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ABS: Plastic pipe used for plumbing construction

Absolute Pressure: The total pressure measured from absolute vacuum; the sum of gauge optional and atmospheric pressure corresponding to the barometer reading expressed in PSI

Absolute Zero: A point of total absence of heat, 2273.18°C

Absorption: Loss of power in an optical fiber, resulting from conversion of optical power into heat

Abstract of title: A written summary of all transactions that could affect the ownership of a piece of real estate including deeds, leases, liens, and wills

Abut: Joining end to end

Accelerator: An additive used to speed curing time of freshly poured concrete

Access Line: A line or circuit that connects a customer site to a network switching center or local exchange; local loop

Accessible: Having access, which may require removal of an access panel, etc.

Accumulator: A container in which fluid or gas is stored under pressure

AC Current: Electrical current that reverses direction at regular intervals (cycles)

Acid Vent: A pipe venting an acid waste system

Acid Waste: A pipe which conveys liquid waste matter

AC Line Filter: Absorbs electrical interference

Acme Thread: A thread used for feed screws

Acoustical: Referring to the study of sound transmission

Active Sludge: Sewage sediment, rich in destructive bacteria, that can be used to break down fresh sewage

AC Voltage: Electrical pressure that reverses direction at regular intervals

Adapter Fitting: Designed to fit two pipes or fittings different in design or material when connecting the two together would not be possible

Adaptive reuse: Adapting an old or historical building for a new purpose

Addendum (plural: addenda): Written information adding to, clarifying, or modifying a bid. An addendum is generally issued by an owner to a contractor during the bidding process and is intended to become part of the contract

Additive alternate: An alternate bid that, if accepted, adds to the contract sum

Adhesive: A bonding material

Adjacent: Touching; next to

Administrative Authority: The individual agency authorized by a political subdivision to enforce the provisions of a building code

Admixtures: Materials added to concrete or mortar to alter it in some way, as an accelerator, retarder, etc.

Aeration: An artificial method in which water and air are brought into direct contact with each other

Aerial Cable: Telecommunications cable installed on aerial supporting structures such as poles, sides of buildings, and other structures

Aerobic: Bacteria living or active only in free oxygen

Aggregate: Grades of sand, vermiculite, perlite, or gravel added to cement for concrete or plaster

Air Break: A physical separation in which a drain discharges indirectly into a fixture, receptacle, or interceptor at a point below the rim of the receptacle to prevent backflow

Air Chamber: A continuation of the water piping beyond the branch to fixtures finished with a cap designed to eliminate shock or vibration

Air, Compressed: Air at any pressure greater than atmospheric pressure

Air Drying: Method of removing excess moisture from lumber using natural circulation of air

Air, Free: Air which is subject only to atmospheric conditions

Air Gap: The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet conveying water or waste to a tank, plumbing fixture, receptor, or other device, and the flood level rim of the receptacle normally twice the diameter of the inlet

Air-Handling Unit: A mechanical unit used for air conditioning or movement of air, as supply or exhaust

Air rights: The right to use the space above a piece of real estate

Air, Standard: Air having a temperature of 70°F (21.1°C), a standard density of 0.0075 lb/ft (0.11 kg/m), and under pressure of 14.70 psia (101.4 kPa); the gas industry standard is 60°F (15.6°C)

Air space: A cavity or space in walls, windows, or other enclosed parts of a building between various structural members

Air Test: A test applied to a plumbing system upon its completion

Alarm Check Valve: A check valve equipped with a signaling device which will annunciate a remote alarm

Allowable Load: Maximum supportable load of any construction components(s)

Allowable Span: Maximum length permissible for any framing component without support

Allowance: In contract documents, an amount noted by an architect to be included in the contract sum for a specific item

Alloy: A substance composed of two or more metals

Alloy Pipe: A steel pipe with one or more elements other than carbon which give it greater resistance to corrosion and more strength

Alternate bid: The amount to be added to or deducted from a base bid amount if alternate materials and/or methods of construction are required

Alteration: Partial construction work performed within an existing structure; remodeling without a building addition

Alternator: Converts mechanical energy into electrical energy

Ambient Temperature: The prevailing temperature of the area surrounding an object

American National Standards Institute (ANSI):
A private organization that coordinates standards

American Standard Code for Information Interchange (ASCII): A standard character set that (typically) assigns a 7-bit sequence to each letter, number, and selected control character

American Standard Pipe Thread: A type of screw thread commonly used on pipe and fittings

American Wire Gauge (AWG): Standard used to describe the size of a wire

Ammeter: An instrument (meter) for measuring electrical current

Ampacity: The amount of current (amps) that a conductor can carry without overheating

Ampere (A): Unit of current measurement

Ampere-hour: The flow of one ampere for one hour

Amplitude: The size, in voltage, of signals in a data transmission

Anaerobic: Bacteria living in the absence of free oxygen

Anchor: A device used to secure pipes to a structure

Anchor Bolt: A J- or L-shaped steel rod threaded on one end for securing structural members to concrete

Anchorage: A secure point of attachment for lifelines, lanyards, or deceleration devices

Anchored bridging: Steel joist bridging connected to a bridging terminus point

Angle of Bend: In a pipe, the angle between radial lines from the beginning and end of the bend to the center

Angle Valve: A device in which the inlet and outlet are at right angles

Annunciator: A sound-generating device that intercepts and speaks the condition of circuits

Anode: The positive electrode in a battery

Anodize: An electrolytic means of coating aluminum or magnesium by oxidizing

Apparent Power (P_A): Product of the voltage and current in a circuit calculated without considering the phase shift. Expressed in terms of volt-amperes (VA)

Approved: Accepted under an applicable specification or standard by the administrative authority

Approved Ground: A grounding bus or strap suitable for connecting to data com equip

Approved Testing Agency: An organization established for purposes of testing to approved standards

Apron: A piece of window trim beneath the window sill; also used to designate the front of a building, such as the concrete apron in front of a garage

Aquifer: An underground formation of sands, gravel, or fractured or porous rock that is saturated with water and that supplies water for wells and springs

Arbor: An axle on which a cutting tool is mounted

Arc Tube: The light-producing element of an HID lamp

Architect's Scale: A rule with scales indicating feet, inches, and fractions of inches

