not preclude the continued designation as a historic building or structure

(2) the proposed work is the minimum necessary to comply with life and safety requirements of Chapters 1 through 5 of this Code
(3) a variance to the flood provisions of this Code is granted by the Board of Appeals.
5.2.16* Mission Continuity. Buildings which perform a community public welfare role shall incorporate means appropriate to their function and importance to ensure their continued operation following a fire or other natural or man-made disaster.
5.2.17 Environment. Buildings shall be designed and constructed so that, during their construction and operation, damage to the environment from waste gases, solids or liquids from the building is reduced to the greatest extent possible.
5.3 RETAINED PRESCRIPTIVE REQUIREMENTS.
5.3.1 Systems and Features. All fire protection systems and features of the building shall comply with applicable NFPA standards for those systems and features.
5.3.2 Electrical Systems. Electrical systems shall comply with Chapter 48.
5.3.3 Means of Egress. The design shall comply with the following requirements in addition to the performance criteria of Section 5.2 and the methods of Sections 5.4 through 5.8:
(1) Changes in Level in Means of Egress — 12.1.7
(2) Guards — 12.1.8
(3) Doors — 12.2.1
(4) Stairs — 12.2.2 other than the provisions of 12.2.2.5.1, 12.2.2.5.2, 12.2.2.6.2, 12.2.2.6.3, and 12.2.2.6.4
(5) Ramps — 12.2.5 other than the provisions of 12.2.5.3.1, 12.2.5.5, and 12.2.5.6.1
(6) Fire Escape Ladders — 12.2.9
(7) Alternating Tread Devices — 12.2.11
(8) Capacity of Means of Egress — 12.3 other than the provisions of 12.3.3 and 12.3.4
(9) Impediments to Egress — 12.5.2
(10) Illumination of Means of Egress — 12.8
(11) Emergency Lighting — 12.9
(12) Marking of Means of Egress — 12.10
5.3.4 Equivalency. Equivalent designs for the features covered in the retained prescriptive requirements mandated by 5.3.3 shall be addressed in accordance with the equivalency provisions of Section 1.6.
5.4* PERFORMANCE-BASED DESIGN CHARACTERISTICS AND ASSUMPTIONS.
5.4.1 General.
5.4.1.1 Design characteristics and assumptions used in the performance-based design shall be clearly stated and shown to be realistic and sustainable.
5.4.1.2 Each design characteristic and assumption used in the design shall be accurately translated into input data specifications, as appropriate for the calculation method or model to be used.
5.4.1.3 Design characteristics and assumptions that the design analyses do not explicitly address or incorporate, and which are therefore omitted from input data specifications, shall be identified, and a sensitivity analysis of the consequences of that omission shall be performed.
5.4.1.4 Design characteristics and assumptions modified in input data specifications, because of limitations in test methods or other data generation procedures, shall be identified, and a sensitivity analysis of the consequences of the modification shall be performed.
5.4.1.5* The design shall not include mutually inconsistent characteristics, assumptions or statements of conditions.
5.4.2 Building Characteristics and Assumptions.
5.4.2.1* Characteristics of the building or its contents, equipment, layout or operations not inherent in the design specifications, but that affect occupant or building behavior, or the rate of hazard development, shall be explicitly identified.
5.4.2.2* The performance of building systems and features shall reflect the documented performance and reliability of the components of those systems or features unless design specifications are incorporated to modify the expected performance.
5.4.2.3 Whenever or wherever any device, equipment, system, condition, arrangement, level of protection or other feature is required to meet the goals, objectives or performance criteria of this Code, it shall be assumed that procedures for the operation and maintenance of such device, equipment system, condition, arrangement, level of protection or other feature will be prepared and that there will be an approved system of maintenance, testing and operated in accordance with an operations and maintenance manual developed as part of the performance-based design, or as directed by the authority having jurisdiction.
5.4.3 Occupant Characteristics and Assumptions.
5.4.3.1* General. The selection of occupant characteristics to be used in the design calculations shall be approved by the authority having jurisdiction and shall provide an accurate reflection of the expected population of building users.
5.4.3.2 Occupant Profile. Occupant characteristics shall represent the normal occupant profile, unless design specifications are used to modify the expected occupant features.
5.4.3.3 Consistency. Occupant characteristics shall not vary across design scenarios except as authorized by the authority having jurisdiction.
5.4.3.4* Response Characteristics. Each of the following basic performance characteristics shall be considered: sensibility, reactivity, mobility, and susceptibility. These estimations shall reflect the expected distribution of characteristics of a population appropriate to the use of the building. The source of data for these characteristics shall be documented.
5.4.3.5 Location. It shall be assumed that in every normally occupied room or area at least one person shall be located at the most remote point form the exits.
5.4.3.6* Number of Occupants. The design shall be based on the maximum number of people that every occupied room or area is expected to contain. Where success or failure of the design is contingent on the number of occupants not exceeding a certain number, operational controls shall be used to ensure a greater number of occupants could not be present.
5.4.3.7* Staff Assistance. In those occupancies where staff assistance is required to ensure the safety of other occupants, such trained assistance shall be provided. The ability of trained employees to be included as part of the building safety system shall be identified and documented.
5.4.4 Emergency Response Personnel Characteristics and Assumptions.
5.4.4.1 This Code assumes that emergency response personnel will be available at the building in a reasonable time in the event of an emergency, and that such personnel are trained in procedures related to the goals, objectives and performance criteria in this Code. Should such response not be available, alternative approved measures shall be provided.
5.4.4.2 Design characteristics and assumptions related to the availability, speed of response, effectiveness, roles, and other characteristics of emergency response personnel shall be specified, estimated, or characterized sufficiently for evaluation of the design.
5.4.5 Other Characteristics and Assumptions.
5.4.5.1* Post-construction Conditions. Design characteristics or assumptions related to activities during the life of the building that affect the ability of the building to meet the stated goals, objectives and performance criteria of this Code shall be specified, estimated, or characterized sufficiently to evaluate the design.
5.4.5.2 Off-site Conditions. Design characteristics or assumptions related to resources or conditions outside the property being designed that affect the ability of the building to meet the stated goals, objectives and performance criteria of this Code shall be specified, estimated, or characterized sufficiently for evaluation of the design.
5.4.5.3* Special Provisions. Additional provisions not covered by the above design characteristics and assumptions provided in Section 5.4 but that are required for the design to comply with the goals, objectives or performance criteria of this Code shall be documented.
5.4.5.4 Single Fire Source. It is assumed that a single fire source shall be utilized to evaluate the protection measures provided in this Code.

5.5* DESIGN SCENARIOS.
5.5.1 General.
5.5.1.1 The proposed design shall be considered to meet the goals and objectives if it achieves the performance criteria for each required design scenario. The authority having jurisdiction shall approve the parameters involved with design scenarios.
5.5.1.2* Design scenarios shall be evaluated for each required scenario using a method acceptable to the authority having jurisdiction and appropriate for the conditions. Each scenario shall be as challenging and realistic as any that could realistically occur in the building.
5.5.1.3* Scenarios selected as design scenarios shall include, but not be limited to, those specified in 5.5.2. through 5.5.4. Design fire scenarios demonstrated by the design team to the satisfaction of the authority having jurisdiction as inappropriate for the building use and conditions shall not be required to be evaluated fully. Fire Design Scenario 8 shall not be required to be applied to fire protection systems for which both the level of reliability and the design performance in the absence of the system are acceptable to the authority having jurisdiction.
5.5.1.4 Each design scenario used in the performance-based design proposal shall be translated into input data specifications, as appropriate for the calculation method or model.
5.5.1.5 Any design scenario specifications that the design analyses do not explicitly address or incorporate and that are, therefore, omitted from input data specifications shall be identified, and a sensitivity analysis of the consequences of that omission shall be performed.
5.5.1.6 Any design scenario specifications modified in input data specifications, because of limitations in test methods or other data generation procedures, shall be identified, and a sensitivity analysis of the consequences of the modification shall be performed.
5.5.2 Required Design Scenarios – Fire.
5.5.2.1* Fire Design Scenario 1. Fire Design Scenario 1 is an occupancy-specific Design Scenario representative of a typical fire for the occupancy. This design scenario shall explicitly account for the following:
(1) Occupant activities
(2) Number and location
(3) Room size
(4) Furnishings and contents
(5) Fuel properties and ignition sources
(6) Ventilation conditions
The first item ignited and its location shall be explicitly defined.

5.5.2.2* Fire Design Scenario 2. Fire Design Scenario 2 is an ultrafast-developing fire, in the primary means of egress, with interior doors open at the start of the fire. This design scenario shall address the concern regarding a reduction in the number of available means of egress.
5.5.2.3* Fire Design Scenario 3. Fire Design Scenario 3 is a fire that starts in a normally unoccupied room that can potentially endanger a large number of occupants in a large room or other area. This design scenario shall address the concern regarding a fire starting in a normally unoccupied room and migrating into the space that can, potentially, hold the greatest number of occupants in the building.
5.5.2.4* Fire Design Scenario 4. Fire Design Scenario 4 is a fire that originates in a concealed wall- or ceiling-space adjacent to a large occupied room. This design scenario shall address the concern regarding a fire originating in a concealed space that does not have either a detection system or suppression system and then spreading into the room within the building that can, potentially, hold the greatest number of occupants.
5.5.2.5* Fire Design Scenario 5. Fire Design Scenario 5 is a slowly developing fire, shielded from fire protection systems, in close proximity to a high occupancy area. This design scenario shall address the concern regarding a relatively small ignition source causing a significant fire.
5.5.2.6* Fire Design Scenario 6. Fire Design Scenario 6 is the most severe fire resulting from the largest possible fuel load characteristic of the normal operation of the building. This design scenario shall address the concern regarding a rapidly developing fire with occupants present.
5.5.2.7* Fire Design Scenario 7. Fire Design Scenario 7 is an outside exposure fire. This design scenario shall address the concern regarding a fire starting at a location remote from the area of concern and either spreading into the area, blocking escape from the area, or developing untenable conditions within the area.
5.5.2.8* Fire Design Scenario 8. Fire Design Scenario 8 is a fire originating in ordinary combustibles in a room or area with each passive or active fire protection system independently rendered ineffective. This set of design scenarios shall address concern regarding each fire protection system or fire protection feature, considered individually, being unreliable or becoming unavailable. This scenario shall not be required to be applied to fire protection systems for which both the level of reliability and the design performance in the absence of the system are acceptable to the authority having jurisdiction.
5.5.3 Required Design Scenarios – Structural.
5.5.3.1 Serviceability Scenario. Buildings shall be designed and constructed to provide serviceability performance, as presented in 5.2.3.1, under dead load and in combination with live, impact, soil and hydrostatic pressure, rain, flood, wind, ice, snow, and earthquake loads having the annual probabilities of exceedance indicated in Table 5.5.3.1. The following combinations of load shall be considered, or alternatively, the loads and load combinations specified in ASCE-7-98, Minimum Design Loads for Buildings and Other Structures, shall be permitted to be used.
- Dead*
- Dead and Floor Live and Impact
- Dead* and Floor Live and Roof Live or Snow or Rain
- Dead* and Floor Live and Wind or Earthquake**
- Dead* and Wind or Earthquake

*The effects of soil and hydrostatic pressure shall be considered concurrently with Dead loads in the above load combinations.
**75% of the effects of Floor Live and Wind or Floor Live and Earthquake loads may be used when considered in combination.
5.5.3.2 Immediate Occupancy Scenario. Buildings and their nonstructural components shall be designed and constructed to provide the immediate occupancy performance level, as presented in 5.2.3.2, under dead load in combination with live loads having the probability of exceedance indicated in Table 5.5.3.1 and the earthquake loads having the annual probabilities of exceedance indicated in Table 5.5.3.2. Building cladding systems shall be designed to provide immediate occupancy performance under dead load in combination with the wind loads indicated in Table 5.5.3.2. The following load combinations shall be used.
- Dead* and Floor Live and Earthquake**
- Dead* and Wind or Earthquake

*The effects of soil and hydrostatic pressure shall be considered concurrently with Dead loads in the above load combinations.
**75% of the effects of Floor Live and Wind or Floor Live and Earthquake loads may be used when considered in combination.

Table 5.5.3.1 Minimum Annual Probabilities of Exceedance for Transient Loads for Serviceability Level

Loading	Occupancy Category1			
	I	II	III	IV
Live	.01	.01	.01	.01
Snow	.04	.02	.0133	.01
Wind	.0267	.02	.0133	.01
Earthquake	N/A	.04	.02	.0133

1- Occupancy categories are as defined in ASCE-7-98 Minimum Design Loads for Buildings and Other Structures

5.5.3.3 Collapse Prevention Scenario. Buildings shall be designed and constructed to resist collapse and their components shall be designed to resist failure as presented in 5.2.3.3 under dead load in combination with live loading having the probability of exceedance indicated in Table 5.5.3.1, and earthquake loads having the intensities indicated in Table 5.5.3.3. The following combinations of load shall be considered.

- Dead* and Floor Live and Earthquake**
- Dead* and Earthquake

*The effects of soil and hydrostatic pressure shall be considered concurrently with Dead loads in the above load combinations.
**75% of the effects of Floor Live and Earthquake loads may be used when considered in combination.

5.5.4 Required Design Scenarios – Safety During Building Use.
5.5.4.1* Building Use Design Scenario 1. Building Use Design Scenario 1 is an event in which the maximum occupant load is in the assembly building and an emergency event occurs blocking the principal exit/entrance to the building. This design scenario shall address the concern of occupants having to take alternative exit routes under crowded conditions.
5.5.4.2 Building Use Design Scenario 2. Building Use Design Scenario 2 is a fire in an area of a building undergoing construction or demolition while the remainder of the building is occupied. The normal fire suppression system in the area undergoing construction or demolition has been taken out of service. This design scenario shall address the concern regarding the inoperability of certain building fire safety features during construction and demolition in a partially occupied building.
5.6 EVALUATION OF PROPOSED DESIGNS.
5.6.1 General. A proposed design's performance shall be assessed relative to each performance objective in Section 4.2 and each applicable scenario in Section 5.5, with the assessment conducted through the use of appropriate calculation methods. The authority having jurisdiction shall approve the choice of assessment methods.

5.6.2 Use. The design professional shall use the assessment methods to demonstrate that the proposed design will achieve the goals and objectives, as measured by the performance criteria in light of the safety margins and uncertainty analysis, for each scenario, given the assumptions.
5.6.3 Input Data.
5.6.3.1 Data. Input data for computer fire models shall be obtained in accordance with ASTM E 1591, Standard Guide for Data for Fire Models. Data for use in analytical models that are not computer-based fire models shall be obtained using appropriate measurement, recording, and storage techniques to ensure the applicability of the data to the analytical method being used.
5.6.3.2 Data Requirements. A complete listing of input data requirements for all models, engineering methods, and other calculation or verification methods required or proposed as part of the performance-based design shall be provided.
5.6.3.3 Uncertainty and Conservatism of Data. Uncertainty in input data shall be analyzed and, as determined appropriate by the authority having jurisdiction, addressed through the use of conservative values.
5.6.4 Output Data. The assessment methods used shall accurately and appropriately produce the required output data from input data based on the design specifications, assumptions, and scenarios.
5.6.5 Validity. Evidence shall be provided confirming that the assessment methods are valid and appropriate for the proposed building, use and conditions.
5.7 SAFETY FACTORS.
5.7.1* General. Approved safety factors shall be included in the design methods and calculations to reflect uncertainty in the assumptions, data, and other factors associated with the performance-based design.
5.8 DOCUMENTATION REQUIREMENTS.
5.8.1* General. All aspects of the design, including those described in 5.8.2 through 5.8.14, shall be documented. The format and content of the documentation shall be acceptable to the authority having jurisdiction.
5.8.2* Technical References and Resources. The authority having jurisdiction shall be provided with sufficient documentation to support the validity, accuracy, relevance, and precision of the proposed methods. The engineering standards, calculation methods and other forms of scientific information provided shall be appropriate for the particular application and methodologies used.
5.8.3 Building Design Specifications. All details of the proposed building design that affect the ability of the building to meet the stated goals and objectives shall be documented.
5.8.4 Performance Criteria. Performance criteria, with sources, shall be documented.
5.8.5 Occupant Characteristics. Assumptions about occupant characteristics shall be documented.
5.8.6 Design Scenarios. Descriptions of design hazards scenarios shall be documented.
5.8.7 Input Data. Input data to models and assessment methods, including sensitivity analysis, shall be documented.
5.8.8 Output Data. Output data from models and assessment methods, including sensitivity analysis, shall be documented.

Table 5.5.3.2 Minimum Annual Probabilities of Exceedance for Transient Loads for Immediate Occupancy Level

Loading	Occupancy Category1			
	I	II	III	IV
Wind2	.00133	.01	.0067	.005
Earthquake	N/A	.0.02	.01	0.0044

1. Occupancy categories are as defined in ASCE-7-98 Minimum Design Loads for Buildings and Other Structures
2. Wind load applies to cladding only.

Table 5.5.3.3 Minimum Intensities for Earthquake Shaking for Non-Collapse

	Occupancy Category1			
	I	II	III	IV
Structure and structural components	0.67 MCE2	MCE2	1.25 MCE2	1.5 MCE2
Nonstructural components	0.67 MCE2	0.67 MCE2	0.83 MCE2	MCE2

1. Occupancy categories are as defined in ASCE-7-98 Minimum Design Loads for Buildings and Other Structures
2. Maximum Considered Earthquake (MCE) shaking shall be as defined in ASCE-7 Minimum Design Loads for Buildings and Other Structures.

5.8.9 Safety Factors. Safety factors utilized shall be documented.
5.8.10 Prescriptive Requirements. Retained prescriptive requirements shall be documented.
5.8.11* Modeling Features.
5.8.11.1 Assumptions made by the model user, and description of models and methods used, including known limitations, shall be documented.
5.8.11.2 Documentation shall be provided that the assessment methods have been used validly and appropriately to address the design specifications, assumptions, and scenarios.
5.8.12 Evidence of Modeler Capability. The design team's relevant experience with the models, test methods, data bases, and other assessment methods used in the performance-based design proposal shall be documented.
5.8.13 Performance Evaluation. The performance evaluation summary shall be documented.
5.8.14 Use of Performance-based Design Option. Design proposals shall include documentation that provides anyone involved in ownership or management of the building with notification that:

(a) the building was approved as a performance-based design with certain specified design criteria and assumptions, and

(b) any remodeling, modification, renovation, change in use, or change in the established assumptions will require a re-evaluation and re-approval.

