Last Revised: 6/12/14



Authors' Manual



This is a contextual document. It is not meant to be read straight from beginning to end. Instead, navigate the pages via the **blue** hyperlinks as you would a Web page.

Some pages include key words in **orange**. Mouse over these words to see additional information about a relevant topic.

This manual should not be used when writing for *HVAC&R Research*. Please refer to the Authors' Manual for HVAC&R Research for guidance when writing for that publication.

This manual should not be used when writing for *ASHRAE Journal*. Please contact the editor for guidance when writing for that publication.

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Obtaining Permissions

Authors must request permission to use/reproduce figures and tables from other sources. Reference all materials from other sources where they appear in your manuscript.

- 1. Classify all references to another source's information as either "in the public domain" or "requires copyright permission."
 - Publications from federal agencies are all in the public domain, which means the information must be cited in your text and referenced at the end of your manuscript but you do *not* have to request permission to use it.
 - Material from private publishers requires copyright permission—if permission is not granted for you to use the material, you cannot use it in your manuscript.
 - For all photos, figures, tables, and data from tables from other sources that require permission, you must cite the source in your text and reference it at the end of your manuscript.
 - **NOTE:** Table data do not require copyright permission as long as the table is reformatted. However, the material must still be cited, so reference information is required.
- 2. For those sources that are not in the public domain, request permission from the copyright holder to use/reproduce the information.
 - Submit the request letter to the copyright holder and ask for a reply within 30 days. The organizations should reply directly to you.
 - To request permission to use ASHRAE copyrighted content, visit ASHRAE's website.
- 3. Permission to use/reproduce material must be obtained during the writing stage.
- 4. Submit permission-granted letters with the completed manuscript. No editing or layout work will begin on the manuscript until all permissions have been received.

Copyright

ASHRAE retains exclusive copyright of papers published on the *ASHRAE Papers CD* and in *ASHRAE Transactions*. Works published by ASHRAE are final and complete works.

Under ASHRAE copyright policies, authors retain the right for certain specific uses of their paper without requesting ASHRAE's permission. Only the "as published" version of the paper may be used by the author. These uses are as follows:

- to make copies of the paper for their own personal use;
- to make copies and distribute copies of the paper to researchers or customers of the author's employer for the personal use by such researchers or customers;
- to post the paper as published by ASHRAE on the author's personal, institutional, or corporate website or server with a link to ASHRAE's website;
- to present the paper (after ASHRAE publication) at a meeting or conference and to distribute copies of such paper to the delegates attending the meeting with written permission from ASHRAE;
- to allow use of the paper by the author's employer for posting on the employer's website, for use by the employer in training or educational courses offered by the employer, for internal research work that is conducted by the employer, and for internal publications published by the employer;
- to include the paper in full or in part in a thesis or dissertation;
- to include the paper in a printed compilation of works of the author, such as collected writings or lecture notes; and
- to prepare other derivative works, such as extending the paper into booklength form, or to otherwise re-use portions or excerpts in other works, providing there is acknowledgement of its publication by ASHRAE.

Other uses must be authorized by ASHRAE. Authors should contact ASHRAE explaining their specific need and identifying the paper and ASHRAE publication in which the paper appeared.

Others wishing to use ASHRAE copyrighted content should visit ASHRAE's website for more information and to make their request.

Formatting Figures

- 1. Original figures or other artwork should be submitted with the manuscript whenever possible. For information on reprinting a figure from another source, see Obtaining Permissions.
- 2. Use only 1 point (0.014 in. [0.35 mm]) or thicker lines—smaller lines will not reproduce well.
- 3. Figures to be reproduced in black and white should use patterns or shapes to distinguish sections instead of coloring and shading. Figures to be reproduced in color should have touching colors that differ significantly so that there can be no confusion in understanding the data. (Note that papers are published in color on the *ASHRAE Papers CD* and in black and white in *ASHRAE Transactions*.)
- 4. Each figure should have a brief legend or descriptive labels, as appropriate. Any text included in a figure (except the figure caption) should be embedded as part of the image file and not contained in a separate text box that is not part of the image file.
- 5. Provide dual units for all measurements, preferably as two figures.
- 6. All figures must be provided to ASHRAE as individual TIF (preferred) or EPS files in either CMYK mode (for color) or Grayscale mode (for black and white) saved at high resolution (600 dpi or greater) and at least 4 in. size or greater. See Converting Graphics Created in Excel or Word for instructions on graphic conversion. Figure files should be clearly labeled (i.e., Figure1.tif, Fig2.tif, Fig3-2, etc.). Multiple-part figures, such as a figure with parts (a) and (b), must be submitted as one file with all parts included.
- 7. Every figure must be referenced in the text by name/number, where "Figure" is capitalized (e.g., "...as shown in Figure 2.").
- 8. Figures must be numbered consecutively as they appear in the text.
- 9. Prepare a list of captions for figures and place it at the end of the manuscript (this applies to papers only; it is not applicable for book projects).