Arcing: A luminous discharge formed by the span of electrical current across a space between terminals

Area Drain: A receptacle designed to collect surface or rain water

Areaway: The open space around foundation walls, doorways or windows to permit light and air to reach the below-ground-level floors

Arrestor (Lightning): A device that reduces the voltage of a surge applied to its terminals and restores itself to its original condition

Arterial vent: A vent serving a drain and a public sewer

Asbestos: A mineral material used for exterior wall siding and for fireproofing

Ashlar: A stone cut by sawing to a rectangular shape

Asphalt: A black material produced as a by-product of oil or coal

Asphalt shingle: A composition-type shingle used on a roof and is fire-resistant

Aspirator: A fitting or device supplied with water or other fluid under positive pressure which passes through an integral orifice or constriction causing a vacuum

Assignment: Transferring the rights and duties under a contract from one party to another

Atmospheric vacuum breaker: A mechanical device consisting of a check valve opening to the atmosphere when the pressure in the piping drops to atmospheric

Attenuation: Denotes the loss in strength of power between that transmitted and that received. Expressed as a ratio in decibels (dB)

Authority having jurisdiction: The organization responsible for approving equipment, installation, or procedure

Autotransformer: Changes voltage level using the same common coil for both the primary and the secondary

Awl: A tool used to mark wood or make pilot holes.

Awning window: A window that is hinged at the top and the bottom swings outward

Axial: In a direction parallel to the long axis of a structural member

B

Backboard: A wooden (or metal) panel used for mounting equipment

Backbone: The main connectivity device of a distributed system

Backcharge: Billings for work performed or costs incurred by one party that, under the contract, should have been performed or incurred by the party to whom billed

Back electromagnetic force: The voltage created in an inductive circuit by a changing current flowing through the circuit

Backfill: Any deleterious material (sand, gravel, etc.) used to fill an excavation

Backflow: The flow of water or other liquids into the distributing pipes of a potable water supply from any source other than its intended source

Backflow connection: A condition in any arrangement where backflow may occur

Backflow preventer: Device to prevent backflow into the potable water system

Backhoe: Self-powered excavation equipment

Backing ring: A metal strip used to prevent melted metal from entering a pipe when making a butt-welded joint

Back-siphonage: The flowing back of used or contaminated water from a fixture or vessel into a water supply pipe due to negative pressure in the pipe

Backsplash: The vertical part of a countertop that runs along the wall to prevent splashing the wall

Back up: A condition in which waste water may flow back into another fixture or compartment but not into the potable water system

Backwater valve: A device which permits drainage in one direction but has a check valve that closes against back pressure

Baffle plate: A tray or partition placed in process equipment to change the direction of flow

Ballast: A component used with fluorescent lamps to provide the voltage necessary to strike the mercury arc, then limit the amount of current that flows through the lamp

Ball Check valve: A device used to stop flow in one direction while allowing flow in the opposite direction

Balloon framing: Wall construction extending from the foundation to the roof structure without interruption

Ball valve: A valve providing a tight shutoff

Baluster: That part of a staircase which supports the handrail or banister

Balustrade: A complete handrail assembly

Bank: An assemblage of fixed contacts

Bank plugs: Pieces of lumber driven into the ground so surveyors can string a line between them to measure grade

banister: That part of a staircase which fits on top of the balusters

Base: The lowest portion or lowest point of a stack of vertical pipe

Baseboard: Molding covering the joint between a finished wall and the floor

Base bid: An agreed construction sum based on the contract documents

Base shoe: A molding added at the bottom of a baseboard used to cover the edge of finish flooring or carpeting

Batten: A narrow piece of wood used to cover a joint

Batter board: Temporary framework used to assist in locating corners when laying a foundation; also used to maintain proper elevations of structures, excavations, and trenches

Battery of fixtures: Two or more similar adjacent fixtures which discharge into a common horizontal waste or soil branch

Batt Insulation: An insulating material to be installed between framing members

Beam: A horizontal framing member made of steel or wood at least 5 inches thick and at least 7 inches wide

Bearing partition: An interior divider or wall that supports the structure above it

Bearing wall: A wall having weight-bearing properties associated with holding up a building's roof or second floor

Bell: That portion of a pipe which is sufficiently enlarged to receive the end of another pipe of the same diameter

Bell-and-spigot joint: Commonly used joint in cast-iron soil pipe end

Benching: Making steplike cuts into a slope used for erosion control

Benchmark: Point of known elevation from which surveyors can establish grades

Berm: A raised earth embankment; the shoulder of a paved road; the area between the curb and the gutter and a sidewalk

Bevel: A tool that can be adjusted to any angle; it helps make cuts at the number of degrees that is desired

Bevel siding: A siding material which is tapered from a thick edge to a thinner edge

Bibb: A faucet used to connect a hose

Bid: A formal offer by a contractor, in accordance with the specifications for a project, to do all or a phase of the work at a certain price in accordance with the terms and conditions stated in the offer

Bid bond: A bond issued on behalf of a contractor that provides assurance to the recipient of the bid that, if the bid is accepted, the contractor will sign the contract and provide a performance bond. The bonding company is obliged to pay the recipient of the bid the difference between the contract's bid and the bid of the next lowest responsible bidder if the bid is accepted and the contractor fails

Bid opening: The actual process of opening and tabulating bids submitted at a prescribed bid date/time and conforming with the bid procedures

Bid security: Funds or a bid bond submitted with a bid as a guarantee to the recipient of the bid that the contractor, if awarded the contract, will accept it

Bi-fold: A double-leaf door used primarily for closet doors

Bird mouth: A notch cut into a roof rafter so that it can rest smoothly on the top plate

Bitumen: The term used to identify asphalt and coal tar

Black pipe: Nongalvanized steel pipe

Blank flange: A soil plate flange used to seal off the flow in a pipe

Blind flange: A flange used to seal off the end of a pipe

Blistering: The condition that paint presents when air or moisture is trapped underneath

Blocking: A piece of wood fastened between structural members to strengthen them

Board foot (B.F.): A unit of lumber measure equaling 144 cubic inches; the base unit is 1 inch thick and 12 inches square or $1 \times 12 \times 12 = 144$ cubic inches