CHAPTER 5 ANNEX

A.5.1 The performance option of this Code establishes acceptable levels of risk for buildings and structures as addressed in Section 1.2. While the performance option of this Code does contain goals, objectives and performance criteria necessary to provide for an acceptable level of risk, it does not describe how to meet these goals, objectives and performance criteria. Design and engineering are needed to meet the provisions of Chapter 5. For fire protection designs, the SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design of Buildings provides a framework for these assessments.
A.5.1.3 A third-party reviewer is a person or group of persons chosen by the authority having jurisdiction to review proposed performance-based designs. Qualifications of the third party reviewer should include experience, education, and credentials that demonstrate knowledgeable and responsible use of applicable models and methods.
A.5.1.6 Continued compliance with the goals and objectives of the Code involves many factors. The building construction — including openings, interior finish, and fire- and smoke-resistive construction — and the building and fire protection systems need to retain at least the same level of performance as is provided for the original design parameters. The use and occupancy should not change to the degree that assumptions made about the occupant characteristics, combustibility of furnishings, and existence of trained personnel are no longer valid. In addition, actions provided by other personnel, such as emergency responders, should not be diminished below the documented assumed levels. Also, actions needed to maintain reliability of systems at the anticipated level need to meet the initial design criteria.
A.5.2.2.2 Many of the performance criteria related to safety from fire can also be found in NFPA 101, Life Safety Code.
A.5.2.2 The SFPE Engineering Guide to Design Performance Criteria contains performance criteria associated with reducing the probability of fire spread.
A.5.2.2.5 This criterion may be met by the provisions of 5.2.2.3 in some cases. In others, the time necessary for establishing safety for emergency responders may be greater than for occupant evacuation and additional measure may need to be taken.
A.5.2.2.6 The SFPE Engineering Guide to Design Performance Criteria contains performance criteria associated with reducing the probability of fire spread.
A.5.2.3.1 Section 5.5 specifies the specific combinations of loads and design scenarios that structures should be constructed and designed to withstand, without exceeding the stated performance levels. The various performance levels are described in 5.2.3.2, 5.2.3.3 and 5.2.3.4.
A.5.2.3.2 The serviceability level is that level of performance expected of structures when subjected to loading that is normally anticipated to occur one or more times during the life of the structure. Interruption of building use or loss of function should not occur as a result of such loading.
A.5.2.3.3 A structure should be considered to be unsafe for continued occupancy if damage sustained by the structure and/or its nonstructural components under load has resulted in a substantially greater propensity for failure or collapse than existed prior to loading. ASCE/FEMA 356 "Prestandard for the Seismic Rehabilitation of Buildings" and Appendix G, of the SEAOC "Recommended Lateral Force Criteria and Commentary" provide criteria that may be used to confirm compliance with the Immediate Occupancy Performance level.
A.5.2.3.4 The collapse prevention criteria contained in ASCE/FEMA 356 "Prestandard for the Seismic Rehabilitation of Buildings" and Appendix G, of the SEAOC "Recommended Lateral Force Criteria and Commentary" may be used to demonstrate compliance with the requirements of this paragraph, under the extreme loads defined in 5.5.3.3.
A.5.2.4.5 The SFPE Engineering Guide to Predicting Human Behavior in Fire identifies methods of notifying occupants of fire.
A.5.2.6.1 Maximum permissible concentrations of indoor air contaminants can be found in the Industrial Ventilation Manual published by the American Conference of Governmental Industrial Hygienists.
A.5.2.6.2 Ventilation rates for outdoor air supplied to buildings can be found in ASHRAE 62-1999 "Ventilation for Acceptable Indoor Air Quality". Guidance on minimum heating and moisture levels to provide a reasonable degree of occupant health in buildings can be found in the ASHRAE Handbooks …
Maximum permissible concentrations of indoor air contaminants can be found in the Industrial Ventilation Manual published by the American Conference of Governmental Industrial Hygienists.
A.5.2.8 Performance criteria for a building to resist flood loads, as opposed to surface water entry, are included in 5.2.3.1.
A.5.2.10.2 The average illuminance is measured over the 12 months of the year.
A.5.2.11.2 Appropriate water demands for consumption, hygiene and food preparation are found in the Uniform Plumbing Code.
A.5.2.11.3 The types of facilities and their wastewater demands are contained in the Uniform Plumbing Code.
A.5.2.12.1 The number of accessible entrances and their design can be found in CABO/ANSI A117.1-1998, American National Standard for Accessible and Usable Buildings and Facilities.
A.5.2.14 Performance criteria for energy use in buildings can be found in ASHRAE 90.1-1999, Energy Standard for Buildings, Except Low-Rise Residential Buildings and ASHRAE 90.2-1993, Energy Efficient Design of New Low-Rise Residential Buildings.
A.5.2.15.1 Fire protection measures to preserve the original quality or character of culturally significant buildings and structures can be found in NFPA 914, Recommended Practice for Fire Protection in Historic Structures.
A.5.2.16 The means to ensure continued operation will be specific to each building, each location and possible disasters that could occur in that building on that site. In some cases, compliance with the requirements of this Code may be sufficient to meet this performance criterion.
A.5.4 In the context of this Code, design characteristics are those attributes of the building, its location, contents and occupants that need to be specified and/or quantified to permit evaluation of a

design against the goals, objectives and performance criteria, using appropriate design scenarios and verification methods. Some design characteristics will be specified in this Code, others may be specified by the authority having jurisdiction to accommodate local conditions and still others specified by the designer of the building.

A.5.4.1.5 This includes assumptions about the interrelations between the performance of building elements and systems, occupant behavior, or emergency response actions that conflict with each other. For each Design scenario, care needs to be taken to ensure that conflicts in actions do not occur. Typical conflicts could include (1) assuming a fire door will remain closed during the fire to contain smoke, while this same door is used by occupants during egress from the area, and (2) assuming fire apparatus will arrive immediately from a distant location to provide water to fire department connections. For example, an assumption that compartmentation blocking the passage of fire and smoke will be maintained at the door to a stairwell cannot be paired with an assumption that evacuation through that door will extend over many minutes.

A.5.4.2.1 Building contents and furnishings are not normally included in design specifications, however, in some cases, they may have an impact on building or occupant behavior. Where contents and furnishings could impact on building or occupant behavior, the designer must present the authority having jurisdiction with detailed information about them and their locations in the building to enable an assessment of their impact in various design scenarios to be determined.

A designer must also clearly express the overall layout of the building, especially those items which may not appear on building plans but which could impact on the performance of the building or the occupants. Examples include the layout of office cubicles that could affect emergency egress and temporary storage areas that could exceed permissible loading for a portion of a floor assembly.

A.5.4.2.2 Systems addressed by this requirement include automatic fire suppression systems and fire alarm systems. Performance issues that need to be documented might include response time indexes, discharge densities, and water flow distribution patterns. Calculations should not include an unlimited supply of extinguishing agent if only a limited supply will be provided in the actual structure or building.

A.5.4.3.1 Guidance on occupant characteristics for use in design can be found in the SFPE Engineering Guide to Predicting Human Behavior in Fire.

A.5.4.3.4 The four basic characteristics – sensibility, reactivity, mobility, and susceptibility – comprise a minimum, exhaustive set of mutually exclusive performance characteristics of people in buildings that can affect a building's ability to meet the goals, objectives and performance criteria of this Code. The characteristics are briefly described as follows.

(a) Sensibility – to physical cues. Ability to sense the sounding of an alarm; can also include discernment and discrimination of visual and olfactory cues in addition to auditory emanations from an event itself.
(b) Reactivity – ability to interpret correctly cues and take appropriate action. Can be function of cognitive capacity, speed or instinctive reaction, or group dynamics; might need to consider reliability or likelihood of a wrong decision, as in situations where familiarity with the premises influences wayfinding.
(c) Mobility – speed of movement. Determined by individual capabilities as well as crowding phenomena such as arching at doorways.
(d) Susceptibility – to products of combustion. Metabolism, lung capacity, pulmonary disease, allergies, or other physical limitations that affect survivability during a building emergency.

In application, as with the use of computer evacuation models, assumptions can address a larger number of factors that are components of these basic performance characteristics. Examples follow.

Alertness	Awake/asleep, can depend on time of day
Responsiveness	Ability to sense cues and react
Commitment	Degree to which occupant is committed to an activity underway before the alarm
Focal point	Point at which an occupant's attention is focused, for example, to front of classroom, stage, or server in business environment
Physical and mental capabilities	Can affect ability to sense, respond, and react to cues; might be related to age or disability
Role	Can determine whether occupant will lead or follow others
Familiarity	Can depend on time spent in building or participation in emergency training
Social affiliation	Extent to which an occupant will act/react as an individual or as a member of a group
Condition	Over the course of the fire, the effects – both physiological and psychological – of the fire and its combustion products on each occupant

A.5.4.3.6 The number of people expected to be contained in a room or area should be based on the occupant load factor specified in NFPA 101, Life Safety Code or other approved sources.

A.5.4.3.7 For example, in hospitals, staff characteristics such as number, location, quality, and frequency of training should be considered.

A.5.4.5.1 Design proposals need to state explicitly any design specifications or estimations regarding building safety plans, inspection programs, or other ongoing programs whose performance is necessary for the building, when occupied or operational, to meet the stated goals, objectives and performance criteria of this Code. Programs of interest include any maintenance, training, labeling, or certification programs required to ensure operational status or reliability in building systems or features.

A.5.4.5.3 This includes provisions that are in excess of basic requirements covered by referenced codes and standards, typical design requirements and operating procedures. It includes provisions such as more frequent periodic testing and maintenance to increase the reliability of safety systems, redundant systems to increase reliability, on-site guard service to enhance detection of fires and aid in fire response procedures, staff training, availability and performance of emergency response personnel, and other factors.

A.5.5 Many events can occur during the life of a building; some have a higher probability of occurrence than others. Some events, though not typical, could have a devastating effect on a building. A reasonable design should be able to achieve the goals, objectives and performance criteria of this Code for any typical or common design scenario and for some of the non-typical, potentially devastating scenarios, up to some level commensurate with society's expectations as reflected in this Code.

The challenge in selecting design scenarios is finding a manageable number that are sufficiently diverse and representative so that, if the design is reasonably safe for those scenarios, it should then be reasonably safe for all scenarios, except for those specifically excluded as being unrealistically severe or sufficiently infrequent to be fair tests of the design.

A.5.5.1.2 The SFPE Engineering Guide to Performance-Based Fire protection Analysis and Design of Buildings identifies methods for evaluating fire scenarios.
A.5.5.1.3 It is desirable to consider a wide variety of different design scenarios to evaluate the complete capabilities of the building or structure. Design scenarios should not be limited to a single or a couple of worst case events.
A.5.5.2.1 An example of such a scenario for a health care occupancy would involve a patient room with two occupied beds with a fire initially involving one bed and the room door open. This is a cursory example in that much of the explicitly required information indicated in 5.5.2.1 can be determined from the information provided in the example. Note that it is usually necessary to consider more than one scenario to capture the features and conditions typical of an occupancy.
A.5.5.2.2 Examples of such scenarios are a fire involving ignition of gasoline as an accelerant in a means of egress, clothing racks in corridors, renovation materials, or other fuel configurations that can cause an ultrafast fire. The means of egress chosen is the doorway with the largest egress capacity among doorways normally used in the ordinary operation of the building. The baseline occupant characteristics for the property are assumed. At ignition, doors are assumed to be open throughout the building.
A.5.5.2.3 An example of such a scenario is a fire in a storage room adjacent to the largest occupiable room in the building. The contents of the room of fire origin are specified to provide the largest fuel load and the most rapid growth in fire severity consistent with the normal use of the room. The adjacent occupiable room is assumed to be filled to capacity with occupants. Occupants are assumed to be somewhat impaired in whatever form is most consistent with the intended use of the building. At ignition, doors from both rooms are assumed to be open. Depending on the design, doorways connect the two rooms or they connect via a common hallway or corridor.
For purposes of this scenario, an occupiable room is a room that might contain people that is, a location within a building where people are typically found.
A.5.5.2.4 An example of such a scenario is a fire originating in a concealed wall- or ceiling-space adjacent to a large, occupied function room. Ignition involves concealed combustibles, including wire or cable insulation and thermal or acoustical insulation. The adjacent function room is assumed to be occupied to capacity. The baseline occupant characteristics for the property are assumed. At ignition, doors are assumed to be open throughout the building.
A.5.5.2.5 An example of such a scenario is a cigarette fire in a trash can. The trash can is close enough to room contents to ignite more substantial fuel sources but is not close enough to any occupant to create an intimate-with-ignition situation. If the intended use of the property involves the potential for some occupants to be incapable of movement at any time, then the room of origin is chosen as the type of room likely to have such occupants, filled to capacity with occupants in that condition. If the intended use of the property does not involve the potential for some occupants to be incapable of movement, then the room of origin is chosen to be an assembly or function area characteristic of the use of the property, and the trash can is placed so that it is shielded by furniture from suppression systems. At ignition, doors are assumed to be open throughout the building.
A.5.5.2.6 An example of such a scenario is a fire originating in the largest fuel load of combustibles possible in normal operation in a function or assembly room or in a process/manufacturing area, characteristic of the normal operation of the property. The configuration, type, and geometry of the combustibles are chosen so as to produce the most rapid and severe fire growth or smoke generation consistent with the normal operation of the property. The baseline occupant characteristics for the property are assumed. At ignition, doors are assumed to be closed throughout the building.
This scenario includes everything from a big couch fire in a small dwelling to a rack storage fire in combustible liquids stock in a big box retail store.
A.5.5.2.7 An example of such a scenario is an exposure fire. The initiating fire is the closest and most severe fire possible consistent with the placement and type of adjacent properties and the placement of plants and combustible adornments on the property. The baseline occupant characteristics of the property are assumed.
This category includes wildlands/urban interface fires and exterior wood shingle problems, where applicable.
A.5.5.2.8 This scenario addresses a set of conditions with a typical fire originating in the building with any one passive or active fire protection system or feature being ineffective. Examples include unprotected openings between floors or between fire walls or fire barrier walls, rated fire doors fail to close automatically or are blocked open, sprinkler system water supply shut off, fire alarm system nonoperative, smoke management system not operational, or automatic smoke dampers blocked open. This scenario should represent a reasonable challenge to the other building features provided by the design and presumed to be available.
The exemption from Fire Design Scenario 8 is applied to each active or passive fire protection system individually and requires two different types of information to be developed by analysis and approved by the authority having jurisdiction. System reliability is to be analyzed and accepted. Design performance in the absence of the system is also to be analyzed and accepted, but acceptable performance does not require fully meeting the stated goals and objectives. It might not be possible to meet fully the goals and objectives if a key system is unavailable, and yet no system is totally reliable. The authority having jurisdiction will determine which level of performance, possibly short of the stated goals and objectives, is acceptable, given the very low probability (that is, the system's unreliability probability) that the system will not be available.
A.5.5.4.1 An example of such a scenario would involve a fire or earthquake effectively blocking the principal entrance/exit but not immediately endangering the occupants. The full occupant load of the assembly space must exit using secondary means.
A.5.7.1 The assessment of precision required in 5.8.2 will require a sensitivity and uncertainty analysis, which can be translated into safety factors.

Sensitivity Analysis. The first run a model user makes should be labeled as the base case, using the nominal values of the various input parameters. However, the model user should not rely on a single run as the basis for any performance-based fire safety system design. Ideally, each variable or parameter that the model user made to develop the nominal input data should have multiple runs associated with it, as should combinations of key variables and parameters. Thus, a sensitivity analysis should be conducted that provides the model user with data that indicates how the effects of a real fire might vary and how the response of the proposed fire safety design might also vary.

The interpretation of a model's predictions can be a difficult exercise if the model user does not have knowledge of fire dynamics or human behavior.

Reasonableness Check. The model user should first try to determine whether the predictions actually make sense, that is, they don't upset intuition or preconceived expectations. Most likely, if the results don't pass this test, an input error has been committed.

Sometimes the predictions appear to be reasonable but are, in fact, incorrect. For example, a model can predict higher temperatures farther from the fire than close to it. The values themselves might be reasonable, for example, they are not hotter than the fire, but they don't "flow" down the energy as expected.

A margin of safety can be developed using the results of the sensitivity analysis in conjunction with the performance criteria to provide the possible range of time during which a condition is estimated to occur.

Safety factors and margin of safety are two concepts used to quantify the amount of uncertainty in engineering analyses. Safety factors are used to provide a margin of safety and represent, or address, the gap in knowledge between the theoretically perfect model, that is, reality and the engineering models that can only partially represent reality.

Safety factors can be applied to either the predicted level of a physical condition or to the time at which the condition is predicted to occur. Thus, a physical or a temporal safety factor, or both, can be applied to any predicted condition. A predicted condition (that is, a

parameter's value) and the time at which it occurs are best represented as distributions. Ideally, a computer fire model predicts the expected or nominal value of the distribution. Safety factors are intended to represent the spread of these distributions.

Given the uncertainty associated with data acquisition and reduction, and the limitations of computer modeling, any condition predicted by a computer model can be thought of as an expected or nominal value within a broader range. For example, an upper layer temperature of 600°C is predicted at a given time. If the modeled scenario is then tested (that is, full-scale experiment based on the computer model's input data), the actual temperature at that given time could be 640°C or 585°C. Therefore, the temperature should be reported as 600°C +40°C, -15°C or a range of 585°C to 640°C.

Ideally, predictions are reported as a nominal value, a percentage, or an absolute value. As an example, an upper layer temperature prediction could be reported as "600°C, 30°C" or "600°C, 5 percent." In this case, the physical safety factor is 0.05 (that is, the amount by which the nominal value should be degraded and enhanced). Given the state-of-the-art of computer fire modeling, this is a very low safety factor. Physical safety factors tend to be on the order of tens of percent. A safety factor of 50 percent is not unheard of.

Part of the problem in establishing safety factors is that it is difficult to state the percentage or range that is appropriate. These values can be obtained when the computer model predictions are compared to test data. However, using computer fire models in a design mode does not facilitate this since (1) the room being analyzed has not been built yet and (2) test scenarios do not necessarily depict the intended design.

A sensitivity analysis should be performed based on the assumptions that affect the condition of interest. A base case that uses all nominal values for input parameters should be developed. The input parameters should be varied over reasonable ranges and the variation in predicted output should be noted. This output variation can then become the basis for physical safety factors.

The temporal safety factor addresses the issue of when a condition is predicted and is a function of the rate at which processes are expected to occur. If a condition is predicted to occur 2 minutes after the start of the fire, then this can be used as a nominal value. A process similar to that described above for physical safety factors can also be employed to develop temporal safety factors. In this case, however, the rates (for example, of heat release and toxic product generation) will be varied instead of absolute values (for example, material properties).

The margin of safety can be thought of as a reflection of societal values and can be imposed by the authority having jurisdiction for that purpose. Since the time for which a condition is predicted will most likely be the focus of the authority having jurisdiction (for example, the model predicts occupants will have 5 minutes to safely evacuate), the margin of safety will be characterized by temporal aspects and tacitly applied to the physical margin of safety.

Escaping the harmful effects of fire (or mitigating them) is, effectively, a race against time. When assessing fire safety system designs based on computer model predictions, the choice of an acceptable time is important. When an authority having jurisdiction is faced with the predicted time of untenability, a decision needs to be made regarding whether sufficient time is available to ensure the safety of building occupants. The authority having jurisdiction is assessing the margin of safety. Is there sufficient time to get everyone out safely? If the authority having jurisdiction feels that the predicted egress time is too close to the time of untenability, then the authority having jurisdiction can impose an additional time that the designer will have to incorporate into the system design. In other words, the authority having jurisdiction can impose a greater margin of safety than that originally proposed by the designer.

A.5.8.1 The SFPE Engineering Guide to Performance-Based Fire Protection Analysis and Design of Buildings describes the documentation that should be provided for a performance-based design.

Proper documentation of a performance design is critical to the design acceptance and construction. Proper documentation will also ensure that all parties involved understand what is necessary for the design implementation, maintenance, and continuity of the fire protection design. If attention to details is maintained in the documentation, then there should be little dispute during approval, construction, start-up, and use.

Poor documentation could result in rejection of an otherwise good design, poor implementation of the design, inadequate system maintenance and reliability, and an incomplete record for future changes or for testing the design forensically.

A.5.8.2 The sources, methodologies, and data used in performance-based designs should be based on technical references that are widely accepted and used by the appropriate professions and professional groups. This acceptance is often based on documents that are developed, reviewed, and validated under one of the following processes:

(1) Standards developed under an open consensus process conducted by recognized professional societies, codes or standards organizations, or governmental bodies

(2) Technical references that are subject to a peer review process and published in widely recognized peer-reviewed journals, conference reports, or other publications

(3) Resource publications such as the SFPE Handbook of Fire Protection Engineering, which are widely recognized technical sources of information

The following factors are helpful in determining the acceptability of the individual method or source:

(a) Extent of general acceptance in the relevant professional community. Indications of this acceptance include peer-reviewed publication, widespread citation in the technical literature, and adoption by or within a consensus document.

(b) Extent of documentation of the method, including the analytical method itself, assumptions, scope, limitations, data sources, and data reduction methods.

(c) Extent of validation and analysis of uncertainties. This includes comparison of the overall method with experimental data to estimate error rates as well as analysis of the uncertainties of input data, uncertainties and limitations in the analytical method, and uncertainties in the associated performance criteria.

(d) Extent to which the method is based on sound scientific principles.

(e) Extent to which the proposed application is within the stated scope and limitations of the supporting information, including the range of applicability for which there is documented validation. Factors such as spatial dimensions, occupant characteristics, and ambient conditions, can limit valid applications.

In many cases, a method will be built from, and will include, numerous component analyses. These component analyses should be evaluated using the same factors that are applied to the overall method as outlined in items (a) through (e).

A method to address a specific fire safety issue, within documented limitations or validation regimes, might not exist. In such a case, sources and calculation methods can be used outside of their limitations, provided that the design team recognizes the limitations and addresses the resulting implications.

The technical references and methodologies to be used in a performance-based design should be closely evaluated by the design team and the authority having jurisdiction, and possibly by a third-party reviewer. The strength of the technical justification should be judged using criteria in items (a) through (e). This justification can be strengthened by the presence of data obtained from fire testing.