Formatting Tables

- 1. All table titles should be descriptive but concise.
- 2. Original tables should be submitted with the manuscript whenever possible. For information on reprinting a table from another source, see Obtaining Permissions.
- 3. Titles appear above the tables, and every major word in the title is capitalized.
- 4. Number tables consecutively and in the order they are mentioned in the text.
- 5. Tables used in the manuscript should **not** be <u>image files</u> but *alterable* tables (such as those created in Word, Excel, Framemaker, InDesign, etc.).
- 6. Use only 1 point (0.014 in. [0.35 mm]) or thicker lines—smaller lines will not reproduce well.
- 7. Vertical and horizontal lines should be avoided except to delineate the top and bottom of a table and to separate the heading row from the data unless lines are otherwise necessary for clarity or organization of the data.
- 8. Label each column with a heading and include units of measurement and other necessary qualifying information. Units should be set off with a comma (e.g., "Velocity, m/s").
- 9. Provide dual units for all measurements.
- 10. Every table must be referenced in the text by name/number, where "Table" is capitalized (e.g., "as provided in Table 5").

Units of Measurement

ASHRAE policy requires dual units of measurement—inch-pound (I-P) and International System of Units (SI). You are required to provide dual units when submitting manuscripts; ASHRAE staff will not convert units for you. Some guidelines are as follows:

- 1. The units used in calculating the work being reported shall be listed first with the alternate system of units following in parentheses.
- 2. Always spell out all units when they are used without a number.
- 3. Do not mix symbols and names in the same expression.
- 4. Do not express plurals by adding an "s"
- 5. Do not use periods with units of measurement:
 - EXCEPTION: in. for inch
- 6. Leave a space between the numerical value and the unit of measurement:
 - *EXCEPTION:* There is no space between number and degree of plane angle or degrees of temperature (45°, 62°F, 20°C) or the number and the percent symbol (5%)
- 7. "L" is the symbol for liter, not lowercase "ell" or script "ell."
- 8. "Centi-" is not an acceptable SI prefix, and the use of cm should be avoided.
- 9. For currency, include the monetary unit of the country where the research is based followed by the U.S. dollar conversion in parentheses.

Formatting Equations

Each significant equation or formula should be displayed on a separate line. Center equations and place consecutive equation numbers flush right in parentheses.

EXAMPLE:

$$a^2 + b^2 = f^2 (1)$$

where

 a^2 = apples

 b^2 = bananas

 f^2 = fruit salad

If an equation requires more than one line, break it before an operational sign, and align the operational signs on the left.

EXAMPLE:

$$E = (a+b+c)/(m+n+o)$$
 (2)
 $\times d + e + f$

If two or more displayed equations are grouped together, leave space between the individual equations:

$$a + b = c \tag{3}$$

$$D = f - ab^2 \tag{4}$$

$$mon + rst$$
 (5)

Spell out the word "equation" and capitalize it in the text when referring to specific, numbered equations. In a highly mathematical or theoretical work, consider developing equations in appendices rather than in the body of the manuscript.

Please note that all equations must be retyped in our pagemaking program—this is one reason we require a hard copy of the manuscript—and therefore should be checked thoroughly by the author at the proofreading stage.

Book Publication Process

Most books are the result of an ASHRAE research project. A subcommittee may be designated to handle the review process of a committee-sponsored project, utilizing committee members or other persons with expertise in the area of concern.