Body belt: A strap with means both for securing it about the waist and for attaching it to a lanyard, lifeline, or deceleration device

Body harness: Straps that may be secured about the person in a manner that distributes the fall-arrest forces over at least the thighs, pelvis, waist, chest, and shoulders with a means for attaching the harness to other components of a personal fall arrest system

Boilerplate: Standardized or formulaic language in a contract

Boiler blow-off: An outlet on a boiler to permit discharge of sediment

Boiler blow-off tank: A vessel designed to receive the discharge from a boiler blow-off outlet

Bolster: A bent-wire device used in holding reinforcing bars in place during the pouring of concrete

Bolted diagonal bridging: Diagonal bridging that is bolted to a steel joist or joists

Bond: In masonry, the interlocking system of brick or block to be installed

Bond beam: A steel-reinforced concrete masonry beam running horizontally around a masonry wall to provide added strength. Vertical bond beams are formed by inserting reinforcing bars in a cell after the wall is laid and filling with grout

Bonding: A very-low-impedance path accomplished by permanently joining non-current-carrying metal parts is made to provide electrical continuity and to conduct current safely

Bonding company: A licensed firm willing to execute a surety bond, payable to the owner, securing a contractor's performance on a contract either in whole or in part, or securing payment for labor and materials. Also known as a surety

Bonding conductor: The conductor that connects the non-current-carrying parts to the approved system ground conductor

Bonding jumper: A conductor used to connect the metal parts of an electrical system

Bond wire: Bare grounding wire that runs inside an armored cable

Bonnet: Connects the valve actuator to the valve body

Borrow site: An area from which earth is taken for hauling to a jobsite which is short of earth

Bottom or heel cut: The cutout of a rafter end which rests against the plate

Bow: A term used to indicate an upward warp along the length of a piece of lumber

Bow window: A window unit that projects from an exterior wall

Brace: An inclined piece of lumber applied to a wall or to roof rafters to add strength

Branch: Any part of the piping system other than a main, riser, or stack

Branch circuit: Conductors between the last overcurrent device and the outlets

Branch circuit, multiwire: A branch circuit having two or more ungrounded circuit conductors, each having a voltage difference between them, and a grounded circuit conductor (neutral) having an equal voltage difference between it and each ungrounded conductor

Branch interval: A length of soil or waste stack corresponding to a story height within which the horizontal branches are connected to the stack

Branch tee: A tee having one side branch

Branch vent: A vent connecting one or more individual vents with a vent stack or stack vent

Brazed: Joined by hard solder

Brazing Ends: The ends of a valve or fitting which are prepared for silver brazing

Breach of contract: A material failure to perform an act required by a contract

Break: The number of separate places on a contact that open or close a circuit

Breakout box: A device that allows access to individual points on a physical interface connector for testing

Brick veneer: A brick wall of single brick, usually covering a frame structure

Bridging: Used to keep joists from twisting or bending

Bridging clip: A device that is attached to the steel joist to allow the bolting of the bridging to the steel joist

Bridging terminus: A wall, a beam, tandem joists (with all bridging installed and a horizontal truss in the plane of the top chord), or other element at an end or intermediate point(s) of a line of bridging that provides an anchor point for the steel joist bridging

British thermal unit (BTU): The amount of heat necessary to raise the temperature of one pound of water 1°F

Bronze trim or bronze mounted: Indicates that certain internal parts of the valves are made of copper alloy

Bubble tight: The condition of a valve seat that prohibits the leakage of visible bubbles

Builder's level: A tripod-mounted device that uses optical sighting to make sure that a straight line is sighted and reference point is level

Builder's risk insurance: Insurance coverage on a construction project during construction

Building code: The legal minimum requirements established or adopted by a government agency for the design and construction of buildings

Building drain: The lowest piping of the drainage system which receives the discharge from waste, etc., inside the building and conveys it to the sewer

Building envelope: The outer structure of a building

Building paper: Also called tar paper, roofing paper, etc

Building permits: Must be obtained for construction and allows for inspections of the work and for placing project on the tax roles

Building sewer: That part of the horizontal piping of a drainage system which extends from the end of the building drain and conveys it to any sewer

Building sewer, combined: Conveys both sewage and storm water

Building sewer, sanitary: Conveys sewage only

Building sewer, storm: Conveys storm water only

Building subdrain: That portion of a drainage system which cannot drain by gravity in a building sewer

Building trap: A fitting or assembly of fittings installed in a building drain to prevent circulation of air between the drainage of the building and the building sewer

Bull head tee: A branch of the tee is larger than the run

Bull float: A tool used to spread out and smooth concrete

Bullnose: Any material with a rounded edge, such as a concrete block, ceramic tile, brick, window sill, etc.

Burst pressure: The pressure which can be slowly applied to the valve at room temperature for 30 seconds without causing rupture

Bus: A group of conductors that serve as a common connection for circuits

Bus bar: A heavy copper or aluminum bar used to carry currents in switchboards

Bushing: A pipe fitting for connecting a pipe with a female or larger-size fitting

Busway: A metal-enclosed distribution of bus bars.

Butt: To meet edge to edge

Butterfly valve: A device which operates at right angles to the flow

Buttress: A projecting structure of masonry or wood to support or give stability to a wall or building against horizontal outward forces

Butt-weld joint: A welded pipe joint made with the ends of two pipes butting each other

Butt-weld pipe: Pipe welded along a seam butted edge to edge and not scarfed or lapped

By-pass: An auxiliary loop in a pipeline intended for diverting flow around a device

By-pass valve: A valve used to divert the flow past the part of the system through which it normally passes

C

Cable: One or more insulated or noninsulated wires used to conduct electrical current

Calcium chloride: A concrete admixture used for accelerating the cure time

California bearing ratio (CBR): A system used for determining the bearing capacity of a foundation

Calorie (Cal): The amount of heat required to raise one gallon of water 1°C

Camber: A slight vertical curve (arch) formed in a beam or girder to counteract deflection due to loading

Cantilever: A projecting structural member or slab supported at one end only

Cant strip: A wooden strip used to raise the first course of shingles in plane; an angular board placed at the junction of the roof deck and wall to relieve the sharp angle when the roofing material is installed

Capacitance (C): The ability of a circuit or component to store an electrical charge, measured in farads (F)

Capacitive circuit: A circuit in which current leads voltage

Capacitive reactance (Xc): The opposition to current flow by a capacitor, in ohms

Capacitor: A device that stores electrical energy by an electrostatic field

Capacity: The maximum or minimum flows possible under given conditions of media, temperature, pressure, velocity, etc.