A.5.8.11 Documentation for modeling should conform to ASTM 1472, Standard Guide for Documenting Computer Software, although most, if not all, models were originally developed before this standard was promulgated.

SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for all the material that is to appear in a new document. This proposal makes clear the SAF-FUN committee's choice of what is to be contained in Chapter 5 on performance-based design option. The draft incorporates the actions

taken on the proposals on Chapter 5; includes editorial changes; reflects changes made to materials from NFPA 101 by the committee so as to be appropriate for the building code; and includes new material because the building code scope is broader than that of NFPA 101.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #440)
Committee: SAF-FUN

5000- 248 - (Chapter 5): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: The Performance approach needs to address multiple hazards or clearly specify that, at the time of code adoption, it is intended to cover only fire.
SUBSTANTIATION: None.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-247 (Log #CP2055).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #868)
Committee: SAF-FUN

5000- 249 - (Chapter 5 and Chapter 6): Accept in Principle in Part
TCC NOTE: The Technical Correlating Committee (TCC) notes that although the proposal is missing a Committee Statement, the gist of a Committee Statement is included in the Committee Action which lists, paragraph by paragraph, other actions taken and reasons for not accepting parts of the submitter's recommendation. The submitter is referred to Proposals 5000-247 (Log #CP2055) and 5000-261 (Log #CP2042) to see how those actions were implemented.
SUBMITTER: David S. Collins, The Preview Group, Inc./Rep. The American Institute of Architect
RECOMMENDATION: Change definitions as noted:
Chapter 5 - Performance-Based Design Options
5.1.4 Independent Review. Should indicate who is responsible for costs. Presumably applicant.
5.1.7 Maintenance of Design Features. Again requirements for maintenance do not belong in the building code. The design professional and contractor have no control over this.
5.2.2 Fire Safety Performance Criteria. I doubt this is even attainable using prescriptive criteria and could be a wide door for litigation.
5.2.5 Health and Amenity Performance Criteria. Define amenity.
5.4.5.4 Number of Occupants. In first sentence, change "expected" to "required". Expected is an unknown and undefinable quantity; required is as established under the code. Possibly add "or as determined by the Authority Having Jurisdiction".
5.4.5.5 Staff Assistance. This is not known at design and construction and staff will change over time. Better to require documentation of training program for staff.
Chapter 6 - Classification of Occupancy and Hazard of Contents.
General. Definitions are being repeated from Chapter 3. Keep in one place only.
6.1.4 Mixed Occupancies. Also covered elsewhere in Chapter 6. Group together and resolve conflicts. This section seems to be addressing separated occupancies. Need to assure retention of concepts regarding separated and non-separated occupancies.
6.2 Hazard of Contents. Is this intended to be another layer of classification on top of occupancies? It is only determined by the Authority Having Jurisdiction. This is another potential litigation opening.
6.3.1.2 Would this not also apply to vertical separations?
6.3.1.3 Not sure if this is the best location for this requirement. It might be overlooked.
6.3.2.2 This requirement does not seem to apply to tenant separations. It is identical to the townhouse separation requirement in 6.3.3.3. Is it misplaced? In multi-story buildings, the tenant separation often do not align from story to story, and do not need to with appropriate horizontal separation.
6.3.3 Separation between Townhouses. Define townhouses.
6.3.4 Mixed Occupancies. Also covered elsewhere in Chapter 6. Group together and resolve conflicts. This section seems to address separated and non-separated occupancies. Need to assure retention of concepts regarding separated and non-separated occupancies.
Exception (a). The 300 occupant limit seems high to not require a separation. An assembly occupancy starts at 50.
Exception (b) & (c). Define hazardous occupancy.
A-6.1.2.1 Assembly Occupancy. This is the only listing containing the word "might". Either delete here or add everywhere else.
(6) College and university classrooms. All assembly occupancies over 50. Do we need to start listing this separately?
(7) Conference rooms.. If listing the 50 occupants criteria, list here especially.
(17) Passenger stations. . . Delete word "public". There is no difference between a public and a private facility.
A.6.1.3.1 Educational Occupancy. (3) Schools should be clarified to include through grade twelve only; not post-secondary. I know it is in the definition, but could be confused by this listing.
A.6.1.4.1 Day-Care Occupancy. In descriptive paragraph, delete "state-approved". This is not critical to safety.
A.6.1.9.1 Residential Board and Care Occupancy. Change "handicapped" to "disabled" in (1) and (2).
A.6.1.11.1 Business Occupancy. In third descriptive paragraph, delete word "city" as adjective for office. Offices are no longer strictly in cities. Also, by definition, a restaurant serving fewer than 50 is classified as mercantile; what is different about a lunch counter serving fewer than 50?
A.6.1.12.1 Industrial Occupancy. (11) Telephone exchanges does not belong in this occupancy. There is little fire loading.
SUBSTANTIATION: None.
COMMITTEE ACTION: Accept in Principle in Part.
With respect to the numerous parts of the submitter's recommendation:
5.1.4. The text has been expanded to address the submitter's concern
5.1.7. Maintenance is too important a subject not to be mentioned. It is an integral part of a performance-based design
5.2.2. The submitter has not proposed any language
5.2.5. The term is no longer used
5.4.5.4. The submitter's wording is not an improvement; the exisiting wording is adequate
5.4.5.5. Staff action can be an integral part of a performance-based design
Definitions - general. Repetition of the definitions is desirable so the user has enough information to classify occupancy without leaving Chapter 6
6.1.4. See the revised section on multiple occupancies
6.2. This is an integral part of the chapter and needs to be retained
6.3.1.2. This requirement has been renumbered as 6.2.3.4; it is applicable for the support of horizontally separated assemblies
6.3.1.3. The material has been deleted
6.3.2.2. The material has been deleted
6.3.3. A definition has been added
6.3.4. The multiple occupancy provisions have been grouped in one place
Exception to (a). The exception has been deleted
Exception (b) and (c). The exceptions have been deleted
Occupancy classification annex. The occupancy descriptions were taken directly from NFPA 101. The committee would need compelling substantiation before making changes.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1210)
Committee: SAF-FUN

5000- 250 - (5-1.3, A.5.1.3): Reject
SUBMITTER: John E. Kampmeyer, Triad Fire Protection Engineering Corp./Rep. National Society of Professional Engineers
RECOMMENDATION: Revise text to read as follows:
5.1.3* Approved Qualifications. The performance-based design shall be prepared by a ~~person~~ professional engineer or registered architect with qualifications acceptable to the authority having jurisdiction. (See also 5.8.12.)
SUBSTANTIATION: In projects conceived, designed and constructed using performance based design, the ultimate safety of the facility depends largely on both the technical and professional qualifications of the modeler. Since professional registration demonstrate a personal responsibility to protect the safety of the public as a condition of their licensing by the jurisdiction in which they practice, the modeler should meet this standard.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The paragraph has been deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #811)
Committee: SAF-FUN

5000- 251 - (5-1.7.1): Reject
SUBMITTER: Dick M. Glumac, Glumac International/Rep. Golden Gate Chapter ASHRAE
RECOMMENDATION: Add new text as follows:
"All performance goals and calculations shall be submitted to the authority having jurisdiction when applying for building permit."
SUBSTANTIATION: Very few structures and buildings have the same design and construction team form the onset to the end of the useful life. Teams change, such that third team, say working in the building 20 years later. The building has new owners, etc., the original engineers have closed their shop. No one has original "performance goals", but if they have been submitted to the Building Department, it can always be retrieved by paying a small fee.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The documentation requirements of Section 5.8 already address the subject. It is the AHJ who should determine at what phase of the overall project the documentation needs to be submitted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #85)
Committee: SAF-FUN

5000- 252 - (5-1.8): Accept in Principle
SUBMITTER: Charles Nelson, Fowlkes and Assoc.
RECOMMENDATION: 5.1.8 None of the references given are correct.
SUBSTANTIATION: In order to be "user friendly" the entire code format should be consistent with the IBC.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-247 (Log #CP2055).
COMMITTEE STATEMENT: The references have been coordinated in the proposal cited.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #551)
Committee: SAF-FUN

5000- 253 - (5-1.8): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: The references in parentheses need to clearly indicate that those are definitions in the Life Safety Code, or they need to be added to Chapter 3 of this Code.
SUBSTANTIATION: None given.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-79 (Log #CP2044) on Chapter 3.
COMMITTEE STATEMENT: The definitions addressed by the submitter have been added to Chapter 3.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #439)
Committee: SAF-FUN

5000- 254 - (5-2): Accept in Principle
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: Performance criteria need to be added for events other than fire.
SUBSTANTIATION: None.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-247 (Log #CP2055).
COMMITTEE STATEMENT: The action on the referenced proposal adds the material requested by the submitter.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #112)
Committee: SAF-FUN

5000- 255 - (5-2.3): Reject
SUBMITTER: Charles Smeby, Jr., Florida State Fire College
RECOMMENDATION: Add to 5.2.3:
"During interior firefighting operations, no firefighter shall be exposed to a probability of injury or death from the failure of a structural component."
SUBSTANTIATION: Since the NFPA 5000 draft is substantial derived for the NFPA Life Safety Code and is focused towards occupant safety during a fire, I would like to propose fire protection criteria that would also cover firefighting safety and property protection. Building codes typically contain many items that are property protection features.
Each municipality has an interest in reducing and eliminating fire losses. From both a "Public Policy" perceptive and to maintain structures that provide taxes and places for employment for their citizens, fire losses do have a major fiscal impact of local and state governments.
This would also have the added benefit for reducing insurance premiums that are the direct result of fire loss. Many of the requirements int he typical building code were derived to limit fire losses, and this tradition should be continued in this innovative new code.

COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: It is not the intent to protect the fire fighter during fire fighting operations, only during search and rescue.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #720)
Committee: SAF-FUN

5000- 256 - (5-2.6 (New)): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. W R Grace & Company
RECOMMENDATION: Add a new Section 5.2.6 to read as follows and renumber 5.2.6 and the subsequent sections accordingly:
5.2.6 Emergency Response Personnel Safety. Emergency response personnel shall not be exposed to unreasonable risks during emergency operations conducted within the building.
SUBSTANTIATION: This proposal introduces a new section to address emergency response personnel safety. Part of the reason given for the decision by the NFPA Board of Directors to develop the NFPA 5000 Building Code was to address fire fighter safety. This proposal introduces that concept for consideration in a performance based design.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-247 (Log #CP2055).
COMMITTEE STATEMENT: The action on the referneced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #113)
Committee: SAF-FUN

5000- 257 - (5-2.7 (New)): Reject
SUBMITTER: Charles Smeby, Jr., Florida State Fire College
RECOMMENDATION: Add a new 5-2.7:
"Property Protection Criteria. The design criteria shall assure that no more than $1,000,000 of the building structure can be damaged by and Design Hazard Scenarios."
SUBSTANTIATION: Since the NFPA 5000 draft is substantial derived for the NFPA Life Safety Code and is focused towards occupant safety during a fire, I would like to propose fire protection criteria that would also cover firefighting safety and property protection. Building codes typically contain many items that are property protection features.
Each municipality has an interest in reducing and eliminating fire losses. From both a "Public Policy" perceptive and to maintain structures that provide taxes and places for employment for their citizens, fire losses do have a major fiscal impact of local and state governments.
This would also have the added benefit for reducing insurance premiums that are the direct result of fire loss. Many of the requirements in the typical building code were derived to limit fire losses, and this tradition should be continued in this innovative new code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Property protection is addressed as a function of public welfare. A simple monetary value cannot be established as a threshold at which the goal of property protection should apply.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #589)
Committee: SAF-FUN

5000- 258 - (5-4.4): Accept in Principle
SUBMITTER: John Valiulis, Rep. Hilti, Inc.
RECOMMENDATION: Revise text to read as follows:
"The performance of fire protection systems and building features shall reflect the documented performance and reliability of the components of those systems or features unless design specifications are incorporated to modify the expected performance."
SUBSTANTIATION: This more accurately elaborates on the thought of "Operational status" which is in the title of the section. A good analysis really must incorporate the relative probability of success of different types of fire protective features, both passive and active. As an example, fire protection provided by a double interlocked automatic sprinkler system will be less reliable than protection by a simple wet automatic sprinkler system. The decrease in reliability of one option versus another needs to be taken into account in determining other appropriate features for the building. There is currently nothing in the mandatory sections of the Code to indicate that issues of reliability need to be factored in to a performance based design. Appendix sections such as A.5.4.7, A.5.4.9, and A.5.4.10 do make it clear that reliability (either inherent or due to maintenance, inspection, or emergency procedures) needs to be considered. However, those sections are non-mandatory.
COMMITTEE ACTION: Accept in Principle.
Add the words "and reliability" as shown in the submitter's recommendation, but do it in 5.4.2.2.
COMMITTEE STATEMENT: The paragraph in question has been renumbered.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #721)
Committee: SAF-FUN

5000- 259 - (5-4.6): Reject
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. W R Grace & Company
RECOMMENDATION: Revise text to read as follows:
5.4.6 Emergency Response Personnel. Unless under the continuous and direct control of the building owner or occupant, or nongovernmental emergency response personnel shall not be relied upon in the performance design. Emergency response personnel of the governmental agency legally responsible for providing emergency responders to the local jurisdiction shall be permitted to be relied upon in the performance design when approved by the authority having jurisdiction. When so approve, the design characteristics or other conditions related to the availability, speed of response, effectiveness, roles, and other characteristics of emergency response personnel shall be specified, estimated, or characterized sufficiently for evaluation of the design.
SUBSTANTIATION: Designs developed under the performance based design option should not rely upon the local fire department's response as part of the design solution the local jurisdiction is agreeable to such consideration. The major concern we have is that the fire department response level could change overtime depending upon the needs of society and the willingness to fund the services the community believes are appropriate. In the case where a local community feels confident that it can sustaining the level of the fire department's response over a long period of time, then it may be reasonable to assume that such level of response will be available for the life of the building, and in such case, could be used in the performance based design.
However, because of the many variables involved in providing a given level of fire department response, including adequate water supply for fire fighting operations and reasonable response times, it is most likely

that a consistent level of service cannot be assured over the live of a building which may be as as much as 30 years or more. Thus, the building should be designed on a "stand alone" basis in order to determine its built-in level of protection, unless the emergency responders are under the direct control, on a continuous basis, of the building's owner or occupant. Such control could be achieved by actually employing personnel as part of an on-site brigade or entering into a contract with an agency capable of providing the necessary response level. In those cases, it then becomes necessary to document the design characteristics indicated in this section.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's wording is overly restrictive; current 5.4.4.2 does a better job addressing the subject. Reliance on emergency responders to fulfill part of the performance-based design's protection/solution is something that the AHJ should judge on a case by case basis. Sometimes it is feasible, other times not.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #590)
Committee: SAF-FUN

5000- 260 - (5-5.3.8): Reject
SUBMITTER: John Valiulis, Rep. Hilti, Inc.
RECOMMENDATION: Revise text to read as follows:
5.5.3.8* Design Hazard Scenario 8. Design hazard scenario 8 is a fire originating in ~~ordinary combustibles in~~ a room or area with each passive or active fire protection system independently rendered ineffective. The design fire for each studied area should be the most severe fire resulting from the largest possible fuel load that is characteristic of the normal operation of that part of the building. This set of design fire scenarios shall address concern regarding each fire protection system or fire protection feature, considered individually, being unreliable or becoming unavailable.
Exception No. 1*. This scenario shall not be required to be applied to fire protection systems for which both the level of reliability and the design performance in the absence of the system are acceptable to the authority having jurisdiction.
Exception No. 2: Passive protection features which can be considered to be inherently reliable shall not be required to be included in the study of fire protection features which might be rendered ineffective
A.5.5.3.8 Exception No. 2 Some fire protection features are unlikely to unexpectedly disappear or be rendered ineffective, such as a fire-rated barrier wall, or a heat vent which operates by melting out of the entire cover material. On the other hand, a fire door can easily be propped open and should be considered as a likely scenario. Similarly, an automatic sprinkler system control valve can be purposely, inadvertently or maliciously shut off, and should be considered a realistic failure scenario.
SUBSTANTIATION: Scenario 8 is the only one which considers the "what if" scenarios for any of the fire protection features being unavailable or ineffective on the day of the fire. As such, it is the only one of the scenarios that considers that fact that we do not live in a perfect world. The historical fire record is replete with examples of fire protection features that did not work as intended or as designed when a fire event occurred. Any other field of engineering always considers that materials or assemblies may not behave as expected, and appropriately incorporates safety factors to account for any unperfected, but not unexpected, deviant behavior. Fire protection engineering needs to hold to this same, almost universal, standard. In studying the impact of an outcome due to the failure or ineffectiveness of some designed feature, it would not be wise to use an arbitrary and optimistically unrealistic basis such as a "fire in ordinary combustibles". For example, this could result in a gross under prediction of the turn of events for a flammable liquid storage room, a high rack warehouse with an adjacent office area, or an underground parking garage. It seems to be a reasonable approach to ask that the "what-if" scenarios that are created simply recognize the true fire challenge that can exist.
Exception No. 2 is proposed to recognize that some passive fire protection features can be reasonably counted on to work as intended at the time of a fire. For proposed Exception No. 2, it is recognized that even a fire barrier wall can be completely torn down during the life of a building, or that a heat vent is completely removed and replaced by a solid cover. However, future changes to the construction or occupancy or the building do not seem to be the type of scenarios which are intended to be studied by Scenario 8. In a performance-based design, one must at least assume that some attributes of the studied building will remain constant, or cause a brand new evaluation/design to be made. The presence of walls, number of stories, occupancy, location of stairs, type of construction, etc. are among the features which would considered to be relatively constant, not a variable. If such things are changed, the performance-based design should be redone or reevaluated anyway.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Design fire scenario 8 is not intended to be the most challenging fire. Its intent is to fail a design that makes use of only one protection feature.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2042)
Committee: SAF-FUN

5000- 261 - (Chapter 6): Accept
TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-FUN requesting that:
(1) the action on 6.1.8.1.1 "Definition – One- and Two-Family Dwelling" be superseded by that of Proposal 5000-262 (Log #CP1428) by SAF-RES but with the word "Occupancy" deleted so that the boldface heading is "Definition – One- and Two-Family Dwelling" and not "Definition – One- and Two-Family Dwelling Occupancy".
(2) the terminology for this occupancy be coordinated with what will ultimately end up in Chapter 24. See related proposal 5000-984 (Log#CP1426.)
(3) consideration be given to adding language to 6.4.1.2 to clarify that the reference criteria should only be limited the construction requirements of the referenced documents as was done in section 6.4.1.1.
(4) the documents referenced in 6.4 be made available to the TC's that have responsibility for the chapters that most closely relate to the subject matter of the referenced standards for their review.
SUBMITTER: Technical Committee on Fundamentals
RECOMMENDATION: Create a Chapter 6 Classification of Occupancy and Hazard of Contents to read as follows:

Chapter 6
Classification of Occupancy and Hazard of Contents

6.1 Classification of Occupancy.
6.1.1 General.
6.1.1.1 Occupancy Classification.
6.1.1.1.1 The occupancy of a building or structure, or portion of a building or structure, shall be classified in accordance with 6.1.2 through 6.1.13.
6.1.1.1.2 Occupancy classification shall be subject to the ruling of the authority having jurisdiction where there is a question of proper classification in any individual case.
6.1.1.2 Special Structures. Occupancies in special structures shall conform to the requirements of the specific occupancy Chapters 15 through 29, except as modified by Chapter 30.
6.1.2 Assembly. *(For requirements, see Chapter 15.)*
6.1.2.1* Definition — Assembly Occupancy. An occupancy (1) used for a gathering of 50 or more persons for deliberation, worship,

entertainment, eating, drinking, amusement, awaiting transportation, or similar uses; or (2) used as a special amusement building, regardless of occupant load.

6.1.2.2 Small Assembly Uses. Occupancy of any room or space for assembly purposes by fewer than 50 persons in an other occupancy and incidental to such other occupancy shall be classified as part of the other occupancy and shall be subject to the provisions applicable thereto.

6.1.3 Educational. *(For requirements, see Chapter 16.)*

6.1.3.1* Definition — Educational Occupancy. An occupancy used for educational purposes through the twelfth grade by six or more persons for four or more hours per day or more than 12 hours per week.