The ASHRAE submittal, review, and publication process proceeds as follows:

- 1. The author indicates intent to submit a manuscript to Special Publications and receives the Authors' Manual.
- 2. The author prepares the manuscript, including artwork, according to this Authors' Manual and submits the manuscript to Special Publications (see Book Submission Guidelines).
- 3. The cognizant ASHRAE Technical Committee selects qualified reviewers.
- 4. Reviewers send reviews and comments to the author.
- 5. The author revises the manuscript and/or rebuts comments and provides a revised manuscript or rebuttal to the cognizant Technical Committee.
- 6. Reviewers complete an additional review.
- 7. The review process continues until the manuscript is accepted or rejected for publication by the cognizant Technical Committee.
- 8. After the manuscript is approved for publication, the author submits a final Microsoft® Word file and separate figure files electronically to Special Publications, and the author is informed of a tentative publication schedule.
- 9. Special Publications editors edit the manuscript for grammar, punctuation, clarity, and consistency with ASHRAE policies, as well as completeness of parts. It is then put into pages, with the figures and tables incorporated.
- 10. The editors send a PDF to the author. The author proofreads the manuscript and returns replies to the editors' queries within a mutually agreed upon (hopefully short) timeframe.
- 11. The book is published and offered for sale in the ASHRAE Bookstore as both the physical, printed book and a PDF available for download.
- 12. The author receives a complimentary copy of the published book.

Paper Publication Process

Technical Paper and Conference Paper submittal, review, and publication activity is coordinated by the ASHRAE Conference Program Administrator. The papers publication process proceeds as follows:

- 1. The author indicates intent to submit a paper to the ASHRAE Conference Program Administrator and receives instructions and the Authors' Manual.
- 2. The author prepares the paper, including artwork, according to the Authors' Manual and applicable Author's Template (for Technical Papers or Conference Papers).
- 3. The author uploads the paper through the applicable website as indicated in the Technical Papers Submission Requirements and Conference Papers Submission Requirements.
- 4. The ASHRAE Conference Program Administrator selects qualified reviewers.
- 5. The reviewers carefully review the paper and submit reviews online.
- 6. The author receives reviews and comments. The author revises the paper and/or rebuts the comments and uploads a revised paper or rebuttal.
- 7. The reviewers are notified that a revised paper requires additional review.
- 8. The review process continues until the paper is accepted or rejected for publication.
- 9. After the paper is accepted, the author uploads the final paper through the applicable website in the appropriate format as indicated in the Technical Papers Submission Requirements and Conference Papers Submission Requirements.
- 10. The accepted paper is scheduled for presentation at an ASHRAE Winter or Annual Conference or a Specialty Conference.
- 11. ASHRAE staff editors edit and format the Technical Paper and send a PDF to the author, who proofreads the paper and returns responses to the editors' queries by the supplied deadline, or staff editors scan the Conference Paper for adherence to the Author's Template for Conference Papers and the author addresses any noted errors and provides a revised PDF by the supplied deadline.
- 12. Editors send the author comments and questions generated at an ASHRAE Winter or Annual Conference for the Technical Paper. The author returns responses to the comments and questions to the editors.
- 13. Conference Papers are published as PDFs on the *ASHRAE Papers CD*, Technial Papers are available as preprint PDFs on the *ASHRAE Papers CD* and published with the questions and comments and authors' responses in *ASHRAE Transactions*, and papers for Specialty Conferences are published as PDFs on flash drives for the individual conferences.

Book Submission Guidelines

The following materials are required for manuscript submission:

- 1. The complete manuscript in Microsoft® Word and the figures provided as separate TIF or EPS files saved at high resolution. Tables should be editable and NOT submitted as images.
- 2. A laser printout of the complete manuscript including text, tables, and graphics. With the printout, include a cover sheet with the following information:
 - Proposed title of the book
 - Whether the book will include a CD, DVD, or supplemental materials online
 - Sponsoring ASHRAE Technical Committee and/or ASHRAE research project number, as applicable
 - Author names in desired order with (if applicable) ASHRAE membership grade, academic degrees at the doctoral level, and professional certifications for each author
 - An "About the Authors" paragraph
 - Complete contact information for the corresponding author, including mailing address, phone and fax numbers, and e-mail address
 - Three to five key words from the Key Word List and a paragraph describing the book (to be used on the back of the book, in the bookstore, and in marketing materials)
- 3. Electronic or printed copies of any permissions granted for reproducing material from other sources (see Obtaining Permissions)
- 4. The completed Marketing Questionnaire
- 5. See Document Formatting and Book Organization for additional requirements.