Capillary: The action by which the surface of a liquid, where it is in contact with a solid, is elevated or depressed

Carbon steel pipe: Owes its properties mostly to the carbon it contains

Carriage: A notched stair frame

Casement: A type of window hinged to swing outward

Casing: The trim that goes on around the edge of a door or window opening

Catch basin: A complete drain box where water drains into a pit, then through a pipe connected to the box

Catch point: Another name for hinge point or top of shoulder

Cathode: The negative electrode in a battery

Cathodic protection: The control of the electrolytic corrosion of an underground or underwater metallic structure by the application of an electric current

Caulk: Any type of material used to seal walls, windows, and doors to weatherize

Cavitation: A localized gaseous condition that is found within a liquid stream

Cement: A material that is the basis for a concrete mix

Cementitious: Able to harden like cement

Cement joint: The union of two fittings by insertion of material

Cement plaster: A mixture of gypsum, cement, hydrated lime, sand, and water, used primarily for exterior wall finish

Center line: The point on stakes or drawings which indicates the halfway point between two sides

Cesspool: A lined excavation in the ground which receives the discharge of a drainage system so as to retain the organic matter and solids but permit the liquids to seep through the bottom and sides

Chainwheel-operated valve: A device which opens and closes valve seats

Chair: Small device used to support horizontal rebar

Chamfer: A beveled outside corner or edge on a beam or column

Chase: A groove made in a wall or through a floor to accommodate pipes or ducts

Check valve: A device designed to allow a fluid to pass through in one direction only

Chemical waste system: Piping which conveys corrosive or harmful wastes to the drainage system

Choke coil: An inductor used to limit the flow of AC

Choker: A wire rope or synthetic fiber rigging assembly that is used to attach a load to a hoisting device

Chord: Top or bottom member of a truss

Circuit: A complete path through which electricity flows

Circuit breaker: A device used to open and close a circuit

Circuit vent: A branch vent that serves two or more traps and extends from in front of the last fixture connection of a horizontal branch to the vent stack

Circular mil (cm): A measurement of the cross-sectional area of a conductor

Clamp gate valve: A gate valve whose body and bonnet are held together by a U-bolt

Cleanout: A plug joined to an opening in a pipe which can be removed for the purpose of cleaning

Clear and grub: To remove all vegetation, trees, concrete, or anything that will interfere with construction

Clear water waste: Cooling water and condensate drainage from HVAC/R, cooled condensate from steam heating, cooled boiler blowdown water and waste water drainage in which impurities have been reduced below a minimum concentration considered harmful

Cleat: A ladder crosspiece of rectangular cross section placed on edge upon which a person may step while ascending or descending a ladder

Clerestory: A windowed area between roof planes or rising above lower story, to admit light and/or ventilation

Closed circuit: A continuous path for electrical flow

Close nipple: A nipple with a length twice the length of a standard pipe thread

Cock: A form of valve having a hole in a tapered plug which is rotated to provide passageway for fluid

Coefficient of expansion: The increase in unit length, area, or volume for a one degree rise in temperature

Coil: A winding of insulated conductors arranged to produce magnetic flux

Cold forming: The process of using press brakes, rolls, or other methods to shape steel into desired cross sections at room temperature

Cold joint: Construction joint in concrete occurring at a place where the continuous pouring has been interrupted

Collar tie: Horizontal framing member tying the raftering together above the plate line

Column: A load-carrying vertical member that is part of the primary skeletal framing system; columns do not include posts

Combined waste and vent system: A specially designed system of waste piping, embodying the horizontal wet venting of one or more floor sinks or floor drains by means of a common waste and vent pipe, adequately sized to provide free movement of air above the flow line of the drain

Common noise: Noise produced between the ground and the hot or neutral line

Common rafter: A structural member that extends without interruption from the ridge to the plate line in a sloped roof structure

Common vent: A vent which connects at the junction of two fixture drains and serves as a vent for both fixtures

Compactor: A machine for compacting soil

Companion flange: A pipe flange to connect with another flange or with a flanged valve or fitting

Competent person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees and who has authorization to take prompt corrective measures to eliminate them

Compression joint: A multi-piece joint with cup-shaped threaded nuts which, when tightened, compress tapered sleeves so that they form a tight joint

Compressor: A mechanical device for increasing the pressure of air or gas

Concrete: A mixture of sand, gravel, and cement in water

Condensate: Water which has liquified from steam

Condensation: The process by which moisture in the air becomes water or ice on a surface (such as a window) whose temperature is colder than the air's temperature

Conductance: A measure of the ability of a component to conduct electricity in mohs

Conductor: A substance which offers little resistance to the flow of electrical currents; the piping from the roof to the building storm drain or combined sewer, located inside of the building

Conduit: Metal, fiber pipe or raceway used to carry electrical conductors

Conduit body: The part of a conduit system, at the junction of two or more sections of the system, that allows access through a removable cover

Confluent vent: A vent serving more than one fixture vent or stack vent

Connector: A device that is used to couple (connect) parts of a personal fall arrest system or positioning device system together

Connector: An employee who, working with hoisting equipment, is placing and connecting structural members and/or components

Constructibility: The ability to erect structural steel members without having to alter the over-all structural design

Construction joint: Separation between two placements of concrete; a means for keying two sections together

Construction load (for joist erection): Any load other than the weight of the employee(s), the joists, and the bridging bundle

Construction manager: An entity that provides construction management services, either as an advisor or as a contractor

Controlled access zone: A work area designated and clearly marked in which certain types of work (such as overhand bricklaying) may take place without the use of conventional fall protection systems guardrail, personal arrest, or safety net to protect the employees working in the zone