6.1.3.2 Other Occupancies. Other occupancies associated with educational institutions shall be in accordance with the appropriate parts of this *Code*.

6.1.3.3 Incidental Instruction. In cases where instruction is incidental to some other occupancy, the section of this *Code* governing such other occupancy shall apply.

6.1.4 Day-Care. *(For requirements, see Chapter 17.)*

6.1.4.1* Definition — Day-Care Occupancy. An occupancy in which four or more clients receive care, maintenance, and supervision, by other than their relatives or legal guardians, for less than 24 hours per day.

6.1.5 Health Care. *(For requirements, see Chapter 18.)*

6.1.5.1* Definition — Health Care Occupancy. An occupancy used for purposes of medical or other treatment or care of four or more persons where such occupants are mostly incapable of self-preservation due to age, physical or mental disability, or because of security measures not under the occupants' control.

6.1.6 Ambulatory Health Care. *(For requirements, see Chapter 19.)*

6.1.6.1 Definition — Ambulatory Health Care Occupancy. A building or portion thereof used to provide services or treatment simultaneously to four or more patients that (1) provides, on an outpatient basis, treatment for patients that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others, or (2) provides, on an outpatient basis, anesthesia that renders the patients incapable of taking action for self-preservation under emergency conditions without the assistance of others.

6.1.7 Detention and Correctional. *(For requirements, see Chapter 20.)*

6.1.7.1* Definition — Detention and Correctional Occupancy. An occupancy used to house four or more persons under varied degrees of restraint or security where such occupants are mostly incapable of self-preservation because of security measures not under the occupants' control.

6.1.7.2* Nonresidential Uses. Within detention and correctional facilities, uses other than residential housing shall be in accordance with the appropriate chapter of the *Code*.

6.1.8 Residential. *(For requirements, see Chapters 21 through 24.)*

6.1.8.1* Definition — Residential Occupancy. An occupancy that provides sleeping accommodations for purposes other than health care or detention and correctional.

6.1.8.1.1* Definition — One- and Two-Family Dwelling. Building containing not more than two dwelling units in which each dwelling unit is occupied by members of a single family with not more than three outsiders, if any, accommodated in rented rooms.

6.1.8.1.2 Definition — Lodging or Rooming House. A building or portion thereof that does not qualify as a one- or two-family dwelling, that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants.

6.1.8.1.3 Definition — Hotel. A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals.

6.1.8.1.4* Definition — Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities.

6.1.8.1.5 Definition — Apartment Building. A building containing three or more dwelling units with independent cooking and bathroom facilities.

6.1.9 Residential Board and Care. *(For requirements, see Chapter 25.)*

6.1.9.1* Definition — Residential Board and Care Occupancy. A building or portion thereof that is used for lodging and boarding of four or more residents, not related by blood or marriage to the owners or operators, for the purpose of providing personal care services.

6.1.10 Mercantile. *(For requirements, see Chapter 26.)*

6.1.10.1* Definition — Mercantile Occupancy. An occupancy used for the display and sale of merchandise.

6.1.11 Business. *(For requirements, see Chapter 27.)*

6.1.11.1* Definition — Business Occupancy. An occupancy used for account and record keeping or the transaction of business other than mercantile.

6.1.12 Industrial. *(For requirements, see Chapter 28.)*

6.1.12.1* Definition — Industrial Occupancy. An occupancy in which products are manufactured or in which processing, assembling, mixing, packaging, finishing, decorating, or repair operations are conducted.

6.1.13 Storage. *(For requirements, see Chapter 29.)*

6.1.13.1* Definition — Storage Occupancy. An occupancy used primarily for the storage or sheltering of goods, merchandise, products, vehicles, or animals.

6.2 Multiple Occupancies

6.2.1 General.

6.2.1.1 Multiple occupancies as defined in 3.106.xx shall comply with Section 6.2.1. In addition, multiple occupancies shall comply with either Section 6.2.2 Mixed Occupancy requirements or Section 6.2.3 Separated Occupancy requirements.

6.2.1.2.* Where incidental to another occupancy, areas used as follows shall be permitted to be considered part of the predominant occupancy and subject to the provisions of the *Code* that apply to the predominant occupancy:

(a) Mercantile, business, industrial, or storage use

(b)* Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold.

6.2.1.3 Each occupancy shall not exceed the area limitations or be located at a height greater than that permitted for such occupancy and the type of construction being used.

6.2.1.4 Where minor accessory uses do not occupy more than 25 percent of the area of any floor of a building, nor more than the basic area permitted for the occupancy by Table 7.3 for such minor use, for the purpose of determining permitted area, the principal use of the building shall determine the occupancy classification.

6.2.1.5 The following accessory occupancies need not be separated from the primary occupancy as required in 6.2.1.4:

(a) An area used solely as a public dining room having an occupant load of not more than 300 persons and accessory to a retail sales area.

(b) An assembly room not over 750 ft^2 (70 m^2) in area, when not accessory to an occupancy with high hazard contents.

(c) Administrative, clerical or other office rooms, which, in the aggregate, are not more than 25 percent of the principal occupancy, when not accessory to an occupancy with high hazard contents, but shall be not more than the basic area permitted for the occupancy and type of construction.

6.2.2 Mixed Occupancies

6.2.2.1 Each portion of the building shall be classified in accordance with Section 6.1 as to its use.

6.2.2.2 The means of egress facilities, type of construction, protection, and other safeguards in the building shall comply with the most restrictive fire and life safety requirements of the occupancies involved.

6.2.2.3 The type of construction required for the building shall be determined by applying the Section 7.3 height and area limitations for each of the occupancies to the entire building.

6.2.2.4 The most restrictive type of construction determined in Section 6.2.2.3 shall apply to the entire building.
6.2.2.5 The most restrictive applicable high rise building provisions and fire-protection system requirements shall apply to all portions of the building.
6.2.3 Separated Occupancies.
6.2.3.1 Where separated occupancies are provided, each part of the building comprising a distinct occupancy, as described in this chapter, shall be completely separated from other occupancies by fire resistive assemblies as specified in 6.2.3.2 through 6.2.3.4 and Table 6.2 as shown on the following page.
6.2.3.2 Occupancy separations shall be classified as 3-hour fire resistance–rated, 2-hour fire resistance–rated, or 1-hour fire resistance–rated, and shall meet the requirements of Chapter 8.
6.2.3.3 Occupancy separations shall be vertical or horizontal or both, or when necessary, of such other form as required to provide complete separation between occupancy divisions in the building.
6.2.3.4 Where the occupancy separation is horizontal, structural members supporting the separation shall be protected by an equivalent fire-resistive construction.
6.3 Hazard of Contents.
6.3.1 General.
6.3.1.1 For the purpose of this *Code*, the hazard of contents shall be the relative danger of the start and spread of fire, the danger of smoke or gases generated, and the danger of explosion or other occurrence potentially endangering the lives and safety of the occupants of the building or structure, or causing damage to the building or its contents.
6.3.1.2 Hazard of contents shall be determined by the authority having jurisdiction on the basis of the character of the contents and the processes or operations conducted in the building or structure.
6.3.1.3 For the purpose of this *Code*, where different degrees of hazard of contents exist in different parts of a building or structure, the most hazardous shall govern the classification, unless hazardous areas are separated or protected as specified in the applicable sections of Chapters 15 through 30.
6.3.2 Classification of Hazard of Contents.
6.3.2.1* The hazard of contents of any building or structure shall be classified as low, ordinary, or high in accordance with 6.3.2.2, 6.3.2.3, and 6.3.2.4.
6.3.2.2* Low Hazard. Low hazard contents shall be classified as those of such low combustibility that no self-propagating fire therein can occur.
6.3.2.3* Ordinary Hazard. Ordinary hazard contents shall be classified as those that are likely to burn with moderate rapidity or to give off a considerable volume of smoke.
6.3.2.4* High Hazard. High hazard contents shall be classified as those that are likely to burn with extreme rapidity or from which explosions are likely.
6.4 Special Operations.
6.4.1 General.
6.4.1.1 In addition to the requirements in this Code, building or structures in which the following operations are conducted, or materials are manufactured, stored, sold or handled shall also comply with applicable construction requirements in the standards and codes in 6.4.2.
6.4.1.2 When conflicts exist between the requirements in this Code and equivalent requirements in the standards and codes included in 6.4.2, the more stringent requirement shall apply.
6.4.2 Specific Operations.
6.4.2.1 Acetylene Cylinder Charging Plants. Buildings and structures in plants that are engaged in the generation and compression of acetylene and in the charging of acetylene cylinders, either as their sole operation or in conjunction with facilities for charging other compressed gas cylinders, shall be constructed in accordance with *NFPA 51A, Standard for Acetylene Cylinder Charging Plants.*
6.4.2.2 Agricultural and Food Products Facilities Buildings and structures associated with the production, storage and handling of agricultural and food products that are subject to accumulation of agricultural dust shall be constructed in accordance with *NFPA 61, Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities.* These includes:

(1) All facilities that handle, process, use, blend, mill, receive, load, ship, package, store, or unload dry agricultural bulk materials, their by-products, or dusts that include grains, oilseeds, agricultural seeds, legumes, sugar, flour, spices, feeds, and other related materials

(2) All facilities designed for manufacturing and handling starch, including drying, grinding, conveying, processing, packaging, and storage of dry or modified starch, and dry products and dusts generated from these processes

(3) Those seed preparation and meal-handling systems of oilseed processing plants not covered by NFPA 36, Standard for Solvent Extraction Plants. (61:1-1.1)

6.4.2.3 Automotive and Marine Service Stations. Automotive service stations, marine service stations, service stations located inside buildings, and fleet vehicle service stations shall be constructed in accordance with *NFPA 30A, Automotive and Marine Service Station Code.*
6.4.2.4 Aerosol Manufacture and Storage. Building and structures in which aerosol products are manufactured, stored, and displayed shall be constructed in accordance with *NFPA 30B, Code for the Manufacture and Storage of Aerosol Products.*
6.4.2.5 Aircraft Engine Test Facilities. Buildings and structures in which aircraft engines are tested within a test cell or on a test stand shall be constructed in accordance with *NFPA 423, Standard for Construction and Protection of Aircraft Engine Test Facilities.*
6.4.2.6 Aircraft Hangers. Aircraft hangers and mezzanines, tool rooms, and other enclosures within aircraft storage and servicing areas shall be constructed in accordance with *NFPA 409, Standard on Aircraft Hangars.*
6.4.2.7 Airport Terminal Buildings. Airport terminal buildings and aircraft loading walkways between the terminal building and aircraft shall be constructed in accordance with *NFPA 415, Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways.*
6.4.2.8 Aluminum Powder. Buildings used for the manufacture, packing, or loading for shipment of aluminum powders shall be constructed in accordance with *NFPA 651, Standard for the Machining and Finishing of Aluminum and the Production and Handling of Aluminum Powders.*
6.4.2.9 Ammonium Nitrate Storage. Buildings in which ammonium nitrate is stored shall be constructed in accordance with *NFPA 490, Code for the Storage of Ammonium Nitrate.*
6.4.2.10 Cellulose Nitrate Motion Picture Film. . Buildings in which cellulose nitrate motion picture film is stored shall be constructed in accordance with *NFPA 40, Standard for the Storage and Handling of Cellulose Nitrate Motion Picture Film.*
6.4.2.11 Compressed Natural Gas (CNG) Vehicular Fuel Systems. Buildings and structures used for compressing, storage and dispensing of CNG as an engine fuel in fleet and public dispensing operations shall be constructed in accordance with *NFPA 52, Compressed Natural Gas (CNG) Vehicular Fuel Systems Code.*
6.4.2.12 Cleanrooms. Buildings in semiconductor fabrication facilities that contain cleanrooms shall be constructed in accordance with *NFPA 318, Standard for the Protection of Cleanrooms.*
6.4.2.13 Coal Preparation Plants. Surface buildings, structures and housing provided as part of a plant designed to prepare coal for shipment shall be constructed in accordance with *NFPA 120, Standard for Coal Preparation Plants.* Such preparation includes the separation, crushing, screening, washing, drying, storage, and loadout of coal to make ready for market.
6.4.2.14 Combustible Particulate Solids. Buildings and structures in all phases of the manufacture, processing, blending, repackaging, and handling of combustible particulate solids, where the materials present a fire or explosion hazard, shall be constructed in accordance with *NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.*
6.4.2.15 Combustion Engines and Gas Turbines. Buildings and rooms in which stationary combustion engines and gas turbines are installed shall be constructed in accordance with *NFPA 37, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.*

TABLE 6.2 Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging / rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300		0	0	2	2	1	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	1	2	2	3	2	3
Assembly > 300, ≤ 1000			0	2	2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	2	3
Assembly > 1000				2	2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	2	3	3	3
Educational					2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day care >12 clients						1	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day-care homes							2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	2	3
Health care								2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	3	2†	2†	2†	3	3	3
Ambulatory health care									2†	2	2	2	2	2	2	2	2	2	2	3	1	2	2	3	2	3
Detention & correctional										2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	3	3	3	2†	NP	3	NP
One- & two-family dwellings											1	1	1	1	2	2	2	2	2	3	2	2	2	3	2	3
Lodging & rooming house												1	1	2	2	2	2	2	2	3	2	2	2	3	2	3
Hotels & dormitories													1	2	2	2	2	2	2	3	2	2	2	3	2	3
Apartment buildings														2	2	2	2	2	2	3	2	2	2	3	2	3
Board & care, small															1	2	2	2	2	3	2	3	3	3	3	3
Board & care, large																2	2	2	2	3	2	3	3	3	3	3
Mercantile, Class A																	0	0	0	3	2	3	3	3	2	3
Mercantile, Class B																		0	0	3	2	3	3	3	2	3
Mercantile, Class C																			0	3	2	3	3	3	2	3
Mercantile, covered mall																				3	2	3	3	3	2	3
Mercantile, bulk retail																					3	3	3	3	3	3
Business																						2	2	3	2	3
Industrial, general purpose																							0	3	2	3
Industrial, special purpose																								3	2	3
Industrial, high hazard																									3	3
Storage, low & ordinary hazard																										3
Storage , high hazard																										

[1] The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, where the building is protected throughout by an approved automatic sprinkler system in accordance with Section 11.3.

NP – Not permitted

† – The 1-hour reduction due to the presence of sprinklers in accordance with Note 1 above shall not be permitted.

6.4.2.16 Compressed and Liquefied Gases. Buildings in which compressed and liquefied gases are stored, used or handled shall be constructed in accordance with *NFPA 55, Standard for the Storage, Use, and Handling of Compressed and Liquefied Gases in Portable Cylinders.*

6.4.2.17 Cooking Operations, Commercial. Buildings in which public and private cooking operations are performed, except for single-family residential occupancies, shall be constructed in accordance with *NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.*

6.4.2.18 Data Processing Facilities. When required by the authority having jurisdiction or the occupant, buildings in which electronic computer/data processing equipment and computer areas are located shall be constructed in accordance with *NFPA 75, Standard for the Protection of Electronic Computer/Data Processing Equipment.*

6.4.2.19 Dipping and Coating Processes Using Flammable or Combustible Liquids. Buildings in which articles or materials are passed through tanks, vats, containers, or process equipment that contain flammable or combustible liquids, including, but are not limited to, dipping, roll coating, flow coating, curtain coating, and cleaning shall be constructed in accordance with *NFPA 34, Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids.*

6.4.2.20 Dry Cleaning Plants. Dry cleaning plants shall be constructed in accordance with *NFPA 32, Standard for Drycleaning Plants.*

6.4.2.21 Emergency Communication Centers. Buildings used as public emergency communication centers and emergency response facilities shall be constructed in accordance with *NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems.*

6.4.2.22 Ethylene Oxide. Buildings and structures that house ethylene oxide storage, dispensing, and use shall be constructed in accordance with *NFPA 560, Standard for the Storage, Handling, and Use of Ethylene Oxide for Sterilization and Fumigation.*

6.4.2.23 Exhaust Systems, Particulate. Buildings and structures containing exhaust systems for air conveying of vapors, gases, mists, and noncombustible particulate solids shall be constructed in accordance with *NFPA 91, Standard for Exhaust Systems for Air Conveying of Vapors, Gases, Mists, and Noncombustible Particulate Solids.*

6.4.2.24 Explosives Manufacturing, Storage and Sale. Buildings in which explosives are manufactured, stored or sold shall be constructed in accordance with *NFPA 495, Explosive Materials Code.*

6.4.2.25 Fireworks and Pyrotechnic Devices. Buildings in which fireworks and pyrotechnic devices are manufactured or stored, and magazines in which these products are stored, shall be constructed in accordance with *NFPA 1124, Code for the Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles.*

6.4.2.26 Flammable and Combustible Liquids. Buildings or structures in which flammable and combustible liquids, including waste liquids, are stored, handled or used shall be constructed in accordance with *NFPA 30, Flammable and Combustible Liquids Code.*

6.4.2.27 Grandstands. Grandstands and folding and telescoping seating shall only be allowed in or near buildings as allowed by *NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures.*

6.4.2.28 Health Care Facilities. Buildings in which medical, dental, psychiatric, nursing, obstetrical, or surgical care are provided, including, but are not limited to, hospitals, nursing homes, limited care facilities, clinics, medical and dental offices, and ambulatory care centers, shall be constructed in accordance with *NFPA 99, Standard for Health Care Facilities.*

6.4.2.29 Heliports. When allowed by the authority having jurisdiction, roof-top heliports and roof-top landing pads shall be constructed in accordance with *NFPA 418, Standard for Heliports.* Fueling systems associated with roof-top heliports shall be constructed in accordance with *NFPA 407, Standard for Aircraft Fuel Servicing.*

6.4.2.30 Hydrogen Systems, Gaseous. Buildings and structures in consumer premises with a gaseous hydrogen system with a storage capacity of more than 400 scf (11 m^3) shall be constructed in accordance with *NFPA 50A, Standard for Gaseous Hydrogen Systems at Consumer Sites.*

6.4.2.31 Hydrogen Systems, Liquefied. Buildings and structures in consumer premises with a gaseous hydrogen system with a storage capacity of more than 39.63 gal (150 L) shall be constructed in accordance *with NFPA 50B, Standard for Liquefied Hydrogen Systems at Consumer Sites.*

6.4.2.32 Hypobaric Facilities. Buildings in which hypobaric facilities and chambers are located shall be constructed in accordance with *NFPA 99B, Standard for Hypobaric Facilities.*

6.4.2.33 Incinerators and Waste Handling Systems. Buildings containing incinerators, or waste handling chutes, conveying systems, storage rooms, and compactors shall be constructed in accordance *NFPA 82, Standard on Incinerators and Waste and Linen Handling Systems and Equipment.*

6.4.2.34 Laboratories Using Chemicals. Buildings in which chemicals are handled or stored, and where laboratory-scale operations are conducted shall be constructed in accordance with *NFPA 45, Standard on Fire Protection for Laboratories Using Chemicals.*

6.4.2.35 Linen Handling Systems. Buildings containing linen and laundry chutes and conveying systems shall be constructed in accordance with *NFPA 82, Standard on Incinerators and Waste and Linen Handling Systems and Equipment.*

6.4.2.36 Lithium Storage, Processing and Handling. Buildings intended for the storage, handling, processing, or use of lithium shall be constructed in accordance with *NFPA 485, Standard for the Storage, Handling, Processing, and Use of Lithium Metal.*

6.4.2.37 LNG Fueling Facilities. Buildings associated with LNG fueling operations shall be constructed in accordance with *NFPA 57, Liquefied Natural Gas (LNG) Vehicular Fuel Systems Code.*

6.4.2.38 LNG Production Facilities. Buildings and structures associated with the production and related storage and handling of Liquefied Natural Gas (LNG) and shall be constructed in accordance with *NFPA 59A, Standard for the Production, Storage, and Handling of Liquefied Natural Gas (LNG).*

6.4.2.39 LP-Gas Distribution Facilities. Buildings or structures housing LP-gas distribution facilities shall be constructed in accordance with *NFPA 58, Liquefied Petroleum Gas Code.*

6.4.2.40 Magnesium Storage, Handling and Processing. Buildings in which magnesium solids and powders are stored, handled or processed, including mills, foundries, production plants and storage facilities, shall be constructed in accordance with *NFPA 480, Standard for the Storage, Handling, and Processing of Magnesium Solids and Powders.*

6.4.2.41 Marinas and Boatyards. Buildings and structures used for construction, repair, storage, hauling, launching, or fueling of vessels shall be constructed in accordance with *NFPA 303, Fire Protection Standard for Marinas and Boatyards*, if fire on a dock would pose an immediate threat to these facilities, or a fire at a referenced facility would pose an immediate threat to a dock area.