Manuscripts should be submitted to:

Mark Owen

Editor/Group Manager, ASHRAE Handbook and Special Publications 1791 Tullie Circle NE, Atlanta, GA 30329 USA

mowen@ashrae.org Telephone: 678-539-1187

Book Publication Process provides information on how the process will proceed after submission of the manuscript to Special Publications.

Technical Papers
Submission
Requirements

Technical Papers most often report on ASHRAE-sponsored research and unsolicited research in HVAC&R technical areas.

All Technical Papers undergo critical, double-blind peer review by three or more competent specialists to ensure high quality of content. A paper must be accepted by three reviewers to be approved for an ASHRAE Winter or Annual Conference. The Technical Paper review activity is coordinated by the ASHRAE Conference Program Administrator, who can be contacted if you have any questions during the paper submission and review process. File submission is done online via Manuscript Central. Instructions for uploading files to Manuscript Central are available in the "Instructions & Forms" section of that website.

The Technical Paper submission requirements are as follows:

- 1. Upload an Agreement to Publish form that is signed by every author.
- 2. Download the Authors' Template for Technical Papers for a Microsoft® Word file to use when writing the paper; also see an example paper.
- 3. Typed manuscripts for Technical Papers **must not** exceed 30 double-spaced pages (including references and tables) and can contain a **maximum** of 12 figures. Dual units of measurement should be included in the text, tables, and figures. See Document Formatting for additional requirements. Upload the paper as a Microsoft® Word file for review.
- 4. Upload an author's list as a separate Word file that includes the following:
 - The title of the paper
 - Author names in desired order, principal author first, with (if applicable)
 ASHRAE membership grade, academic degrees at the doctoral level, and professional certifications for all authors.
 - An author note with job title, affiliation, and address for each author.
 - Complete contact information for the corresponding author.
 - Authors should NOT identify themselves in manuscript files to enable reviewers to maintain a blind review.

Reviews will be done using ASHRAE's online review process, and ASHRAE staff editors will edit and lay out the accepted Technical Paper. (See Paper Publication Process for more information.) The corresponding author of the paper will receive a complimentary print copy of the published paper for distribution to all authors.

Conference Papers
Submission
Requirements

Conference Papers presented at ASHRAE Winter or Annual Conferences report on research in progress, applications, case studies, and other topics in HVAC&R technical areas. Conference Papers presented at Specialty Conferences report on specific technical areas within HVAC&R, depending on the conference.

All Conference Papers undergo single-blind review by two or more reviewers to ensure high quality of content. A paper must be accepted by two reviewers to be approved for a conference. The Conference Paper review activity is coordinated by the ASHRAE Conference Program Administrator, who can be contacted if you have any questions during the paper submission and review process. File submission is done online via Conference Exchange using the link provided for each individual conference.

The Conference Paper submission requirements are as follows:

- 1. Upload an abstract for review. The abstract must be accepted before the paper can be submitted. When you upload your abstract you will be assigned an ID# for your submission (one ID# for both the abstract and the paper).
- 2. Upon acceptance of the abstract, submit the paper based off of the accepted abstract.
 - Download the Authors' Template for Conference Papers for a Microsoft® Word file to use when writing the paper; also see an example paper.
 - Conference Papers must not exceed eight single-spaced pages in length (including references, tables, and figures) and must include an author note at the bottom of page 1. Dual units of measurement should be included in the text, tables, and figures. See Document Formatting for additional requirements. Conference Papers being submitted should be considered "Final" by the author. Upload the Conference Paper as a PDF with your assigned ID# as the file name.
 - Please note that adherence to the Author's Template and to the requirements set forth in this Authors' Manual are significant factors in determining the acceptance of your Conference Paper.
- 3. Upload an Agreement to Publish form signed by the presenting author.

Reviews will be done using ASHRAE's online review process. (See Paper Publication Process for more information.) The corresponding author of a paper will receive a complimentary PDF of the published paper for distribution to all authors.

Key Word List

Please use this list as an aid in selecting a minimum of three and up to a maximum of five key words.