Contact: A control device that uses a small current to energize or de-energize

Contacts: The conducting part of a switch that operates with another conducting part to make or break a circuit

Continuous load: A load whose maximum current continues for three hours

Continuous vent: A vent that is a continuation of the drain to which it connects

Continuous waste: A continuous drain from two or three fixtures connected to a single trap

Contour line: Solid or dashed lines showing the elevation of the earth

Control: A device used to regulate the function of a component or system

Controlled decking zone: (CDZ) An area in which certain work (for example, initial installation and placement of metal decking) may take place without the use of guardrail systems, personal fall arrest systems, fall restraint systems, or safety net systems and where access to the zone is controlled

Controlled load lowering: Lowering a load by means of a mechanical hoist drum device that allows a hoisted load to be lowered with maximum control using the gear train or hydraulic components of the hoist mechanism. Controlled load lowering requires the use of the hoist drive motor, rather than the load hoist brake, to lower the load

Controlling contractor: A prime contractor, general contractor, construction manager, or any other legal entity that has the overall responsibility for the construction of the project—its planning, quality, and completion

Convection: Transfer of heat through the movement of a liquid or gas

Convector: A heat transfer device (radiator) used in a hydronic (hot water) system

Coping: The top course or cap on a masonry wall protecting the masonry below

Corbel: A stone, masonry, or wood bracket projecting out from a wall

Corner beads: Metal strips that prevent damage to drywall corners

Cornice: That part of the roof extending horizontally out from the wall

Corporation cock: A stopcock screwed into the street water main to supply a house service connection

Cost breakdown: A detailed summary of all the anticipated costs on a construction project

Coulomb: Current of one ampere per second

Coupling: A pipe fitting with female threads used to connect two pipes

Course: A horizontal layer of masonry units

Crawl space: The area under a floor that is only excavated to allow one to crawl under it

Cripple jack: A jack rafter with a cut that fits in between a hip and a valley rafter

Cripple rafter: A cripple rafter is not as long as the regular rafter

Cripple stud: A short stud that fills out the position where the stud would have been located if a window, door, or some other opening had not been there

Critical level: The point on a backflow-prevention device or vacuum breaker marked C/L which determines the minimum elevation above the flood-level rim of the fixture served at which the device may be installed; when a backflow-prevention device is not marked C/L, the bottom of the vacuum breaker or combination valve constitutes the critical level

Critical lift: A lift that (1) exceeds 75 percent of the rated capacity of the crane or derrick, or (2) requires the use of more than one crane or derrick

Cross: A pipe fitting with four branches in pairs, each pair on one axis

Cross brace: Wood or metal diagonal bracing used to aid in structural support between joists and beams

Cross connection: Any physical connection between two otherwise separated piping systems, one of which contains potable water and the other of unknown safety, whereby flow may occur from one system to the other

Crossover: A pipe fitting with a double offset or shaped like the letter "U" with ends turned out; used to pass the flow of one pipe past another

Crosstalk: The unwanted energy transferred from one circuit or wire to another

Cross valve: A valve fitted on a transverse pipe so as to open communication between two parallel pipes

Crown: The top of a trap

Crown vent: A vent pipe connected at the uppermost point in the crown of a trap

Crows foot: A lath set by the grade setter with markings to indicate the final grade at a certain point

Cup: To warp across the grain

Cup weld: A pipe weld in which one pipe is expanded on the end to allow the entrance of the end of the other pipe

Curb box: A device at the curb that contains a valve used to shut off a supply line

Current: The flow of electricity in a circuit, in AMPS

Curtain wall: Inside walls that do not carry loads

Cutout box: A surface-mounted electrical enclosure with a hinged door

Cutting plane line: A heavy broken line with arrows, letters, and numbers at each end indicating the section view that is being identified

Cycle: Measured in hertz (Hz), it is the flow of AC in one direction and then in the opposite direction in one time interval

D

Dado: A rectangular groove cut into a board across the grain

Daisy chaining: The connection of multiple devices in a serial fashion

Dampen: To check or reduce

Dampproofing: A surfacing used to coat and protect concrete and masonry from moisture

Data rate: The number of bits of information in a transmission system, expressed in bits per second

Datum point: See Benchmark; identification of the elevation above mean sea level

DC compound motor: The field is connected in both series and shunt with the armature

DC permanent magnet motor: Uses magnets, not a coil, for the field winding

DC series motor: The field is connected in series with the armature

DC shunt motor: The field is connected in parallel with the armature

DC voltage: Voltage that flows in one direction only

Dead end: A branch leading from a soil, waste, or vent pipe, a building drain, or a building sewer which is terminated at a developed distance of 2 feet or more by means of a plug, etc.

Dead load: The weight of a structure and all its fixed components

Deceleration device: Any mechanism such as rope, grab, ripstitch lanyard, specially-woven lanyard, tearing or deforming lanyards, automatic self-retracting lifelines/lanyards

Deceleration distance: The additional vertical distance a falling person travels, excluding lifeline elongation and free fall distance, before stopping, from the point at which a deceleration device begins to operate

Decibel: A standard logarithmic unit for the ratio of two powers, voltages, or currents. In fiber optics, the ratio is power

Deck: The part of a roof that covers the rafters

Decking hole: A gap or void more than 2 inches (5.1 cm) in its least dimension and less than 12 inches (30.5 cm) in its greatest dimension in a floor, roof, or other walking/working surface. Pre-engineered holes in cellular decking (for wires, cables, etc.) are not included in this definition

Deep cycle: Battery type that can be discharged to a large fraction of capacity

Deformed bar: Steel reinforcement bar with ridges to prevent the bar from loosening during the concrete curing process

Degauss: To remove residual permanent magnetism.