6.4.2.42 Marine Terminals, Piers and Wharves. Buildings and structures provided as part of a marine terminal shall be constructed in accordance with *NFPA 307, Standard for the Construction and Fire Protection of Marine Terminals, Piers, and Wharves.*

6.4.2.43 Membrane Structures. Membrane structures provided as part of a building or structure shall comply with *NFPA 102, Standard for Grandstands, Folding and Telescopic Seating, Tents, and Membrane Structures.*

6.4.2.44 Model Rocket Motor Manufacturing. Buildings in which model rocket motors are manufactured, and associated storage buildings and magazines shall be constructed in accordance with *NFPA 1125, Code for the Manufacture of Model Rocket and High Power Rocket Motors.*

6.4.2.45 Motion Picture and Television Production Facilities. Buildings and structures used as soundstages and production studios in the motion picture and television industry shall be constructed in accordance with *NFPA 140, Standard on Motion Picture and Television Production Studio Soundstages and Approved Production Facilities.*

6.4.2.46 Motor Freight Terminals. Buildings in which the overall operation of freight transfer, vehicle repair and service, truck parking, and administrative functions are performed shall be constructed in accordance with *NFPA 513, Standard for Motor Freight Terminals.*

6.4.2.47 Nuclear Power Plants. Nuclear power plant buildings and structures shall be constructed in accordance with *NFPA 803, Standard for Fire Protection for Light Water Nuclear Power Plants*, or *NFPA 804, Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants*, as applicable.

6.4.2.48 Oil-Burning Equipment. Rooms in buildings containing an oil-fuel storage tank shall be constructed in accordance with *NFPA 31,Standard for the Installation of Oil-Burning Equipment.*

6.4.2.49 Organic Coating Manufacturing Facilities. Buildings and structures in which flammable and combustible liquids are used to manufacture organic coatings for automotive, industrial, institutional, household, marine, printing, transportation, and other applications shall be constructed in accordance with *NFPA 35, Standard for the Manufacture of Organic Coatings.*

6.4.2.50 Organic Peroxide Storage. Buildings and structures in which organic peroxide formulations are stored shall be constructed in accordance with *NFPA 432, Code for the Storage of Organic Peroxide Formulations.*

6.4.2.51 Oxidizers, Mercantile Sales of. Buildings and structures in which liquid and solid oxidizers are sold shall be constructed in accordance with *NFPA 430, Code for the Storage of Liquid and Solid Oxidizers.*

6.4.2.52 Oxidizers, Storage of. Buildings and structures in which liquid and solid oxidizers are stored shall be constructed in accordance with *NFPA 430, Code for the Storage of Liquid and Solid Oxidizers.*

6.4.2.53 Oxygen-Fuel Gas Systems. Buildings and structures in which oxygen-fuel gas welding and cutting systems are used for welding or cutting, gaseous fuels are generated from flammable liquids, or calcium carbide is stored shall be constructed in accordance *NFPA 51, Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes.*

6.4.2.54 Oxygen Systems, Bulk. Buildings and structures in consumer premises with a bulk oxygen system with a storage capacity of more than 20,000 ft^3 (566 m^3) of oxygen (NTP) shall be constructed in accordance with *NFPA 50, Standard for Bulk Oxygen Systems at Consumer Sites.*

6.4.2.55 Parking Structures. Open, enclosed, basement, and underground parking structures, other than those provided with one- and two-family dwellings, shall be constructed in accordance with *NFPA 88A, Standard for Parking Structures.*

6.4.2.56 Pesticide Storage. Buildings in which pesticides are stored shall be constructed in accordance with *NFPA 434, Code for the Storage of Pesticides.*

6.4.2.57 Pyroxylin Plastic Storage. . Buildings in which pyroxylin plastics are stored in the form of raw material, unfinished and finished products, or scrap shall be constructed in accordance with *NFPA 42, Code for the Storage of Pyroxylin Plastic.*

6.4.2.58 Racetrack Facilities. Buildings and structures provided at racetracks, including those containing stalls for housing horses, human sleeping quarters,
feed rooms, tack rooms, equipment storage rooms, blacksmith shops, kitchens, mechanical equipment rooms and toilet facilities shall be constructed in accordance with *NFPA 150, Standard on Fire Safety in Racetrack Stables.*

6.4.2.59 Radioactive Materials. Buildings in which radioactive materials are stored, handled, or used in quantities and conditions requiring government oversight (e.g., U.S. Nuclear Regulatory Commission or U.S. Department of Energy, etc.) license to possess or use these materials and to all other locations with equal quantities or conditions shall be constructed in accordance with *NFPA 801, Standard for Fire Protection for Facilities Handling Radioactive Materials.*

6.4.2.60 Repair Garages. Garages used for major repair and maintenance of motorized vehicles and any sales and servicing facilities associated therewith shall be constructed in accordance *with NFPA 88B, Standard for Repair Garages.*

6.4.2.61 Solvent Extraction Plants. Buildings and structures in which commercial scale extraction processing of animal and vegetable oils and fats by the use of Class I flammable hydrocarbon liquids is conducted, and all buildings and structures within 100 ft (30 m) of such an extraction process, shall be constructed in accordance with *NFPA 36, Standard for Solvent Extraction Plants.*

6.4.2.62 Spray Application Using Flammable or Combustible Materials. Buildings in which flammable or combustible materials are sprayed or applied by fluidized bed application methods, either continuously or intermittently, shall be constructed in accordance with *NFPA 33, Standard for Spray Application Using Flammable or Combustible Materials.*

6.4.2.63 Sulfur Processing. Buildings and structures in which sulfur grinding or pulverizing machinery is located shall constructed in accordance with *NFPA 655, Standard for Prevention of Sulfur Fires and Explosions.*

6.4.2.64 Titanium Production and Processing. Buildings housing titanium reduction furnaces, boring and crushing facilities, refining operations and titanium powder drying operations shall be constructed in accordance with *NFPA 481, Standard for the Production, Processing, Handling, and Storage of Titaniu*m.

6.4.2.65 Waste Water Treatment Plants. Buildings and structures in waste water treatment plants shall be constructed in accordance with *NFPA 820, Standard for Fire Protection in Wastewater Treatment and Collection Facilities.*

6.4.2.66 Wood Processing and Woodworking Facilities. Buildings and structures in facilities that handle, store, or process wood or wood products that produce or utilize finely divided wood particles or wood fibers shall be constructed in accordance with *NFPA 664, Standard for the Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities.* Such facilities include, but are not limited to, wood flour plants, woodworking plants, lumber mills, and composite board plants.

6.4.2.67 Zirconium Production and Processing. Buildings housing zirconium reduction furnaces, boring and crushing facilities, refining operations and zirconium powder drying operations shall be constructed in accordance with *NFPA 482, Standard for the Production, Processing, Handling, and Storage of Zirconiu*m.

Chapter 6 Annex

A.6.1.2.1 Assembly Occupancy. Assembly occupancies might include the following:

(1) Armories
(2) Assembly halls
(3) Auditoriums
(4) Bowling lanes
(5) Club rooms
(6) College and university classrooms, 50 persons and over
(7) Conference rooms
(8) Courtrooms
(9) Dance halls
(10) Drinking establishments
(11) Exhibition halls
(12) Gymnasiums
(13) Libraries
(14) Mortuary chapels
(15) Motion picture theaters
(16) Museums
(17) Passenger stations and terminals of air, surface, underground, and marine public transportation facilities
(18) Places of religious worship
(19) Pool rooms
(20) Recreation piers
(21) Restaurants
(22) Skating rinks
(23) Special amusement buildings regardless of occupant load
(24) Theaters

Assembly occupancies are characterized by the presence or potential presence of crowds with attendant panic hazard in case of fire or other emergency. They are generally or occasionally open to the public, and the occupants, who are present voluntarily, are not ordinarily subject to discipline or control. Such buildings are ordinarily occupied by able-bodied persons and are not used for sleeping purposes. Special conference rooms, snack areas, and other areas incidental to, and under the control of, the management of other occupancies, such as offices, fall under the 50-person limitation.

Restaurants and drinking establishments with an occupant load of fewer than 50 persons should be classified as mercantile occupancies.

For special amusement buildings, see 15.4.7.

A.6.1.3.1 Educational Occupancy. Educational occupancies include the following:

(1) Academies
(2) Kindergartens
(3) Schools

An educational occupancy is distinguished from an assembly occupancy in that the same occupants are regularly present.

A.6.1.4.1 Day-Care Occupancy. Day-care occupancies include the following:

(1) Adult day-care occupancies, except where part of a health care occupancy
(2) Child day-care occupancies
(3) Day-care homes
(4) Kindergarten classes that are incidental to a child day-care occupancy
(5) Nursery schools

In areas where public schools offer only half-day kindergarten programs, many child day-care occupancies offer state-approved kindergarten classes for children who need full-day care. As these classes are normally incidental to the day-care occupancy, the requirements of the day-care occupancy should be followed.

A.6.1.5.1 Health Care Occupancy. Health care occupancies include the following:

(1) Hospitals
(2) Limited care facilities
(3) Nursing homes

Occupants of health care occupancies typically have physical or mental illness, disease, or infirmity. They also include infants, convalescents, or infirm aged persons.

A.6.1.7.1 Detention and Correctional Occupancy. Detention and correctional occupancies include the following:

(1) Adult and juvenile substance abuse centers
(2) Adult and juvenile work camps
(3) Adult community residential centers
(4) Adult correctional institutions
(5) Adult local detention facilities
(6) Juvenile community residential centers
(7) Juvenile detention facilities
(8) Juvenile training schools

A.6.1.7.2 Chapter 20 addresses the residential housing areas of the detention and correctional occupancy. Examples of uses other than residential housing include gymnasiums or industries.

A.6.1.8.1 Residential Occupancy. Residential occupancies are treated as separate occupancies in this *Code* as follows:

(1) One- and two-family dwellings (Chapter 21)
(2) Lodging or rooming houses (Chapter 22)
(3) Hotels, motels, and dormitories (Chapter 23)
(4) Apartment buildings (Chapters 24)

A.6.1.8.1.1 The definition of *one- and two-family dwelling* states that each dwelling unit can be "occupied by members of a single family with not more than three outsiders..." The Code does not define the term *family*. The definition of *family* is subject to federal, state, and local regulations and might not be restricted to a person or a couple (two people) and their children. The following examples aid in differentiating between a single-family dwelling and a lodging or rooming house:

(1) An individual or a couple (two people) who rent a house from a landlord and then sublease space for up to three individuals should be considered a family renting to a maximum of three outsiders, and the house should be regulated as a single-family dwelling in accordance with Chapter 21.

(2) A house rented from a landlord by an individual or a couple (two people) in which space is subleased to four or more individuals, but not more than 16, should be considered and regulated as a lodging or rooming house in accordance with Chapter 22.

(3) A residential building that is occupied by four or more individuals, but not more than 16, each renting from a landlord, without separate cooking facilities, should be considered and regulated as a lodging or rooming house in accordance with Chapter 22.

A.6.1.8.1.3 So-called apartment hotels should be classified as hotels because they are potentially subject to the same transient occupancy as hotels. Transients are those who occupy accommodations for less than 30 days.

A.6.1.8.1.4 Rooms within dormitories intended for the use of individuals for combined living and sleeping purposes are guest rooms or guest suites. Examples of dormitories are college dormitories, fraternity and sorority houses, and military barracks.

A.6.1.9.1 Residential Board and Care Occupancy. The following are examples of facilities that are classified as residential board and care occupancies:

(1) A group housing arrangement for physically or mentally handicapped persons who normally attend school in the community, attend worship in the community, or otherwise use community facilities
(2) A group housing arrangement for physically or mentally handicapped persons who are undergoing training in preparation for independent living, for paid employment, or for other normal community activities
(3) A group housing arrangement for the elderly that provides personal care services but that does not provide nursing care
(4) Facilities for social rehabilitation, alcoholism, drug abuse, or mental health problems that contain a group housing arrangement and that provide personal care services but do not provide acute care
(5) Assisted living facilities
(6) Other group housing arrangements that provide personal care services but not nursing care

A.6.1.10.1 Mercantile Occupancy. Mercantile occupancies include the following:

(1) Auction rooms
(2) Department stores
(3) Drugstores
(4) Restaurants with fewer than 50 persons
(5) Shopping centers
(6) Supermarkets

Office, storage, and service facilities incidental to the sale of merchandise and located in the same building should be considered part of the mercantile occupancy classification.

A.6.1.11.1 Business Occupancy. Business occupancies include the following:

(1) Air traffic control towers (ATCTs)
(2) City halls
(3) College and university instructional buildings, classrooms under 50 persons, and instructional laboratories
(4) Courthouses
(5) Dentists' offices
(6) Doctors' offices
(7) General offices
(8) Outpatient clinics, ambulatory
(9) Town halls

Doctors' and dentists' offices are included, unless of such character as to be classified as ambulatory health care occupancies.

Birth centers occupied by fewer than four patients, not including infants, at any one time; not providing sleeping facilities for four or more occupants; and not providing treatment procedures that render four or more patients, not including infants, incapable of self-preservation at any one time should be classified as business occupancies. For birth centers occupied by patients not meeting these parameters, see Chapters 18 and 19.

Service facilities common to city office buildings such as newsstands, lunch counters serving fewer than 50 persons, barber shops, and beauty parlors are included in the business occupancy group.

City halls, town halls, and court houses are included in this occupancy group insofar as their principal function is the transaction

of public business and the keeping of books and records. Insofar as they are used for assembly purposes, they are classified as assembly occupancies.

A.6.1.12.1 Industrial Occupancy. Industrial occupancies include the following:

(1) Dry cleaning plants
(2) Factories of all kinds
(3) Food processing plants
(4) Gas plants
(5) Hangars (for servicing/maintenance)
(6) Laundries
(7) Power plants
(8) Pumping stations
(9) Refineries
(10) Sawmills
(11) Telephone exchanges

In evaluating the appropriate classification of laboratories, the authority having jurisdiction should treat each case individually based on the extent and nature of the associated hazards. Some laboratories are classified as occupancies other than industrial; for example, a physical therapy laboratory or a computer laboratory.

A.6.1.13.1 Storage Occupancy. Storage occupancies include the following:

(1) Barns
(2) Bulk oil storage
(3) Cold storage
(4) Freight terminals
(5) Grain elevators
(6) Hangars (for storage only)
(7) Parking structures
(8) Stables
(9) Truck and marine terminals
(10) Warehouses

Storage occupancies are characterized by the presence of relatively small numbers of persons in proportion to the area.

A.6.2.1.2 Examples of uses that might be incidental to another occupancy include the following:

(1) A newsstand (mercantile) in an office building
(2) A giftshop (mercantile) in a hotel
(3) A small storage area (storage) in any occupancy
(4) Minor office space (business) in any occupancy
(5) A maintenance area (industrial) in any occupancy

A.6.2.1.2(b) Examples of uses that have occupant loads below the occupancy classification threshold levels include the following:

(1) An assembly use with fewer than 50 persons within a business occupancy
(2) An educational use with fewer than 6 persons within an apartment building.

A.6.3.2.1 These classifications do not apply to the application of sprinkler protection classifications. See NFPA 13, *Standard for the Installation of Sprinkler Systems*.

A.6.3.2.2 Chapter 29 recognizes storage of noncombustible materials as low hazard. In other occupancies it is assumed that, even where the actual contents hazard is normally low, there is sufficient likelihood that some combustible materials or hazardous operations will be introduced in connection with building repair or maintenance, or some psychological factor might create conditions conducive to panic, so that the egress facilities cannot safely be reduced below those specified for ordinary hazard contents.

A.6.3.2.3 Ordinary hazard classification represents the conditions found in most buildings and is the basis for the general requirements of this *Code*.

The fear of poisonous fumes or explosions is necessarily a relative matter to be determined on a judgment basis. All smoke contains some toxic fire gases but, under conditions of ordinary hazard, there should be no unduly dangerous exposure during the period necessary to escape from the fire area, assuming there are proper exits.

A.6.3.2.4 High hazard contents include occupancies where flammable liquids are handled or used or are stored under conditions involving possible release of flammable vapors; where grain dust, wood flour or plastic dust, aluminum or magnesium dust, or other explosive dusts are produced; where hazardous chemicals or explosives are manufactured, stored, or handled; where cotton or other combustible fibers are processed or handled under conditions producing flammable flyings; and other situations of similar hazard.

SUBSTANTIATION: The NFPA 5000 draft that was published for purposes of soliciting public proposals does not fulfill the requirement that the Report on Proposals contain proposals for all the material that is to appear in a new document. This proposal makes clear the SAF-FUN committee's choice of what is to be contained in Chapter 6 on classification of occupancy and hazard of contents. The draft incorporates the actions taken on the proposals on Chapter 6; includes editorial changes; and reflects changes made by the committee to NFPA 101 material so as to be appropriate for the building code.

COMMITTEE ACTION: Accept.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP1428)
Committee: SAF-RES

5000- 262 - (6-1): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comment on this proposal be submitted in the TCC's name to SAF-RES requesting that:

(1) only the portion of the proposal dealing with the definitions of "Multifamily Dwelling" and "One- and Two-Family Dwelling" be done because the remainder is more accurately accomplished by Proposal 5000-261 (Log #CP2042) by SAF-FUN.

(2) The terminology for this occupancy be coordinated with what will ultimately end up in Chapter 24. See related proposal 5000-984 (Log# CP1426).

SUBMITTER: Technical Committee on Residential Occupancies

RECOMMENDATION: Add the following residential occupancy classifications and definitions:

6.1.X Hotels and Dormitory Occupancies. For requirements, see Chapter 23.

6.1.X.1 Definition–Dormitory. A building or a space in a building in which group sleeping accommodations are provided for more than 16 persons who are not members of the same family in one room or a series of closely associated rooms under joint occupancy and single management, with or without meals, but without individual cooking facilities.

6.1.X.2 Definition–Hotel. A building or groups of buildings under the same management in which there are sleeping accommodations for more than 16 persons and primarily used by transients for lodging with or without meals.

6.1.X Lodging or Rooming House. For requirements, see Chapter 22.

6.1.X.1 Definition–Lodging or Rooming House. A building or portion thereof that does not qualify as a one- or two-family dwelling, that provides sleeping accommodations for a total of 16 or fewer people on a transient or permanent basis, without personal care services, with or without meals, but without separate cooking facilities for individual occupants.

6.1.X Multifamily Dwelling. For requirements, see Chapter 24.

6.1.X.1 Definition–Multifamily Dwelling Occupancy. A building containing three or more dwelling units with independent cooking and bathroom facilities.

6.1.X One- and Two-Family Dwelling. For requirements, see Chapter 21.

6.1.X.1 Definition–One- and Two-Family Dwelling Occupancy. A building containing not more than two dwelling units with independent cooking and bathroom facilities.

SUBSTANTIATION: The Technical Committee on Residential Occupancies proposes the noted definitions of residential occupancies be added to Chapter 6 to make the Code more user-friendly. The term 'apartment building' is revised to 'multifamily dwelling' in accordance with the action on Proposal 5000-984 (Log #CP1426).

COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
NOT RETURNED: 1 Gottlieb
COMMENT ON AFFIRMATIVE:
FRANCIS: This proposal attempts to regulate residential uses based on an undefined concept called "Family". There is significant legal precedent regarding such activities. The proposal also contains a comment about closely associated rooms. It is perilously close to creating a condition wherein the authority having jurisdiction can only enforce this section in an arbitrary and capricious manner. It seems to be the opinion of the committee that enforcement will be by sound judgment so I am able to support the committee position. On the matter of the definition of "family" I simply believe there is no good performance definition of "family" immediately available for use in this context and concur with the committee's proposal to forge ahead.
LATHROP: The definitions should all be within 6.1.8 in the order of appearance in the Code.