Α

agricultural applications air cleaning equipment air conditioning accessories air conditioning units air distribution equipment air handlers air pollution control equipment

В

boilers building automation & controls building envelope

С

certification programs
chillers
chimneys
clean spaces/areas/rooms
coils
commercial buildings
commissioning
compressors
computers
condensing units
consulting services
controls
cooling towers

D

dehumidifiers dormitories drives ducts

Е

economic development economizers education educational facilities electrical components energy management systems energy recovery environmental test facilities evaporators

F

fans filters fire safety systems food processing furnaces

G

gaskets geothermal products

health care facilities

Н

heat exchangers
heat pumps
heat recovery units
heaters
heating accessories
hotels and motels
humidifiers
hydronic heating equipment

1

ice makers
ice rinks
ice storage equipment
indoor air quality equipment &
products
industrial facilities
instruments & meters
insulation

J

justice facilities

Κ

kitchen ventilation systems

L

laboratories libraries and archives

M

motors

museums

0

oil

Р

pipes power plants public assembly buildings pumps

R

radiant heating equipment
refrigerant control equipment
refrigerants
refrigerated facilities
refrigerating equipment
research & development
residential buildings
restaurants and hospitality facilities
retail space

S

software solar equipment soldering, welding, and brazing equipment supermarkets

Т

testing laboratories thermal storage tools training

U

utilities

V

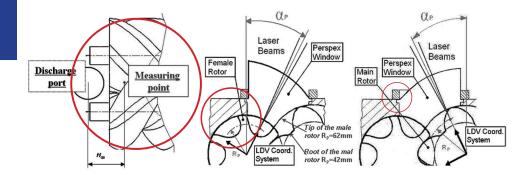
valves
VAV equipment
vibration & noise control

W

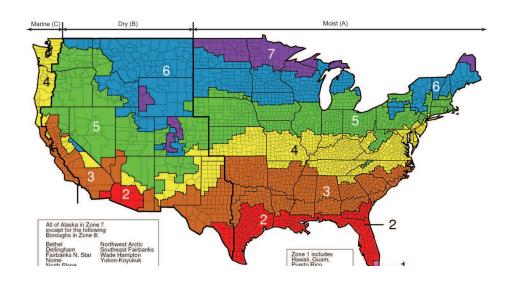
warehouse refrigeration water heaters water treatmen

Sample Figures

"Figures to be reproduced in black and white should use **patterns** or **shapes** to distinguish sections instead of coloring and shading."



"Figures to be reproduced in color should have **touching colors that differ significantly** so that there can be no confusion in understanding the data."



Sample Table

Table 1. Review of the Research on the Two-Phase Heat Transfer at Micro Scale

Researcher	Working Liquid	Dimension of the Channel	Single/Array of Microchannel(s)	Heat Transfer Coefficient, W/(cm ² /K)
Munkejord et al. (2002)	Peopane	63–155 μm	Array of microchannels	7.1 ~ 8.4
Cuta et al. (1996)	Water	Width: 100~300 μm Depth: 1 mm	Array of microchannels	1 ~ 2
Darabi and Ekula (2003)	HFE-7100		Single channel	1.8
Qu and Ma (2002)	Water	About 10 μm	Single channel	25
Brooks et al. (1999)	Water	Width: 50~200 μm Depth: 0.5~3 mm	Array of microchannels	25 W/cm ² (heat flux)
Park and Lee (2003)	Water	150 μm	Single channel	1.4
Tran et al. (1996)	R-12	2.46 mm	Single channel	0.2 ~ 1
Bao et al. (2000)	R-11	1.95 mm	Single channel	0.7~1.4
Bao et al. (2000)	R-123	1.95 mm	Single channel	0.5~1.4
Lin et al. (2001)	R-141b	1.1 mm	Single channel	0.2~0.6
Lazarek and Black (1982)	R-113	3.1 mm	Single channel	0.7-1.1
Wambsganss et al. (1993)	R-113	2.92 mm	Single channel	0.1~0.5

Heading Level Samples

PERFORMANCE EVALUATION FUNCTION

First Level

The performance of any air-conditioning system depends on two factors:

- a. thermal comfort
- b. energy consumption

Second Level

Thermal Comfort

The most important variables that influence the condition of thermal comfort are air temperature, water vapor pressure in ambient air, relative air velocity, mean radiant temperature, activity level (heat production in the body), thermal resistance of the clothing, and purity of the air. Fanger (1970) defined a thermal sensation index by considering air temperature, water vapor pressure in ambient air, relative air velocity, mean radiant temperature, activity level, and thermal resistance of the clothing. PMV is the thermal sensation index given by Fanger (1970) and is internationally standardized. It is easy to use PMV when controlling an air-conditioning system because PMV is an index of human thermal sensation with one value for all seasons and is effective for all temperatures that are neither extremely high nor extremely low. PMV ranges from –3 (cold) to +3 (hot). When PMV is zero, then thermal sensation will be neutral, i.e., neither cold nor hot. Broadly speaking, when PMV approaches zero then thermal comfort increases.

The first term on the right-hand side of Equation 14 indicates the mass of moisture in the incoming air, which comes in contact with the evaporator wall, and the mass of moisture in the outgoing air. The humidity of the incoming air is calculated from a psychrometric chart with the help of the second-order curve-fitting method. The multiplying factor, (1 - b), corresponds to the bypass factor of the evaporator. The second term amounts to mass of moisture in the incoming air bypassed through the evaporator and the mass of moisture in the outgoing air. The multiplying factor b corresponds to the bypass factor of the evaporator. The rate of change of specific humidity of supply air when the evaporator wall temperature is more than the dew-point temperature is given by

$$(\rho_a V_d) dW_s / dt = \nu \rho_a ((1 - \xi) W_3 + \xi W_0 - W_s) . \tag{1}$$

The first two terms on the right-hand side of Equation 15 correspond to absolute or specific humidity of incoming air, and the third term corresponds to outgoing supply air humidity.

Specific Humidity of Thermal Space. The rate of change of the specific humidity of the thermal space is given by

$$(\rho_a V_s)dW_1/dt = v\rho_a(W_s - W_3) + M_0$$

Agreement to Publish Notice

ASHRAE requires that prospective authors sign an Agreement to Publish form that gives ASHRAE the copyright and permits ASHRAE to publish the manuscript, to reprint it, and to offer it in whole or in part for reproduction or translation. ASHRAE must have the author's written permission and assignment of copyright (for papers) before a manuscript can be processed for publication. For books this is likely covered by a publications contract or a research project agreement; for papers, authors should complete the Agreement to Publish form and either mail it to the address or fax it to the number provided on the form or upload it to Manuscript Central (preferred). Authors shall not submit manuscripts that are or will be considered for publication by other organizations or publishers.

It is the author's responsibility to secure and transmit to ASHRAE written permissions for use of proprietary information and/or copyrighted materials appearing in the manuscript prior to its submission.

ASHRAE requires previously unpublished papers in all its publications. Prior publication of papers in publications that are indexed or widely available from retrievable sources (including ASHRAE Journal and HVAC&R Research) usually precludes consideration for presentation at Society conferences or for publication in ASHRAE Transactions.

Commercialism Policy

Commercialism Policy (as of March 2, 2009)

Commercialism is the inclusion of visual, apparel, written, or verbal references to any organization for the promotion or commercial advantage of that organization or the commercial disadvantage of a competing organization.

The Conferences and Expositions Committee will strictly enforce this policy for ASHRAE papers, presentations, and/or research documentation at the ASHRAE Winter and Annual Conferences.

What Is Not Allowed

- a. References or displays of trade names, logos or products provided by an HVAC&R related commercial organization, except as allowed in part (b) below.
- b. Inference that ASHRAE approves or endorses any product, software or system for any reason, even if the product, software or system complies with an ASHRAE standard.
- c. Copies of papers or portions thereof, draft position papers or recommendations, brochures, or other information SHALL NOT be made available at ASHRAE transaction sessions, seminars, or forums.

What Is Allowed

- d. First slide or presentation introductions.
- e. Bibliographies shall be restricted to the last slide or closing remarks.
- f. Research, programs, case studies, statements, policy, and/or legislation from any organization may be referenced only in order to maintain presentation clarity and relevance. Research, programs, policy, legislation or name of organizations, software, government agencies and government-sponsored agencies may be referenced only in order to maintain presentation clarity and relevance. Reference to Universities, Research agencies, Government agencies, Government-sponsored agencies, and/or non-profit organizations shall be allowed as long as the reference is non-biased in nature, germane to the focus of the publication/presentation, and does not imply an ASHRAE endorsement of a product and/or service.
- g. The names of computer hardware, computer software, operating systems, browsers, word processing programs, spreadsheets, presentation programs, etc.
- h. Trade or company names and/or logos of historical nature may be allowed.
- Trade or company names and/or logos NOT related to the HVAC&R industry may be allowed.
- j. Specific reference may be made to industry-related standards, test methods, and codes
- k. Make, model or sole source of critical test instrumentation, engineering software, reagents or apparatus may be identified as a footnote, so that others may duplicate the testing.
- 1. The last slide may contain your name.