Delta connection: A connection that has each coil connected end-to-end

Department having jurisdiction: The administrative authority affected by any provision of a building code

Depth of discharge (DOD): The percent of the rated battery capacity that has been withdrawn

Derrick floor: An elevated floor of a building or structure that has been designated to receive hoisted pieces of steel prior to final placement

Developed length: The length along the center line of a pipe and fittings

Device (wiring device): The part of an electrical system that is designed to carry, but not use, electrical energy

Dewpoint: The temperature of a gas or liquid at which condensation or evaporation occurs

Diagonal brace: A wood or metal member placed diagonally over wood or metal framing to add rigidity at corners and at 25'0" of unbroken wall space

Diaphragm: A flexible disk which actuates the valve stem

Diaphragm control valve: A control valve having a spring diaphragm actuator

Dielectric fitting: A fitting having insulating parts or material that prohibits flow of electrical current

Differential: The variance between two target values, one is high, the other low

Diffuser: A grille or register over the air duct opening into a room which controls and directs the flow of air

Digestion: The portion of the sewage treatment process where biochemical decomposition of organic matter takes place, resulting in the formation of simple organic and mineral matter

Dimension line: A line on a drawing with a measurement indicating length

Direct current (DC): Electrical current which flows in one direction only

Disk: That part of a valve which actually closes off the flow

Displacement: The volume or weight of a fluid displaced by a floating body

Diverter: A piece, usually metal, used to direct moisture to a desired path or location

Domestic sewage: Liquid and water-borne wastes that are free from industrial wastes and permit satisfactory disposal without special treatment into a public or private sewer

Dormer: A projection built out from a sloping roof, including one or more vertical windows

Dosing tank: A watertight tank in a septic system placed between the tank and the distribution box equipped with a pump or automatic siphon designed to discharge sewage to a disposal field

Double-cleat ladder: A ladder similar in construction to a single-cleat ladder but with a center rail to allow simultaneous two-way traffic for employees ascending or descending

Double break contacts: Contacts that break the current in two separate places

Double connection: An attachment method where the connection point is intended for two pieces of steel which share common bolts on either side of a central piece

Double connection seat: A structural attachment that, during the installation of a double connection, supports the first member while the second member is connected

Double disk: A two-piece disk used in a gate valve

Double offset: Two changes of direction installed in succession or series in continuous pipe

Double plate: Usually refers to the practice of using two pieces of dimensional lumber for support over the top section or wall section

Double ported valve: A valve having two parts to overcome line-pressure imbalance

Double-sweep tee: A tee made with long-radius curves between body and branch

Double trimmer: Double joists used on the sides of openings placed without regard to regular joist spacings for stairs or chimneys

Double wedge: A device used in gate valves, similar to a double disk, in which the split wedges seal independently

Dowel: Straight metal bars used to connect or position two sections of concrete or masonry

Down: Refers to piping running through the floor to a lower level

Downspout: The rainleader from the roof to a building storm drain

Downstream: Refers to a location in the direction of flow after passing a reference point

Drain: Any pipe which carries waste water or water-borne wastes in a drainage system

Drainage fitting: A type of fitting used for draining fluid from pipes and making a smooth and continuous interior surface

Drainage system: The drainage piping within public or private premises which conveys sewage, rain water, or other liquid wastes to an approved point of disposal, but not including the mains of a public sewer system

Drain field: An area of a piping system arranged in troughs for disposing liquid waste

Drain tile: Usually 4" plastic pipe with small holes that allow water to drain into it; laid along the foundation footing to drain the seepage into a sump or storm sewer

Droop: The amount by which the controlled variable pressure, temperature, liquid level, or differential pressure deviates from a set value

Drop: Refers to piping running to a lower elevation within the same floor level

Drop elbow: A small elbow having wings cast on each side to secure to a ceiling, wall, etc.

Drop siding: Has a special groove cut into it that lets each board fit into the next board

Drop tee: A tee having wings as in a drop elbow

Dross: Solid scum that forms on the surface of a metal when molten or melting as a result of oxidation or dirt

Dry wall: A type of wall covering (gypsum board) used in place of plaster

Dry-pipe valve: A valve used with a dry-pipe sprinkler system in which water is on one side and air is on the other

Dry-weather flow: Sewage collected during the summer which contains little or no ground water by infiltration and no storm water

Duct: A round or rectangular pipe, usually metal, used for transferring conditioned air in a heating and cooling system

Ductwork: A system of pipes used to distribute air to all parts of a structure.

Durham system: A term used to describe soil or waste systems in which all piping is of threaded pipe, tubing, or other rigid construction

DWV: Type of copper or plastic tubing used for drain, waste, or venting pipe

E

Earthwork: Excavating and grading soil

Easement: A portion of land on or off a property which is set aside for utilities

Eave: The lowest edge on a gable roof

Eaves: The overhang of a roof projecting over walls

Eaves trough: A gutter

Eccentric fittings: Fittings whose openings are offset and allow liquid to flow freely

Effective openings: The minimum cross-sectional area at the point of discharge

Efficiency (EFF): The ratio of output power to input power, expressed in percent

Effluent: Sewage, treated or partially treated, flowing out of sewage treatment equipment

Elastic limit: The greatest stress which a material can withstand without a permanent deformation after release of the stress

Elbow: A fitting that makes an angle between adjacent pipes

Electricity: The movement of electrons through a conductor

Electrolysis: The process of producing chemical changes by passage of an electric current through an electrolyte

Electromagnet: Coil of wire that exhibits magnetic properties when current passes through it

Elevation: An exterior or interior orthographic view of a structure, identifying the design and the materials to be used

Elevation numbers: The vertical distance above or below sea level

Embankment: Area being filled with earth

End connection: The method of connecting the parts of a piping system

Engineered plumbing system: Designed by using engineering design criteria other than those given in plumbing codes

Equalization: The process of restoring all cells in a battery to an equal state of charge.

Equivalent: Alternative designs, materials, or methods that the employer can demonstrate will provide an equal or greater degree of safety for employees than the method or item specified in the standard

Erection bridging: The bolted diagonal bridging that is required to be installed prior to releasing the hoisting cables from the steel joists

Erosion: The gradual destruction of metal or other material by the abrasive action of liquids, gases, etc.

Evapotranspiration: Loss of water from the soil by evaporation and plants

Excavation: The recess or pit formed by removing the earth in preparation for footings, etc.

Excitation: The power required to energize the magnetic field of motors, transformers, generators, etc.