(Log #1100)
Committee: SAF-FUN

5000- 263 - (6-1.1.1): Reject
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete the last sentence.
SUBSTANTIATION: The right of the authority having jurisdiction to make decisions based on the Building Code is established in the first chapter and does not need to be repeated throughout the Code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The sentence that the submitter wants to delete comes from NFPA 101 where it has worked effectively. The AHJ should have the final determination of occupancy classification. The sentence needs to be retained.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #161)
Committee: SAF-BCF

5000- 264 - (6-1.3.1): Reject
SUBMITTER: Thomas W. Jaeger, Adrew B. Boman, Gage-Babcock & Assoc., Inc./Rep. American Health Care Association
RECOMMENDATION: Provide new Section to read as follows:
6.1.3.1 Definition - Assisted Living Facility. An occupancy that serves as a congregate residential setting that provides or coordinates personal services, 24-hour supervision and assistance (scheduled and unscheduled), activities, and health-related services.
SUBSTANTIATION: This modification is necessary with the proposal to include Assisted Living as a separate Occupancy Classification.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Assisted living facilities are within the scope of board and care occupancies, therefore a separate chapter and associated definition are not necessary. See also the Committee Action on Proposal 5000-1424 (Log #158).
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 16
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
NOT RETURNED: 1 Groner

(Log #385)
Committee: SAF-MER

5000- 265 - (6-1.10.1): Reject
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Replace proposed definition with new clarification for Mercantile Occupancy as follows:
6.1.10.1* Definition — Mercantile Occupancy. ~~An occupancy used for the display and sale of merchandise.~~ The occupancy or use of a building or structure or that portion thereof used for the wholesale or retail display, storage, and merchandising of goods or wares.
SUBSTANTIATION: The Mercantile Occupancy definition used in NFPA 30, Flammable and Combustible Liquids Code, is more complete.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: It was determined that the current definition adequately addresses the application for the NFPA 5000 document. The proposed definition adds the reference to storage which is not within the responsibility of this chapter. Also the definition establishes a list of selling activity such as retail and warehouse which was determined not needed.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
NEGATIVE: 1
EXPLANATION OF NEGATIVE:
TABAR: See my Explanation of Negative Vote on Proposal 5000-183 (Log #384).

(Log #1101)
Committee: SAF-IND

5000- 266 - (6-1.13.1): Reject
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Revise Section 6.1.13.1. Add at the end of the paragraph "not considered high hazard".
SUBSTANTIATION: Additional changes are being submitted to create a high hazard classification. Limiting the storage occupancy to other than high hazard is necessary in the definition.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The proposed text is not necessary. It is not the intent to limit the application of the requirements found within Chapter 29 for Storage Occupancies to low and ordinary contents. Chapter 33 which pertains to Hazardous Occupancies will provide the necessary requirements for those contents that are classified as high hazard.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 19
NOT RETURNED: 3 Harshbarger, Tabar, Wren

(Log #808)
Committee: SAF-FUN

5000- 267 - (6-1.14): Accept in Principle
SUBMITTER: Gene Boecker, CCI (Code Consultants, Inc.)
RECOMMENDATION: Revise as follows:
6.1.14 Mixed Occupancies
6.1.14.1 Definition - Mixed Occupancy. An occupancy in which two or more classes of occupancy exist in the same building or structure and where such classes are intermingled so that separate safeguards are impracticable or otherwise not desired.
~~6.1.14.2 Applicable Requirements. Where a mixed occupancy classification occurs, the means of egress facilities, construction, protection, and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved.~~
~~Exception: Where incidental to another occupancy, buildings used as follows shall be permitted to be considered part of the predominant occupancy and subject to the provisions of the Code that apply to the predominant occupancy:~~
~~(a) Mercantile, business, industrial, or storage use~~
~~(b) Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold.~~
6.2 unchanged
6.3 ~~Fire Ratings for Occupancy Separations~~ Multiple Occupancies.
6.3.1 General.
~~6.3.4.1~~ When a building is used for more than one occupancy, each part of the building comprising a distinct occupancy, as described in this chapter shall be separated from other occupancies as specified in 6.3.3 and in Table 6.3. or else classified as a Mixed Occupancy and treated as specified in 6.3.2 or a combination of both.
Exception: Where incidental to another occupancy, building areas used as follows shall be permitted to be considered part of the

predominant occupancy and subject to the provisions of the Code that apply to the predominant occupancy:
(a) Mercantile, business, or storage use
(b) Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold.

6.3.1 Mixed Occupancies

6.~~1.14.2~~3.2.1 ~~Applicable Requirements.~~ Where a Mixed Occupancy classification occurs, the ~~means of egress~~ construction, fire protection, and other safeguards shall comply with the most restrictive life safety requirements of the occupancies involved. Height and area calculations shall be based upon the most restrictive occupancy provided and applies to the entire building.

6.3.2.2 The means of egress requirements in a Mixed Occupancy shall apply separately to each occupancy but shall not be reduced where egress from one occupancy leads through another.

6.3.~~4~~3 A building housing more than one occupancy shall conform to the requirements of this Code for height, area and type of construction applying to ~~the principle~~ each occupancy of the building. Occupancies in the same building ~~other than the principle occupancy~~ shall not exceed the area limitations or be located at a story height greater than that permitted for such occupancy and the type of construction being used.

6.3.~~1.1~~3.2 Separation shall be provided between the various groups and divisions of occupancies as specified in Table 6.3 and in accordance with Chapter 8 and other portions of this Code.

Insert Table 6.3 (to be developed)

6.3.~~1.~~3.3 Storage areas of more than 30,000 cubic feet used for the storage of combustibles shall be separated from adjacent areas by not less than a 2-hour fire-resistive occupancy separation.

6.3.~~4.~~3.4 When minor accessory uses do not occupy more than 25 percent of the area of any floor of a building, nor more than the basic area permitted for the occupancy by Table ~~6~~7.3 for such minor use, for the purpose of determining permitted area, the principle use of the building shall determine the occupancy classification, when the uses are separated as specified in this section. Such principle use shall be used to determine height and area limitations for the type of construction used.

Exception: The following accessory occupancies need not be separated from the ~~primary~~ principle occupancy as required herein:
(a) An area used solely as a public dining room having an occupancy load of not more than 300 and accessory to a retail sales area.
(b) An assembly room not over 750 ft^2 in area, when not accessory to a Hazardous occupancy.
(c) Administrative, clerical or other office rooms, which, in the aggregate, are not more than 25 percent of the principle, when not accessory to a Hazardous occupancy, but shall be not more than the basic area permitted for the occupancy and type of construction.

6.3.~~5~~4 Forms of Occupancy Separation. Occupancy separations shall be vertical or horizontal or both, or when necessary, of such other form as required to provide complete separation between occupancy divisions in the building.

6.3.~~1.2~~4.1 Where the occupancy separation is horizontal, structural members supporting the separation shall be protected by an equivalent fire-resistive construction.

6.3.~~6~~5 Occupancy Separations Classified.

6.3.~~6~~5.1 Occupancy separations shall be classified as, 3. hour fire-resistive, 2-hour fire-resistive and 1-hour fire-resistive. ~~(See NFPA 90A, Standard for the Installation of Air Conditioning and Ventilating Systems, and NFPA 221, Standard for Fire Walls and Fire Barrier Walls for specifications for fire dampers in air ducts piercing occupancy separations.)~~

renumber 6.3.2 to 6.3.6 (Tenant Separations)

renumber 6.3.3 to 6.3.7 (Separation Between Townhouses)

SUBSTANTIATION: The current organization of the code text dealing with mixed use is confusing. Although lengthy, the reconstruction of this section clarifies how multiple occupancies within a building should be addressed. The appendix (A.6.1.14.1) states that the "code sets no specific occupancy separation," however, the code is not clear that this condition exists. The proposed 6.3.1.1 states that the option exists for separation or non-separation. No where else in the code (other than in the appendix) is this actually stated.

The following discusses each proposed section in more detail.

6.1.14.1 - The definition is modified to indicate that it is not solely the fact that separation is impractical but that it may simply be a desired option. The term "impractical" is subjective and is troublesome to interpret and enforce. It also implies that the impracticality of separation is the only criteria to evaluate whether separation should be provided. In fact, the condition can exist simply because the code does not require a separation. By stating "or not otherwise desire: it also opens the option to the designer to either choose to separate and thus evaluate each occupancy separately or else to consider the condition as a mixed occupancy and thus require that all safeguards for each occupancy be applied throughout the building.

The "applicable requirements" from draft 6.1.14.2 and its exception are proposed to be relocated to 6.3.

6.2 - Nothing is proposed to be changed. The unchanged text is not shown for brevity.

6.3 - The title is revised to acknowledge that the mixed occupancy condition is included.

6.3.1 - The information from the draft 6.3.4.1 is relocated here since it is a charging statement. The added phrase makes it clear that there are two ways that the multiple occupancy condition can be addressed.

The exception from the draft 6.1.14.2 definition/applicable requirements is moved to this location since it indicates conditions where neither a mixed occupancy nor a separation between occupancies is required.

6.3.2 - The "applicable requirements" from draft 6.1.14.2 is retitled for code text as mixed occupancies.

6.3.2.1 - The requirements from draft 6.1.14.2 are relocated here to address what is necessary if a mixed occupancy condition exists. "Means of egress" is not included in this subsection to allow for a specific subsection to deal with the issue. The added sentence discusses how height and area, and subsequently construction type is to be addressed.

6.3.2.2 - A new section is added to discuss now means of egress is to be addressed in a mixed occupancy condition. The draft text lumps means of egress in with the other safeguards as being required to be the most restrictive for the entire building. This is inappropriate and can be interpreted as requiring such things as a 15 square foot per occupant factor being applied to the restaurant kitchen, office, and storeroom.

6.3.3 - Logically, the next discussion the code should be the alternative to the mixed occupancy condition. The section is retitled to better indicate the content.

6.3.3.1 - Draft 6.3.4.2 is relocated here (6.3.4.1 was relocated to 6.3.1 and is not shown in strikeout for clarity). The term "principle" use is deleted since it is entirely possible that there are enough occupancies present that a "principle' occupancy cannot be accurately determined. Rather each occupancy in its respective height and area are considered. Section 7.2.1.3 already dictates that only a single type of construction can be provided within the building so the user will not be trying to mix the heights and areas based on differing types of construction.

6.3.3.2 - Draft 6.3.1.1 is relocated here since it follows the logic of increasing specificity.

Table 6.3 - The Table is relocated here.

6.3.3.3 - The specific language in draft 6.3.1.3 is relocated here. Alternatively, the text could be relocated to Chapter 29 or included within Table 6.3.

6.3.3.4 - This section addresses a condition where a "principle" use can occur. Draft 6.3.4.3 and its exception are relocated here and should be the last item in the Occupancy Separation section since it is meaningless where the mixed occupancy condition exists.

6.3.4 - The next logical section should be renumbered from 6.3.5.

6.3.4.1 0 Draft 6.3.1.2 is relocated here since it further describes how the rating for separations should provide continuity.

6.3.5 - Similarly, draft 6.3.6 is renumbered. The parenthetical information is deleted in the proposal. It is more appropriate in an appendix, if at all.

6.3.6 - Draft 6.3.2 is relocated here. Again, it is a more specific item and should be located after the general criteria regarding occupancy separations.

6.3.7 - Draft 6.3.3 is relocated and renumbered.

The entire end of Chapter 6 is basically maintained but with a few changes for clarity. The reorganization puts the whole mixed/multiple/separated occupancies discussion in a logical format. I realize that this appears to be a major change at first glance due to its scope. Upon careful review, I think you will find that it's a workable presentation of the code.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-268 (Log #CP2043).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2043)

Committee: SAF-FUN

5000- 268 - (6-1.14 and Section 6.3): Accept

TCC NOTE: The Technical Correlating Committee (TCC) directs that a public comments on this proposal be submitted in the TCC's name to SAF-AXM, SAF-END, SAF-HEA, SAF-DET, SAF-RES, SAF-BCF, SAF-MER and SAF-IND requesting that each technical committee evaluate the fire resistance-rated hourly separation requirements of Table 6.2 applicable to its occupancy and Tables 7.4.3(a) and 7.4.3.(b). The TCC requests that the evaluation and preparation of any needed substitute values be prepared in time for consideration by SAF-FUN at its ROC-preparation meeting which typically occurs as the first meeting of committee weeks and by BLD-STR at its ROC-preparation meeting which will occur during the second set of committee weeks.

SUBMITTER: Technical Committee on Fundamentals

RECOMMENDATION: 1. Replace 6.1.14 and Section 6.3 with the following. Renumber Section 6.2 as Section 6.3.

6.2 Multiple Occupancies

6.2.1 General.

6.2.1.1 Multiple occupancies as defined in 3.106.xx shall comply with 6.2.1. In addition, multiple occupancies shall comply with either 6.2.2 Mixed Occupancy requirements or 6.2.3 Separated Occupancy requirements.

6.2.1.2.* Where incidental to another occupancy, areas used as follows shall be permitted to be considered part of the predominant occupancy and subject to the provisions of the Code that apply to the predominant occupancy:

(a) Mercantile, business, industrial, or storage use

(b)* Nonresidential use with an occupant load fewer than that established by Section 6.1 for the occupancy threshold.

A.6.2.1.2 Examples of uses that might be incidental to another occupancy include the following:

(1) A newsstand (mercantile) in an office building

(2) A giftshop (mercantile) in a hotel

(3) A small storage area (storage) in any occupancy

(4) Minor office space (business) in any occupancy

(5) A maintenance area (industrial) in any occupancy

A.6.2.1.2(b) Examples of uses that have occupant loads below the occupancy classification threshold levels include the following:

(1) An assembly use with fewer than 50 persons within a business occupancy

(2) An educational use with fewer than 6 persons within an apartment building.

6.2.1.3 Each occupancy shall not exceed the area limitations or be located at a height greater than that permitted for such occupancy and the type of construction being used.

6.2.1.4 Where minor accessory uses do not occupy more than 25 percent of the area of any floor of a building, nor more than the basic area permitted for the occupancy by Table 7.3 for such minor use, for the purpose of determining permitted area, the principal use of the building shall determine the occupancy classification.

6.2.1.5 The following accessory occupancies need not be separated from the primary occupancy as required in 6.2.1.4:

(a) An area used solely as a public dining room having an occupancy load of not more than 300 and accessory to a retail sales area.

(b) An assembly room not over 750 ft^2 (70 m^2) in area, when not accessory to an occupancy with high hazard contents.

(c) Administrative, clerical or other office rooms, which, in the aggregate, are not more than 25 percent of the principal occupancy, when not accessory to an occupancy with high hazard contents, but shall be not more than the basic area permitted for the occupancy and type of construction.

6.2.2 Mixed Occupancies

6.2.2.1 Each portion of the building shall be classified in accordance with Section 6.1 as to its use.

6.2.2.2 The means of egress facilities, type of construction, protection, and other safeguards in the building shall comply with the most restrictive fire and life safety requirements of the occupancies involved.

6.2.2.3 The type of construction required for the building shall be determined by applying the Section 7.3 height and area limitations for each of the occupancies to the entire building.

6.2.2.4 The most restrictive type of construction determined in 6.2.2.3 shall apply to the entire building.

6.2.2.5 The most restrictive applicable high rise building provisions and fire-protection system requirements shall apply to all portions of the building.

6.2.3 Separated Occupancies.

6.2.3.1 Where separated occupancies are provided, each part of the building comprising a distinct occupancy, as described in this chapter, shall be completely separated from other occupancies by fire resistive assemblies as specified in Section 6.2 and in Table 6.2 as shown on the following page.

6.2.3.2 Occupancy separations shall be classified as 3-hour fire resistance–rated, 2-hour fire resistance–rated, or 1-hour fire resistance–rated, and shall meet the requirements of Chapter 8.

6.2.3.3 Occupancy separations shall be vertical or horizontal or both, or when necessary, of such other form as required to provide complete separation between occupancy divisions in the building.

6.2.3.4 Where the occupancy separation is horizontal, structural members supporting the separation shall be protected by an equivalent fire-resistive construction.

2. Revise 3.3.106.11 as follows:

3.3.106.11 Occupancy, Mixed. ~~An occupancy in which two or more classes of occupancy exist in the same building or structure and where such classes are intermingled so that separate safeguards are impracticable.~~ A multiple occupancy where the occupancies are intermingled.

3. Add two new definitions as follows:

3.3.106.XX Occupancy, Multiple. A building or structure in which two or more classes of occupancy exist.

3.3.106.XX Occupancy, Separated. A multiple occupancy where the occupancies are separated by fire resistance-rated assemblies.

4. Revise the following Sections in the draft as indicated**:**

Section 6.3.1.3. Delete, based on recommendation from the Technical Committee on Industrial and Storage Occupancies.

Section 6.3.3. Relocate to Chapter 21, One and Two-family Dwellings as a new section numbered and titled 21.4 Separation of Townhouses. Also add new definition of townhouse as follows:

Townhouse: A single family dwelling constructed in attached groups of three or more units in which each unit extends from the foundation to the roof and has open space on at least two sides.

Sections 6.3.6.2 through 6.3.6.4, Relocate these sections to Chapter 8 as section number and title 8.5 Occupancy Separations. Renumber remaining sections.

TABLE 6.2 Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging/ rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300		0	0	2	2	1	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	1	2	2	3	2	3
Assembly > 300, ≤ 1000			0	2	2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	2	3
Assembly > 1000				2	2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	2	3	3	3
Educational					2	2	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day care >12 clients						1	2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day-care homes							2†	2	2†	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	2	3
Health care								2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	3	2†	2†	2†	3	3	3
Ambulatory health care									2†	2	2	2	2	2	2	2	2	2	2	3	1	2	2	3	2	3
Detention & correctional										2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	3	3	3	2†	NP	3	NP
One- & two-family dwellings											1	1	1	1	2	2	2	2	2	3	2	2	2	3	2	3
Lodging & rooming house												1	1	2	2	2	2	2	2	3	2	2	2	3	2	3
Hotels & dormitories													1	2	2	2	2	2	2	3	2	2	2	3	2	3
Apartment buildings														2	2	2	2	2	2	3	2	2	2	3	2	3
Board & care, small															1	2	2	2	2	3	2	3	3	3	3	3
Board & care, large																2	2	2	2	3	2	3	3	3	3	3
Mercantile, Class A																	0	0	0	3	2	3	3	3	2	3
Mercantile, Class B																		0	0	3	2	3	3	3	2	3
Mercantile, Class C																			0	3	2	3	3	3	2	3
Mercantile, covered mall																				3	2	3	3	3	2	3
Mercantile, bulk retail																					3	3	3	3	3	3
Business																						2	2	3	2	3
Industrial, general purpose																							0	3	2	3
Industrial, special purpose																								3	2	3
Industrial, high hazard																									3	3
Storage, low & ordinary hazard																										3
Storage , high hazard																										

[1] The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, where the building is protected throughout by an approved automatic sprinkler system in accordance with Section 11.3.

NP – Not permitted

† – The 1-hour reduction due to the presence of sprinklers in accordance with Note 1 above shall not be permitted.