Policy Enforcement

- m. The Conferences and Expositions Committee coordinates the review of all papers prior to publication or presentation. Nonconforming items within the audio-visual material will be deleted from the material or the material will not be allowed to be shown at the presentation.
- n. The technical programs Issues Updates Seminar and Public Session are not reviewed for commercialism since they are subject to current topics of general interest.
- o. Exemptions for special cases will require the written approval of the Program Committee Chair prior to the start of the Annual or Winter Conference.

Converting Graphics Created in Excel or Word

Below are steps for converting figures created in Microsoft® Excel or Microsoft® Word into .TIF files. For additional information see Formatting Figures.

1. In Excel, select the chart or graph to be converted. In Word, select the image to be converted.

If using Excel 2007 or Word 2007:

• From the menu options select "Copy."

If using an older version of Excel:

- Hold down the Shift key and from the menu options select "Edit."
- Choose "Copy Picture" from the drop-down Edit menu.
- Select "As shown when printed," then "OK."

If using an older version of Word:

- From Word's menu options, choose "Edit" then "Copy."
- 2. Minimize Excel or Word (don't close it).
- 3. Open Microsoft® PowerPoint.

If using PowerPoint 2007:

- Delete the two boxes showing on the blank page that opens.
- From the PowerPoint menu options, under the Design tab, select "Page Setup."
- In Page Setup, set the width for 24 in. and the height for 24 in.
- · Choose "OK."
- From the PowerPoint menu options, choose "Paste, Paste Special."
- Choose "Picture (Enhanced Metafile)."

If using an older version of PowerPoint:

- Choose "Blank Presentation," then "OK."
- Choose the icon showing a completely blank slide (or page).
- · Choose "OK."
- Under the File menu options, choose "Page Setup."
- In Page Setup, set the width for 36 inches and the height for 24 in. for landscape layout and set the width for 24 in. and the height for 36 in. for portrait layout.
- Choose "OK."
- From the PowerPoint menu options, choose "Edit, Paste Special."
- Choose "Picture (Enhanced Metafile)."
- 4. Select the image you pasted into PowerPoint. When you click on the image, it will show small squares on all four corners. These are handles. Use one of the corner handles to stretch the image to fill the page. Be sure to hold down the shift key as you stretch the corner handle so that the image proportions will remain intact.
- 5. Under the File menu option, choose "Save As."
- 6. In the "Save As" dialog box, choose "Tag Image File Format (*.tif, *.tiff)" from the Save As Type drop-down list. Give the file a name and click "Save." PowerPoint will ask if you want to save all slides or the current slide only; choose to save the current slide.

Book Organization

Manuscripts should be double-spaced and in a single-column format on 8 1/2 by 11 in. (126 by 279 mm) or A4 sheets, with 1 in. (25 mm) margins.

Authors may submit artwork or suggestions for cover design, but final cover designs are at the discretion of ASHRAE.

Title Page. Includes the proposed title of the book, the research project number if applicable, the number of the cognizant ASHRAE Technical Committee if applicable, and the author names in desired order.

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Indent items in a list, preceded by a number and period.

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The HVAC system was designed to accommodate the following:

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- 2. minimal energy consumption

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... are the following:

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- relative amounts of heating and cooling loads.

Separate items in a list within text using numbers in parentheses.

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EXAMPLE: (ASHRAE 1982)

Sample References

Journal

Veronica, D.A. 2010. Detecting cooling coil fouling automatically—Part 2: Results using a multilayer perceptron. *HVAC&R Research* 16(5):599–616.

Standard

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LBNL. 1993. *DOE-2*, Version 2.1E. Berkely, CA: Lawrence Berkeley National Laboratory.

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Personal Communication

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