Existing work: A plumbing system which has been installed prior to the effective date of applicable code

Expansion joint: A joint whose primary purpose is to absorb longitudinal thermal expansion in a pipe line; formed in concrete or masonry units by a bituminous fiber strip to allow for expansion and contraction

Expansion loop: A large-radius bend in a pipe line to absorb longitudinal expansion

Extension trestle ladder: A self-supporting portable ladder, adjustable in length, consisting of a trestle ladder base and a vertically adjustable extension section with a suitable means for locking the ladders together

Extra heavy: Description of piping material, usually cast iron, indicating thicker than standard

Extrusion: Metal which has been shaped by forcing it in the hot or cold state through dies of the desired shape

F

Face: The exposed side of a framing or masonry unit

Face brick: A select brick fired to produce a desired color and effect for use in the face of a wall

Face-to-face dimensions: The dimensions from the face of the inlet port to the face of the outlet port of a valve, etc.

Failure: Load refusal, breakage, or separation of component parts. Load refusal is the point where the structural members lose their ability to carry the loads

Fall restraint system: A fall protection system that prevents the user from falling any distance. The system is comprised of either a body belt or body harness along with an anchorage, connectors, and other necessary equipment. The other components typically include a lanyard and may also include a lifeline and other devices

Farad (F): The unit of measurement of capacitance

Fascia: A flat board covering the ends of rafters on the cornice or eaves

Fault current: Any current that travels an unwanted path

Feathering: Raking new asphalt to join smoothly with the existing asphalt

Feeder: Circuit conductors between the service and the final branch circuit OCPD

Female thread: Internal thread in pipe fittings, etc.

Ferrule: A precision tube that holds a fiber for alignment

Fiber optics: A technology that uses light as a digital information carrier

Field: The stationary windings (magnets) of a DC motor

Filament: A conductor that has a high enough resistance to cause heat

Filter: A combination of circuit elements designed specifically to pass certain frequencies and resist all others

Filter: Device through which fluid is passed to separate contaminants from it

Filter element or media: A porous device which performs the process of filtration

Final interior perimeter: The perimeter of a large permanent open space within a building such as an atrium or courtyard. This does not include openings for stairways, elevator shafts, etc.

Finish: Any material used to complete an installation that provides an esthetic or finished appearance

Firebrick: A special type of brick that is not damaged by fire; used to line the firebox

Fire hydrant valve: A valve that drains at an underground level to prevent freezing

Fire pumps:

Can pump: A vertical-shaft turbine-type pump used to raise water pressure

Centrifugal pump: The pressure is developed by centrifugal force

End suction pump: A single suction pump having its suction nozzle on the opposite side of the casing from the stuffing box and having the face of the suction nozzle perpendicular to the shaft

Excess pressure pump: Low-flow, high-head pump for sprinkler systems not being supplied from a fire pump

Fire pump: A pump with driver, controls, and accessories used for fire protection service; fire pumps are centrifugal or turbine type

Horizontal pump: The shaft is in a horizontal position

Horizontal split-case pump: A centrifugal pump characterized by a housing which is split parallel to the shaft

In-line pump: A centrifugal pump whose drive unit is supported by the pump, having its suction and discharge flanges on approximately the same center line

Pressure maintenance (jockey) pump: A pump used to maintain pressure in a fire protection system without the operation of the fire pump

Vertical-shaft turbine pump: A centrifugal pump with one or more impellers discharging into one or more bowls and a vertical educator or column pipe used to connect the bowl(s) to the discharge head on which the pump driver is mounted

Fire stop/draft stop/fire blocking: A framing member used to reduce the ability of a fire to spread

Firewall/fire separation wall/fire division wall: Any wall that is used to prevent the spread of fire

Fitting: The connector or closure for fluid lines

Fitting, compression: A fitting designed to join pipe or tubing by means of pressure

Fitting, flange: A fitting which utilizes a radially extending collar for sealing

Fitting, Welded: A fitting attached by welding

Fixed ladder: A ladder that cannot be readily moved or carried because it is an integral part of a building or structure. A side-step fixed ladder is a fixed ladder that requires a person getting off at the top to step to the side of the ladder side rails to reach the landing. A through fixed ladder is a fixed ladder that requires a person getting off at the top to step between the side rails of the ladder to reach the landing

Fixture branch: A pipe connecting several fixtures

Fixture carrier: A metal unit designed to support a plumbing fixture off the floor

Fixture carrier fittings: Special fittings for wall-mounted fixture carriers

Fixture drain: The drain from the trap of a fixture to the junction of that drain with any other drain pipe

Fixture supply: A water-supply pipe connecting the fixture with the fixture branch or directly to a water main

Fixture unit: A measure of probable discharge into a drainage system by various types of plumbing fixtures

Fixture unit flow: A measure of the probable hydraulic demand on a water supply by various types of plumbing fixtures

Flange: A ring-shaped plate on the end of a pipe at right angles to the end of the pipe and provided with holes for bolts to allow fastening

Flange bonnet: A valve bonnet having a flange which bolts to a matching flange on the valve body

Flange ends: A valve or fitting having flanges for joining to other piping, etc.

Flange faces: Pipe flanges which have the entire surface faced straight across, using a full face or ring gasket

Flanges: The parallel faces of a structural beam joined by the web of the beam

Flap valve: A Nonreturn valve in the form of a hinged disk or flap

Flashing: Metal or plastic strips or sheets used for moisture protection in conjunction with other construction materials

Flashover: A disruptive electrical discharge around or over an insulator

Flash Point: The temperature at which a fluid gives off sufficient flammable vapor to ignite

Flat: In roofing, any roof structure up to a 3:12 slope

Float valve: A valve which is operated by means of a bulb or ball floating on the surface of a liquid within a tank

Flooded: A condition when the liquid rises to the flood-level rim of a fixture

Flood-level rim: The top edge of a plumbing receptacle, from which water overflows

Flow pressure: The pressure in a water supply pipe near the water outlet while the faucet or outlet is fully open

Flue: An enclosed passage, normally vertical, for removal of gaseous products of combustion to the outer air

Fluorescence: The emission of light by a substance when exposed to radiation

Flush: To be even with

Flush door: A smooth-surface door without panels or molding

Flushing-type floor drain: A floor drain which is equipped with an integral water supply, enabling flushing