This table goes with Proposal 5000-268, Log #CP2043

5. Revise Table 8.1 as follows:
Table 8.1 Minimum Fire Resistance of Walls, Partitions and Opening Protectives. Revise the Component entry for Occupancy Separations from "See 3-10" to "See Sections 6.2 and 8.5".
SUBSTANTIATION: This proposal addresses changes in the mixed occupancy requirements, as follows:
Requirements for mixed occupancies in 6.1.14 and Section 6.3 are consolidated in Section 6.2, so they are not separated by the section on Hazard of Contents. Requirements are reorganized into a new format that includes sections on non-separated use and separated use.
In following direction in the manual of style, exceptions have been removed and replaced with mandatory requirements.
A revised definition of Mixed Occupancy is included, along with new definitions of Multiple Occupancy and Separated Occupancy.
Requirements for separation of townhouses are specific to one- and two-family dwellings and have been relocated to Chapter 21. A definition of townhouse was also proposed.
The tenant separation section was deleted and will be handled, if necessary, by individual occupancy chapters.
Sections 6.3.6.2 through 6.3.6.4 were relocated to Chapter 8 in order to consolidate provisions on protecting the openings and limiting the amount of openings in occupancy separations.
Section 6.3.6.1 was revised to delete reference to NFPA 90A, and include a direct reference to the requirements for fire rated assemblies in Chapter 8.
Table 8.1 was revised to correct a cross reference to Chapter 6.
The occupancy chapter technical committees have been asked to revise their respective xx.1.2 subsection to reference Section 6.2 and used the generalized terminology "multiple occupancies," rather than "mixed occupancies."
In earlier correspondence to SAF-IND, the SAF-FUN committee recommended moving draft paragraph 6.3.1.3 on the subject of large volume storage spaces to the Storage Occupancies chapter. Based on the feedback received from SAF-IND, the paragraph is being deleted.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee is aware that the Technical Correlating Committee on the Building Code (the TCC) might need to add TCC notes to this proposal in the ROP to coordinate the actions taken by BLD-STR, SAF-RES and SAF-FIR on their respective portions of this multiple-part proposal. The actions by BLD-STR, SAF-RES and SAF-FIR should appear as committee-generated proposals from those committees.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #891)
Committee: SAF-FUN

5000- 269 - (6-1.14.1, 6.1.14.2, 6.3.1.1): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance for Codes and Standards (MACS)
RECOMMENDATION: Revise text:
6.1.14.1 Definition - Mixed Occupancy. An occupancy in which two or more classes of occupancy exist in the same building or structure and where such classes are intermingled so that separate safeguards, including the separation of the classes of occupancies as required in Section 6.3, are impracticable.
6.1.14.2 Applicable Requirements. Where a mixed occupancy classification occurs,the means of egress facilities, type of construction, protection,and other safeguards for the entire building shall comply with the most restrictive fire and life safety requirements applicable to ~~of~~ the occupancies involved.
Exception to remain unchanged.
~~A.6.1.14.1 Mixed Occupancy. With only a few exceptions, the Code sets no specific occupancy separation requirements. The authority having jurisdiction determines the separation needed, if any, based on 6.1.14 and subsection 1.2 of each occupancy chapter.~~
6.3.1.1 Separation by fire resistive walls and floors shall be provided between the various groups and divisions of occupancies as specified in Table 6.3 and in accordance with Chapter 8 and other portions of this Code.
Exception: Mixed occupancy buildings as defined in and complying with Section 6.1.14.
SUBSTANTIATION: This proposal is basically editorial since it clarifies the application of these sections proposed to be revised. It coordinates the section on mixed occupancy with the section on requirements for the separation of occupancies. It clarifies the fact that when a mixed occupancy building occurs and since it is not possible to separate the classes of occupancies with the appropriate fire resistive separation, then it is exempt from those fire separation requirements. Otherwise, it is our opinion that the code intends that buildings containing more than one occupancy to have those occupancies separated with fire resistive separations in accordance with Section 6.3
Furthermore, we deleted the Annex note to 6.1.14.1 since it is not consistent with the code text. It apparently was extracted from the Life Safety Code NFPA 101 but does not fit within the context of NFPA 5000 Building Code.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-268 (Log #CP2043).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1014)
Committee: SAF-FUN

5000- 270 - (6-1.14.3): Reject
SUBMITTER: James A. Rossberg, Christopher P. Jones, American Society of Civil Engineers/Rep. Federal Emergency Management Agency, Mitigation Directorate
RECOMMENDATION: Add new text as follows:
6.1.14.3 Dry Floodproofing Requirements. Dry floodproofing of buildings and structures containing mixed occupancies shall comply with Section 100.5.4.
SUBSTANTIATION: Makes code provisions compliant with National Flood Insurance Program regulations (dry floodproofing of mixed occupancies) for buildings and structures in flood hazard areas. Note that this proposal is one of a series of proposals that will insure NFPA 5000 compliance with NFIP regulations. Although submitted separately, the proposals comprising the series should be considered together.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The wording suggested by the submitter is not appropriate for Chapter 6. Similar wording on a host of other subjects is not put in Chapter 6, so this subject should not be treated differently.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2007)
Committee: SAF-DET

5000- 271 - (Table 6.2): Accept
SUBMITTER: Technical Committee on Detention and Correctional Occupancies
RECOMMENDATION: Revise the portion of Table 6.2 applicable to detention and correctional occupancies as shown on the following page:

This table goes with Proposal 5000-271, Log #CP2007

TABLE 6.2
Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging/ rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300									2†																	
Assembly > 300, ≤ 1000									2†																	
Assembly > 1000									2†																	
Educational									2†																	
Day care >12 clients									2†																	
Day-care homes									2†																	
Health care									2†																	
Ambulatory health care									2†																	
Detention & correctional										2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	NP	2†	NP
One- & two-family dwellings																										
Lodging & rooming house																										
Hotels & dormitories																										
Apartment buildings																										
Board & care, small																										
Board & care, large																										
Mercantile, Class A																										
Mercantile, Class B																										
Mercantile, Class C																										
Mercantile, covered mall																										
Mercantile, bulk retail																										
Business																										
Industrial, general purpose																										
Industrial, special purpose																										
Industrial, high hazard																										
Storage, low & ordinary hazard																										
Storage , high hazard																										

1. The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, when the building is protected throughout by an automatic sprinkler systems in accordance with Section 11.3.
NP – Not permitted
† – The 1-hour reduction due to presence of sprinklers in not permitted.

SUBSTANTIATION: The hourly values represent the SAF-DET committee's best judgment of what protection is needed to protect the detention and correctional occupancy from its abutting neighbors that do not comply with the requirements applicable to detention and correctional occupancies. Note that high hazard industrial occupancies and high hazard storage occupancies should not abut a detention and correctional occupancy; this is consistent with the provisions of 20.1.2.6.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee asked SAF-DET for input on the portion of Table 6.2 that affects detention and correctional occupancies. This proposal provides the requested input. SAF-DET drafted and answered this committee proposal to assure that its input will appear in the ROP. It is anticipated that the BLD-AAC technical correlating committee will add a TCC-note to the ROP directing that a public comment be generated in its name asking SAF-FUN to resolve the issue at its ROC-preparation meeting.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 18
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
COMMENT ON AFFIRMATIVE:
KOFFEL: The note should read: "The 1-hour reduction due to the presence of sprinklers is not permitted. This is an editorial correction from what is shown in the ballot.

(Log #CP2029)
Committee: SAF-AXM

5000- 272 - (Table 6.2): Accept
SUBMITTER: Technical Committee on Assembly Occupancies and Membrane Structures
RECOMMENDATION: Revise the portion of Table 6.2 applicable to assembly occupancies as shown on the following pages.
SUBSTANTIATION: The hourly values represent the SAF-AXM committee's best judgment of what protection is needed to protect the assembly occupancy from its abutting neighbors that do not comply with the requirements applicable to assembly occupancies.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee asked SAF-AXM for input on the portion of Table 6.2 that affects assembly occupancies. This proposal provides the requested input. SAF-AXM drafted and answered this committee proposal to assure that its input will appear in the ROP. It is anticipated that the Technical Correlating Committee on the Building Code (the TCC) will add a TCC-note to the ROP directing that a public comment be generated in its name asking SAF-FUN to resolve the issue at its ROC-preparation meeting.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 18
NEGATIVE: 1
EXPLANATION OF NEGATIVE:
MESSERSMITH: Ratings between assembly and other occupancies need to be coordinated. Some of the ratings, such as between assembly and mercantile, are too low.

(Log #CP2036)
Committee: SAF-HEA

5000- 273 - (Table 6.2): Accept
SUBMITTER: Technical Committee on Health Care Occupancies
RECOMMENDATION: Revise the portion of Table 6.2 applicable to health care and ambulatory health care occupancies shown on the following pages.
SUBSTANTIATION: The hourly values represent the SAF-HEA committee's best judgment of what protection is needed to protect the health care and ambulatory health care occupancies from their abutting neighbors that do not comply with the requirements applicable to health care and ambulatory health care occupancies.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee asked SAF-HEA for input on the portion of Table 6.2 that affects health care and ambulatory health care occupancies. This proposal provides the requested input. SAF-HEA drafted and answered this committee proposal to assure that its input will appear in the ROP. It is anticipated that the Technical Correlating Committee on the Building Code (the TCC) will add a TCC-note to the ROP directing that a public comment be generated in its name asking SAF-FUN to resolve the issue at its ROC-preparation meeting.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 21
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21

(Log #CP1427)
Committee: SAF-RES

5000- 274 - (Table 6.2): Accept
SUBMITTER: Technical Committee on Residential Occupancies
RECOMMENDATION: Revise the proposed residential occupancy separation fire barrier requirements as shown in Table 6.2 as shown on the following pages.
SUBSTANTIATION: The Technical Committee on Residential Occupancies proposes the indicated fire barrier separations to the Technical Committee on Fundamentals for consideration, and recognizes the TC on Fundamentals is responsible for Chapter 6 requirements. The proposed fire barrier separations should provide adequate protection to the residential occupancies from other occupancies when they are to be considered 'separated occupancies,' in accordance with the proposed 6.2.3.
COMMITTEE ACTION: Accept.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
NOT RETURNED: 1 Gottlieb

(Log #CP2008)
Committee: SAF-END

5000- 275 - (Table 6.2): Accept
SUBMITTER: Technical Committee on Educational and Day-Care Occupancies
RECOMMENDATION: Revise the portion of Table 6.2 applicable to educational and day-care occupancies as shown on the following pages.
SUBSTANTIATION: The hourly values represent the SAF-END committee's best judgment of what protection is needed to protect the educational and day-care occupancies from their abutting neighbors that do not comply with the requirements applicable to educational and day-care occupancies.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee asked SAF-END for input on the portion of Table 6.2 that affects educational and day-care occupancies. This proposal provides the requested input. SAF-END drafted and answered this committee proposal to assure that its input will appear in the ROP. It is anticipated that the BLD-AAC technical correlating committee will add a TCC-note to the ROP directing that a public comment be generated in its name asking SAF-FUN to resolve the issue at its ROC-preparation meeting.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 14
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 14

TABLE 6.2
Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging/ rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300		0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3
Assembly > 300, ≤ 1000			0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3
Assembly > 1000				1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	3	1	3
Educational																										
Day care >12 clients																										
Day-care homes																										
Health care																										
Ambulatory health care																										
Detention & correctional																										
One- & two-family dwellings																										
Lodging & rooming house																										
Hotels & dormitories																										
Apartment buildings																										
Board & care, small																										
Board & care, large																										
Mercantile, Class A																										
Mercantile, Class B																										
Mercantile, Class C																										
Mercantile, covered mall																										
Mercantile, bulk retail																										
Business																										
Industrial, general purpose																										
Industrial, special purpose																										
Industrial, high hazard																										
Storage, low & ordinary hazard																										
Storage , high hazard																										

1. The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, when the building is protected throughout by an automatic sprinkler systems in accordance with Section 11.3.

This table goes with Proposal 5000- 272, Log CP2029

This table goes with Proposal 5000-273, Log #CP2036

TABLE 6.2
Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging/ rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300							2†	1																		
Assembly > 300, ≤ 1000							2†	1																		
Assembly > 1000							2†	2																		
Educational							2†	1																		
Day care >12 clients							2†	1																		
Day-care homes							2†	1																		
Health care								2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†	2†
Ambulatory health care									2	2	2	2	2	2	2	2	2	2	2	3	1	2	2	3	2	3
Detention & correctional																										
One- & two-family dwellings																										
Lodging & rooming house																										
Hotels & dormitories																										
Apartment buildings																										
Board & care, small																										
Board & care, large																										
Mercantile, Class A																										
Mercantile, Class B																										
Mercantile, Class C																										
Mercantile, covered mall																										
Mercantile, bulk retail																										
Business																										
Industrial, general purpose																										
Industrial, special purpose																										
Industrial, high hazard																										
Storage, low & ordinary hazard																										
Storage , high hazard																										

1. The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, when the building is protected throughout by an automatic sprinkler system in accordance with Section 11.3.

† - The 1-hour reduction due to presence of sprinklers is not permitted.

This table goes with Proposal 5000-274, Log #CP1427

TABLE 6.2
Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging / rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300										2	2	2	2													
Assembly > 300, ≤ 1000										2	2	2	2													
Assembly > 1000										2	2	2	2													
Educational										2	2	2	2													
Day care >12 clients										2	2	2	2													
Day-care homes										2	2	2	2													
Health care										2	2	2	2													
Ambulatory health care										2	2	2	2													
Detention & correctional										2	2	2	2													
One- & two-family dwellings											1	1	1	1	2	2	2	2	2	3	2	2	2	3	2	3
Lodging & rooming house												1	1	2	2	2	2	2	2	3	2	2	2	3	2	3
Hotels & dormitories													1	2	2	2	2	2	2	3	2	2	2	3	2	3
Apartment buildings														2	2	2	2	2	2	3	2	2	2	3	2	3
Board & care, small																										
Board & care, large																										
Mercantile, Class A																										
Mercantile, Class B																										
Mercantile, Class C																										
Mercantile, covered mall																										
Mercantile, bulk retail																										
Business																										
Industrial, general purpose																										
Industrial, special purpose																										
Industrial, high hazard																										
Storage, low & ordinary hazard																										
Storage , high hazard																										

1. The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, when the building is protected throughout by an automatic sprinkler systems in accordance with Section 11.3

This table goes with Proposal 5000-275, Log #CP2008

TABLE 6.2
Required Separation of Occupancies (Hours)[1]

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging / rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage, low and ordinary hazard	Storage, high hazard
Assembly ≤ 300				1	1	1																				
Assembly > 300, ≤ 1000				1	1	2																				
Assembly > 1000				2	2	2																				
Educational					2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day care >12 clients						1	2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Day-care homes							2	2	2	2	2	2	2	2	2	2	2	2	2	3	2	3	3	3	3	3
Health care																										
Ambulatory health care																										
Detention & correctional																										
One- & two-family dwellings																										
Lodging & rooming house																										
Hotels & dormitories																										
Apartment buildings																										
Board & care, small																										
Board & care, large																										
Mercantile, Class A																										
Mercantile, Class B																										
Mercantile, Class C																										
Mercantile, covered mall																										
Mercantile, bulk retail																										
Business																										
Industrial, general purpose																										
Industrial, special purpose																										
Industrial, high hazard																										
Storage, low & ordinary hazard																										
Storage , high hazard																										

1. The fire resistance rating shall be permitted to be reduced by one hour, but in no case to less than one hour, when the building is protected throughout by an automatic sprinkler systems in accordance with Section 11.3.

(Log #753)
Committee: SAF-FUN

5000- 276 - (6-2.1.1): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc.
RECOMMENDATION: Revise text to read as follows:
6.2.1.1 For the purpose of this Code, the hazard of contents shall be the relative danger of the start and spread of fire, the danger of smoke or gases generated, and the danger of explosion or other occurrence potentially endangering the lives and safety of the occupants of the building or structure and causing damage to the building and its contents.
SUBSTANTIATION: This proposal simply introduces the concept of property protection into the criteria for determining the hazard of contents in a building.
COMMITTEE ACTION: Accept in Principle.
Revise 6.2.1.1 [to become 6.3.1.1 based on action on Proposal 5000-261 (Log #CP2042)] as follows:
6.3.1.1 For the purpose of this Code, the hazard of contents shall be the relative danger of the start and spread of fire, the danger of smoke or gases generated, and the danger of explosion or other occurrence potentially endangering the lives and safety of the occupants of the building or structure or causing damage to the building or structure or its contents.
COMMITTEE STATEMENT: The committee action does what the submitter requested but editorially starts the phrase with an "or" rather than an "and," inserts the words "or structure," and changes "and its contents" to "or its contents." This should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #423)
Committee: SAF-FUN

5000- 277 - (6-2.2.4 Exception (New)): Reject
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Chemical Specialties Manufacturers Association
RECOMMENDATION: Add a new Exception to 6.2.2.4 to read as follows:
6.2.2.4* High Hazard. High Hazard contents shall be classified as those that are likely to burn with extreme rapidity or from which explosions are likely. (For means of egress requirements, see Section 12.11.)
Exception No. 1: Aerosol Manufacturing, storage and display of aerosol products when in compliance with the requirements of NFPA 30B, Code for the Manufacture and Storage of Aerosol Products.
SUBSTANTIATION: NFPA 30B, Code for Manufacture and Storage of Aerosol Products establishes controls for the storage, display and manufacturing of aerosol products. These controls include storage arrangements, protection criteria, construction requirements, etc. The controls are validated by extensive full scale fire testing. Aerosol products when in accordance with NFPA 30B, are not likely to burn with extreme rapidity nor are explosions likely, therefore they should be treated as ordinary hazard contents.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: An exception in Chapter 6 is not the appropriate way to handle the issue. Wording is needed in specific occupancy chapters such as industrial.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #438)
Committee: SAF-FUN

5000- 278 - (6-2.2.4 Exception (New)): Reject
SUBMITTER: William E. Koffel, Koffel Assoc., Inc./Rep. Semiconductor Industry Association
RECOMMENDATION: Add a new Exception to read as follows:
6.2.2.4* High Hazard. High Hazard contents shall be classified as those that are likely to burn with extreme rapidity or form which explosions are likely. (For means of egress requirements, see Section 12.11)
Exception: Semiconductor manufacturing facilities complying with NFPA 318, Standard for the Protection of Cleanrooms, and the Article 51, Uniform Fire Code.
SUBSTANTIATION: NFPA 318, Standard for the Protection of Cleanrooms, establishes controls for the manufacturing of semiconductors. These controls include hazardous material controls, protection criteria, construction requirements, etc. In addition, Article 51 of the Uniform Fire Code contains additional operational requirements that are not presently contained in NFPA 1. These controls have contributed to 25 years of no significant fire losses. Semiconductor facilities, when in accordance with NFPA 318 and Article 51, are not likely to burn with extreme rapidity nor are explosions likely, therefore they should be treated as ordinary hazard contents.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: An exception in Chapter 6 is not the appropriate way to handle the issue. Wording is needed in specific occupancy chapters such as industrial.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 15
ABSTENTION: 1
NOT RETURNED: 3 Gallagher, Groner, Tamim
EXPLANATION OF ABSTENTION:
LATHROP: In accordance with Standards Council policy, I have abstained from voting on this item due to a client interest regarding the content of the Public Proposal.

(Log #386)
Committee: SAF-FUN

5000- 279 - (6-2.3.2.19): Reject
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Revise text to read as follows:
6.2.3.2.19 Dipping and Coating Processes Using Flammable or Combustible Liquids. Buildings in which flammable or combustible liquids ~~articles or materials~~ are passed through tanks, vats, containers, or process equipment that ~~contain flammable or combustible liquids~~ are capable of sustaining combustion, including, but not limited to, dipping, roll coating, flow coating, curtain coating, and cleaning, shall be constructed in accordance with NFPA 34, Standard for Dipping and Coating Processes Using Flammable or Combustible Liquids.
SUBSTANTIATION: NFPA 34, Standard for Dipping and Coating Processes Using Flammable and Combustible Liquids does not apply to process involving noncombustible liquids. Additionally, NFPA 30, Flammable and Combustible Liquids Code, Chapter 4 exempts liquids incapable of sustaining combustion, e.g., liquids having no fire point, or combustible liquids incapable of sustaining combustion.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter's language is inaccurate. The subject is better addressed by Proposal 5000-313 (Log #CP2045) on Special Operations.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #387)
Committee: SAF-FUN

5000- 280 - (6-2.3.2.49): Reject
SUBMITTER: David C. Tabar, The Sherwin-Williams Co.
RECOMMENDATION: Revise text to read as follows:
6.2.3.2.49 Organic Coating Manufacturing Facilities. Buildings and structures in which flammable and combustible liquids are used to manufacture organic coatings or protective and decorative finishes ~~for automotive, industrial, institutional, household, marine, printing, transportation, and other applications~~ shall be constructed in accordance with NFPA 35, Standard for the Manufacture of Organic Coatings.
SUBSTANTIATION: The scope should correlate with NFPA 35. Also, where such products are applied represents unnecessary text.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The subject is better addressed by Proposal 5000-313 (Log #CP2045) on Special Operations.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #86)
Committee: SAF-FUN

5000- 281 - (Table 6-3): Reject
SUBMITTER: Charles Nelson, Fowlkes and Assoc.
RECOMMENDATION: Table 6.3 was not published. Separation should be worded so that small assembly (50-300 capacity) lunchrooms or cafeterias should be allowed to have store front or other non-rated glass and non-latching doors in separation from busines occupancies. Perhaps unrated in fully sprinklered buidlings or deluge sprinkled in non-sprinklered buildings.
SUBSTANTIATION: In order to be "user friendly" the entire code format should be consistent with the IBC.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: Submitter has not provided any text.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #297)
Committee: SAF-FUN

5000- 282 - (Table 6-3): Accept in Principle
SUBMITTER: Stephen V. Skalko, Portland Cement Association
RECOMMENDATION: Add Table 6.3 as shown on the following page.
SUBSTANTIATION: Section 6.3.4 of the draft code requires that distinct occupancies within a building be separated from each other by fire and rated assemblies as prescribed in Table 6.3; however, the table does not exist. The purpose of this proposal is to provide the table. The fire separation ratings shown in the table were developed based on the characteristics of the occupants and contents occupying the two parts to be separated. The factors considered were:
1. Occupants:
(a) Mobility (age, infirmity, incarceration)
(b) Alertness (age, infirmity, sleeping, medications)
(c) Knowledge of Premises (regular occupant, transient occupant)
(d) Occupant Density (crowded, sparse)
(e) Discipline of Occupants (maturity, reaction to panic)
2. Contents of the building:
(a) Quantity of material (furnishings, stock, products)
(b) Combustibility (non-combustible, combustible)
(c) Hazard of Contents (explosive, toxic)
The individual ratings that appear in the matrix were determined as follows. The above factors were considered in assessing the risk to an individual occupancy based on a fire occurring in another occupancy, and a fire rating was assigned. A similar assessment was performance based on a fire occurring in the other occupancy. If they were different the higher fire rating was selected as the fire separation rating.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-268 (Log #CP2043).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1170)
Committee: SAF-FUN

5000- 283 - (Table 6-3): Accept in Principle
SUBMITTER: Robert J. Wills, American Iron and Steel Institute
RECOMMENDATION: While I have not proposed an occupancy separation table, I urge the committee to allowing a one hour reduction in the table fire ratings when an automatic fire sprinkler system is provided.
SUBSTANTIATION: Conceptual comment for the committee to consider as a part of the development of the occupancy separation table. Similar provisions are found in many model building codes.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-268 (Log #CP2043).
COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1172)
Committee: SAF-FUN

5000- 284 - (6-3.1.3): Accept
SUBMITTER: Robert J. Wills, American Iron and Steel Institute
RECOMMENDATION: Delete text as follows:
~~6.3.1.3 Storage areas of more than 30,000 cubic feet used for the storage of combustibles shall be separated from adjacent areas by not less than a 2-hour fire-resistance occupancy separation.~~
SUBSTANTIATION: This prescriptive separation requirement as a stand-alone provision is overly restrictive, and can be better addressed by incorporating a fire area concept in the code or in the occupancy separation table itself.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee assigned the subject of 6.3.1.3 to the SAF-IND committee for inclusion in the storage occupancies chapter. SAF-IND felt the provision was too restrictive and did not move the provision to its chapter. Thus, it will be deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #299)
Committee: SAF-FUN

5000- 285 - (6-3.1.1 Exception (New)): Accept in Principle
SUBMITTER: Robert J. Wills, American Iron and Steel Institute
RECOMMENDATION: Add a new Exception to read as follows:
Exception: Fire separation shall not be required between occupancies in a single building when all the following requirements are met:
1. Each portion of the building shall be individually designated as to occupancy, with the required type of construction for the building being determined by applying the height and area limitations for each of the individual occupancies to the overall building.

This table goes with Proposal 5000-282, Log #297

TABLE 6.3
Required Separation of Occupancies (Hours)

	Assembly ≤ 300	Assembly > 300, ≤ 1000	Assembly > 1000	Educational	Day care > 12 clients	Day-care homes	Health care	Ambulatory health care	Detention and correctional	One- & two-family dwelling	Lodging/ rooming houses	Hotels & dormitories	Apartment buildings	Board and care, small	Board and care, large	Mercantile, Class A	Mercantile, Class B	Mercantile, Class C	Mercantile, covered mall	Mercantile, bulk retail	Business	Industrial, general purpose	Industrial, special purpose	Industrial, high hazard	Storage
Assembly ≤ 300		2	3	2	3	2	3	2	3	2	2	2	2	2	2	2	2	2	2	3	2	2	2	3	3
Assembly > 300, ≤ 1000			3	2	3	2	3	2	3	2	2	2	2	2	2	2	2	2	2	3	2	2	3	3	3
Assembly > 1000				3	3	2	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3	3	3
Educational					2	2	3	2	3	2	2	2	2	2	2	3	3	2	3	3	2	3	3	3	3
Day care >12 clients						2	3	2	3	2	2	2	2	2	2	3	3	2	3	3	2	3	3	3	3
Day-care homes							2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3	3
Health care								2	3	2	2	2	2	2	2	3	3	2	3	3	2	3	3	3	3
Ambulatory health care									2	2	2	2	2	2	2	3	3	2	2	3	2	2	2	3	3
Detention & correctional										2	2	3	3	2	3	3	3	2	3	3	2	3	3	3	3
One- & two-family dwellings											1	2	2	1	2	3	3	2	3	3	2	2	2	3	3
Lodging & rooming house												2	2	2	3	3	3	2	3	3	2	2	2	3	3
Hotels & dormitories													2	2	3	3	3	2	3	3	2	2	2	3	3
Apartment buildings														2	3	3	3	2	3	3	2	2	2	3	3
Board & care, small															2	3	3	2	3	3	2	2	2	3	3
Board & care, large																3	3	3	3	3	2	3	3	3	3
Mercantile, Class A																	2	2	3	3	2	3	3	3	3
Mercantile, Class B																		2	3	3	2	3	3	3	3
Mercantile, Class C																			2	2	2	2	2	3	3
Mercantile, covered mall																				3	2	3	3	3	3
Mercantile, bulk retail																					2	2	3	3	3
Business																						2	2	3	3
Industrial, general purpose																							2	3	3
Industrial, special purpose																								3	3
Industrial, high hazard																									3
Storage																									

2. Other code requirements shall be applied to the individual portions of the building based on the occupancy represented in that portion, except the most restrictive applicable high rise building and fire-protection system requirements shall apply to all portions of the building that have not been separated.

SUBSTANTIATION: Virtually all building codes have provisions to allow mixed occupancy buildings without occupancy separations where the fire risk of the specific occupancies are similar. This is either accomplished by including non-rated separations in the mixed occupancy table, by including a long list of specific occupancy exceptions, or by a nonseperated use provision as is being proposed here.

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-268 (Log #CP2043).

COMMITTEE STATEMENT: The action on the referenced proposal should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #130)

Committee: SAF-FUN

5000- 286 - (6-3.1.3): Accept in Principle

SUBMITTER: Peter J. Gore Willse, Industrial Risk Insurers

RECOMMENDATION: Revise text as follows:

6.3.1.3 For Industrial and Storage that are protected with an approved, automatic sprinkler system, there shall be no limit on the volume of combustible stored. For all other occupancies and Industrial and Storage occupancies that are not protected with an approved automatic sprinkler, sStorage areas of more than 30,000 cubic feet used for the storage of combustibles shall be separated form adjacent areas by not less than a 2-hour fire-resistive occupancy separation.

SUBSTANTIATION: The requirement as written is too restrictive. A room with a 10 ft storage could be lo larger then 3000 ft^2 (55 ft by 55 ft). A room with 30 ft. storage could be no larger and 1000 ft^2 (32 ft by 32 ft). A 100 ft high bay warehouse would have to be divided into rooms no larger than 300 ft^2 (17 ft by 17 ft).

COMMITTEE ACTION: Accept in Principle.

See Proposal 5000-284 (Log #1172).

COMMITTEE STATEMENT: The overly restrictive provision has been deleted by the action on the referenced proposal. This should meet the submitter's intent.

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1171)

Committee: SAF-FUN

5000- 287 - (6-3.1.3): Reject

SUBMITTER: Robert J. Wills, American Iron and Steel Institute

RECOMMENDATION: New text as follows:

6.3.1.3 Storage areas of more than 30,000 cubic feet used for the storage of combustibles shall be separated from adjacent areas by not less than a 2-hour fir-resistance occupancy separation.

Exception - When the storage area is protected with an automatic fire sprinkler system, the minimum occupancy separation shall be reduced to 1 hour fire-resistance.

SUBSTANTIATION: Provides acceptable reduction when fire suppression is provided.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Paragraph 6.3.1.3 is being deleted by the action on Proposal 5000-284 (Log #1172).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #241)

Committee: SAF-FUN

5000- 288 - (6-3.2): Reject

SUBMITTER: Michael Gardner, Gypsum Association

RECOMMENDATION: Revise text to read as follows:

6.3.2. Tenant Separations.

6.3.2.1. In a building or portion of a building of a single occupancy classification,
when enclosed spaces are provided for separate tenants, guestrooms in lodging and rooming houses, units in hotel and dormitory occupancies, or dwelling units in apartments, such spaces shall be separated by not less than 1-hour fire-resistance… (Remainder unchanged.)

6.3.2.2. Such walls shall be continuous from the foundation to the underside of
the floor above or the roof sheathing. (Remainder unchanged.)

SUBSTANTIATION: Text currently does not incorporate any requirements for fire-rated partitions that separate hotel guestrooms, apartments or dormitory rooms. In the interest of public and occupant safety such partitions should be required to have a specific level of fire-resistance. Construction of this type should bear a rating in line with that already prescribed for tenant separation partitions. A one-hour rating would be consistent with the requirements contained in existing model building code documents. Proposed text adds requirement.

Paragraph 6.3.2.2. modifies text that appears to have been taken directly from the Epcot Code. Modification reflects concept that building code will used in a variety of structures, many of which will be more than one story in height.

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Paragraph 6.3.2 is being deleted by the action on Proposal 5000-268 (Log #CP2043).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #320)

Committee: SAF-FUN

5000- 289 - (6-3.2): Reject

SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting

RECOMMENDATION: In 6.3.2.2 revise the term "wall" to read "barrier wall(s)."

SUBSTANTIATION: NFPA 221 used the term "wall" to mean a fire wall. A fire wall would have a parapet in most applications when this section specifically stops the rated barrier at the underside of the roof deck. The Exception does not have a clear reason for being present. In the alternative a new positive paragraph should be constructed that will not read Exception: "The Exception...".

COMMITTEE ACTION: Reject.

COMMITTEE STATEMENT: Paragraph 6.3.2 is being deleted by the action on Proposal 5000-268 (Log #CP2043).

NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19

VOTE ON COMMITTEE ACTION:

AFFIRMATIVE: 16

NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1102)
Committee: SAF-FUN

5000- 290 - (6-3.2): Accept in Principle
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Delete 6.3.2.
SUBSTANTIATION: Tenant separation requirements should be determined by the committee responsible for each individual occupancy.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-268 (Log #CP2043).
COMMITTEE STATEMENT: Paragraph 6.3.2 is being deleted by the action on the referenced proposal.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #298)
Committee: SAF-FUN

5000- 291 - (6-3.2.1): Accept in Principle
SUBMITTER: Robert J. Wills, American Iron and Steel Institute
RECOMMENDATION: Delete the following text:
~~6.3.2.1 In a building or portion of a building of a single occupancy classification, when enclosed spaces are provided for separate tenants, such spaces shall be separated by not less than 1-hour fire resistance, except that in Mercantile and Business Occupancy buildings, non-fire rated partitions shall be permitted to be used to separate tenants provided no area between partitions rated at 1-hour or more exceeds 3,000 square feet.~~
SUBSTANTIATION: While tenant separations may be justified for residential occupancies, for other occupancies requiring a separation has not been found to be necessary. Complicating the requirement is the lack of a definition for "tenant".
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-268 (Log #CP2043).
COMMITTEE STATEMENT: Paragraph 6.3.2 is being deleted by the action on the referenced proposal.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #505)
Committee: SAF-FUN

5000- 292 - (6-3.2.1): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: In a building or portion of a building of a single occupancy classification, when enclosed spaces are provided for separate tenants, such spaces shall be separated by not less than 1-hour fire resistance. Exceptions:
1. In Mercantile and Business occupancies, separate tenants may be separated by non-rated partitions, up to a total area of 3,000 square feet.
2. The exception for occupancy separation shall be applicable to tenant separations.
Delete Exception to Section 6.3.2.2
SUBSTANTIATION: This is an attempt to clarify and rewrite the current code intent. As currently written, it could be concluded the 3,000 square foot applies to areas within 1-hour walls, but there is no limit to the area within non-rated walls. Also, the exception has been moved to a better location.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-268 (Log #CP2043) which deletes the 6.3.2's.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #801)
Committee: SAF-FUN

5000- 293 - (6-3.2.1): Reject
SUBMITTER: Gene Boecker, CCI (Code Consultants, Inc.)
RECOMMENDATION: Revise text as follows:
6.3.2 Tenant Separations.
6.3.2.1 In a building or portion of a building of a single occupancy classification, when enclosed spaces are provided for separate tenants, such spaces shall be separated by not less than 1-hour fire-resistance. ~~except that in Mercantile and Business Occupancy building, non-fire rated partitions shall be permitted to be used to separate tenants provided no area between partitions rated at 1-hour or more exceeds 3,000 square feet.~~
Exception No. 1: In Mercantile and Business Occupancy buildings, non-fire rated partitions shall be permitted to be used to separate tenants provided no area between partitions rated at 1-hour or more exceeds 3,000 square feet.
Exception No. 2: In buildings protected throughout by an approved, supervised automatic sprinkler system in accordance with 11.3, non-fire rated partitions shall be permitted unless specifically required to be rated in Chapters 15 through 29.
SUBSTANTIATION: The exception which is included in the main body of the section has been relocated as exception number one. A second exception is provided based on sprinkler protection.
The safety record for sprinkler systems is far in excess of that for passive systems. An approved sprinkler system should be as effective if not more so than any passive system at containing the size of a fire. A supervised sprinkler system is more reliable than a passive system since there is no "supervision" for holes which may be cut in rated walls and other conditions which would compromise the rating. Moreover, the sprinkler system has a suppression component which is not present in any passive system. The exception recognizes the superior protection afforded by the sprinkler system but still directs that separation be required where the specific occupancy chapters so dictate (for example, between hotel guest rooms).
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-268 (Log #CP2043) which deletes the 6.3.2's.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #442)
Committee: SAF-FUN

5000- 294 - (6-3.2.2 Exception): Reject
SUBMITTER: James R. Quiter, Rolf Jensen & Assoc., Inc.
RECOMMENDATION: 6.3.2.2 Add a new Exception:
1. In covered mall buildings, as permitted by Section 26.4.4.1.
SUBSTANTIATION: Without this exception, there is a contradiction in the code.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: See Proposal 5000-268 (Log #CP2043) which deletes the 6.3.2's.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #1103)
Committee: SAF-FUN

5000- 295 - (6-3.3): Accept in Principle
SUBMITTER: Kevin Kelly, National Fire Sprinkler Association
RECOMMENDATION: Move Section 6.3.3 to the Chapters for multi-family residential dwelling.
SUBSTANTIATION: The specific requirements for fire separation walls belong in the chapter for multi family residential dwellings.

COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-926 (Log #CP1404).
COMMITTEE STATEMENT: The referenced proposal was drafted by the SAF-RES committee. It accomplishes what the submitter requested.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #CP2012)
Committee: SAF-FUN

5000- 296 - (6-3.3): Accept
SUBMITTER: Technical Committee on Residential Occupancies
RECOMMENDATION: Delete 6.3.3.
SUBSTANTIATION: A committee proposal 5000-926 (Log #CP1404) relocates townhouse separation wall requirements from Chapter 6 to Chapter 21 without technical changes other than deleting the provisions for party walls. The subject was assigned by SAF-FUN to SAF-RES. This proposal asks SAF-FUN to delete the material from its Chapter 6.
COMMITTEE ACTION: Accept.
COMMITTEE STATEMENT: The SAF-FUN committee assigned the material on townhouses to the SAF-RES committee for inclusion in Chapter 21 so that the verbiage of 6.3.3 could be deleted. The necessary coordination between the two committees has been successfully accomplished.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #242)
Committee: SAF-FUN

5000- 297 - (6-3.3.1): Accept in Principle
SUBMITTER: Michael Gardner, Gypsum Association
RECOMMENDATION: Revise text to read as follows:
6.3.3.1 Each townhouse shall be considered a separate building and shall be separated from adjoining townhouses by the use of separate exterior walls meeting the requirements of Table 6.3 for zero clearance from property lines as required for the type of construction, or by a party wall, or ~~when not more than three stories in height,~~ shall be permitted to be separated by a single wall meeting the following requirements:
SUBSTANTIATION: This appears to be language that has been extracted directly from the Epcot Code. It is overly restrictive and should not be incorporated into NFPA 5000.
Other existing model building codes contain no restrictions on the height of the single wall that may be used to separate adjoining townhomes. Most single wall systems commonly used as townhouse separation walls can readily be built to a height greater than three stories. Height restrictions for systems used as single wall separation walls are generally a function of the physical characteristics of the systems and should be limited by characteristics such as deflection criteria, not by code language.
COMMITTEE ACTION: Accept in Principle.
See Proposal 5000-926 (Log #CP1404).
COMMITTEE STATEMENT: The action on the referenced proposal, as drafted by the SAF-RES committee, should meet the submitter's intent. The material has been moved to a new Section 21.4, and the words addressed by the submitter have been deleted.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 19
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 16
NOT RETURNED: 3 Gallagher, Groner, Tamim

(Log #738)
Committee: SAF-RES

5000- 298 - (6-3.3.1): Accept in Principle
SUBMITTER: Rick Thornberry, The Code Consortium Inc./Rep. Masonry Alliance For Codes and Standards (MCAS)
RECOMMENDATION: Revise text to read as follows:
6.3.3 Separations Between Townhouses.
6.3.3.1 Each townhouse shall be considered a separate building and shall be separated from adjoining townhouses by the use of separate exterior walls meeting the requirements of Table ~~6.3~~ 7.3.1 for ~~zero clearance from property lines~~ a horizontal separation from 0 ft - 5 ft as required for the type of construction, or by a ~~party~~ fire wall, or when not more than three stories in height, shall be permitted to be separated by a single wall meeting the following requirements:
Note: No changes are proposed to the rest of this section.
SUBSTANTIATION: The purpose of this proposal is to clarify the application of this section which requires fire resistive walls to separate adjoining townhouses. The correct table in the code is referenced and the correct terminology is used for determining the requirements of the exterior walls in Table 7.3.1 based on the distance from a property line which is defined by the term "horizontal separation" in Section 3.3.126. Also, the term "party wall" has been revised to "fire wall" which is regulated in Section 8.3. Presently, there is no defined term in this code for party wall. However, fire walls are referenced as indicated in Section 8.3 and defined in Section 3.3.143. We have also submitted companion proposals which clarify the application of Section 8.3 to fire walls and also introduced the concept of party wall without introducing the term "party wall."
Second, the concept of property protection is introduced to follow through with the NFPA Board of Directors support of that issue in their substantiation for promulgating NFPA 5000. While accomplishing property damage and the additional protection for the evacuating occupantis, there will also be a degree of fire fighter safety provided for multistory buildings where fire fighters utilize the exit stair enclosures to gain access to the story of fire origin.
COMMITTEE ACTION: Accept in Principle.
See Committee Proopsal 5000-926 (Log #CP1404).
COMMITTEE STATEMENT: The committee action on Proposal 5000-926 (Log #CP1404) should meet the submitter's intent.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
NOT RETURNED: 1 Gottlieb7

(Log #321)
Committee: SAF-RES

5000- 299 - (6-3.3.2, 6.3.3.3): Reject
SUBMITTER: Gregory J. Cahanin, Cahanin Code Consulting
RECOMMENDATION: Add to the end of the subsection:
"Walls shall comply with Chapter 3 of NFPA 221."
Delete 6.3.3.3.
SUBSTANTIATION: Throughout 6.3.3 the paragraphs are defining a fire wall. 6.3.3.4 defines a fire wall in that the structural integrity of the wall must be maintained independent of the unit on the opposite side of the wall. BY complying directly with NFPA 221 the Code is simplified and the wall will require a parapet due to its 2-hour rating.
COMMITTEE ACTION: Reject.
COMMITTEE STATEMENT: The submitter has not demonstrated why the Code should permit other construction options for separation walls. Also, the committee understands revisions to Chapter 8 will extract applicable provisions from NFPA 221.
NUMBER OF COMMITTEE MEMBERS ELIGIBLE TO VOTE: 22
VOTE ON COMMITTEE ACTION:
AFFIRMATIVE: 21
NOT RETURNED: 1 Gottlieb