Flushometer valve: A device which discharges a predetermined quantity of water to fixtures for flushing purposes

Flux: An electrical field energy distributed in space and represented diagrammatically by means of flux lines denoting magnetic or electrical forces

Fly ash: Fine, powdery coal residue used with a hydraulic (water-resistant) concrete mix

Foot valve: A check valve installed at the base of a pump suction pipe to maintain pump prime

Footcandle (fc): The amount of light produced by a lamp measured in lumens divided by the area that is illuminated

Footing: The part of a foundation wall or column resting on the bearing soil, rock, or piling which transmits the superimposed load to the bearing material

Footprint: The outline of a building on the ground, used in site planning

Form: A temporary construction member used to hold permanent materials in place

Formwork: The total system of support for freshly placed or partially cured concrete, including the mold or sheeting (form) that is in contact with the concrete as well as all supporting members including shores, reshores, hardware, braces, and related hardware

Foundation: The base on which a house or building rests

Four-wire circuits: Telephone circuits which use two separate one-way transmission paths of two wires each

Framing: The wood or metal structure of a building which gives it shape and strength

French drain: A drain consisting of an underground passage made by filling a trench with loose stones

Frequency: The number of times per second a signal regenerates itself at a peak amplitude

Fresh-air inlet: A vent line connected with the building drain just inside the house trap and extending to the outer air providing fresh air to the lowest point of a plumbing system

Frostline: The depth to which ground freezes

Frostproof closet: A hopper that has no water in the bowl and has the trap and the control valve for its water supply installed below the frost line

Full-load current (FLC): The current required by a motor to produce the full-load torque at the motor's rated speed

Full-load torque (FLT): The torque required to produce the rated power of the motor at full speed

Furring strips: Strips of wood attached to concrete or stone that form a nail base for wood or paneling

Fuse: A protective device, also called an OCPD

Fusion weld: Joining metals by fusion, using oxyacetylene or electric arc

G

Gable: The simplest kind of roof; two large surfaces come together at a common edge, forming an inverted V

Gain: A ratio of the amplitude of the output signal to the input signal

Galvanize: A coating of zinc used primarily on sheet metal or pipe

Gambrel roof: A barn-shaped roof

Gate valve: A valve employing a gate, often wedge-shaped, allowing fluid to flow when the gate is lifted from the seat

Gauge: The thickness of metal, glass or wire

Ghost Voltage: A voltage that appears on a motor that is not connected

Girder: A support for joists at one end; usually placed halfway between the outside walls and runs the length of the building

Girt (in systems-engineered metal buildings): A "Z" or "C" shaped member formed from sheet steel, spanning between primary framing and supporting wall material

Glaze: To install glass

Globe valve: Globe-shaped body with a manually raised or lowered disc

Glu-lam (GLB): Beam made from milled 2x lumber bonded together

Grade: An existing or finished elevation in earthwork; a sloped portion of a roadway; sizing of gravel and sand; the structural classification of lumber; the slope or fall of a line of pipe with reference to a horizontal plane; in drainage it is expressed as the fall in a fraction of an inch

Grade beam: A low foundation wall or a beam, usually at ground level, which provides support for the walls of a building

Grade break: A change in slope from one incline ratio to another

Grade lath: A piece of lath that the surveyor marked to indicate the correct grade to the operators

Grade pins: Steel rods driven into the ground at each surveyor's hub

Grader: A power excavating machine with a central blade that can be angled to cast soil on either side

Gravel stop: The edge metal used at the eaves of a built-up roof to hold the gravel

Green: Uncured or set concrete or masonry; freshly cut lumber

Grid: An electrical utility distribution network.

Grid system: A system of metal strips that supports a drop ceiling

Ground: An electrical connect between equipment and the earth

Ground fault: Current from a hot line is flowing to the ground

Ground-fault circuit interrupter (GFCI): An electrical device which protects personnel by detecting hazardous ground faults and quickly disconnects power from the circuit

Grounding: The connection of all exposed non-current-carrying metal parts to earth

Ground joint: The parts are precisely finished and then ground in so that the seal is tight

Grout: A cementitious mixture of high water content made from Portland cement, lime, and aggregate, used to secure anchor bolts and vertical reinforcing rods in masonry walls

Guardrail system: A barrier erected to prevent employees from falling to lower levels

Guinea: A survey marker driven to grade; it may be colored with paint

Gusset: A triangular or rectangular piece of wood or metal that is usually fastened to the joint of a truss to strengthen it

Gutter: A metal trough set below the eaves to catch and conduct water to a downspout

Guy: A wire having one end secured and the other fastened to a pole or structure under tension

Gypsum: A chalk used to make wallboard; made into a paste, inserted between two layers of paper and allowed to dry.

H

Habitable space: In residential construction, the interior areas of a residence used for eating, sleeping, living, and cooking; excludes bathrooms, storage rooms, utility rooms, and garages

Handrail: A rail used to provide employees with a handhold for support

Hanger: Metal fabrication made for placing and supporting joists and rafters

Hardware: Any component used to hang, support, or position another component

Hardwood: Wood from a tree that sheds its leaves

Haunch: Portion of a beam that increases in depth toward the support

Headache ball: A weighted hook that is used to attach loads to the hoist load line of the crane

Header: A framing member used to hide the ends of joists along the perimeter of a structure; also known as a rim joist; the horizontal structural framing member installed over wall openings to aid in the support of the structure above; a large pipe or drum into which each of a group of boilers is connected; also used for a large pipe from which a number of smaller ones are connected in line from the side of the large pipe.

Header course: In masonry, a horizontal row of brick laid perpendicular to the wall face; used to tie a doublewythe brick wall together

Head joint: The end face of a brick or concrete masonry unit to which the mortar is applied

Heater: A device that is placed in a motor starter to measure the amount of current in the power line

Heating element: A conductor (wire) that offers enough resistance to produce heat when connected to power

Henry (H): The unit of measure of inductance

Hertz (Hz): One Hertz is equal to one cycle of the AC sine wave per second

Hidden line: A dashed line identifying portions of construction that are a part of the drawing but cannot be seen; e.g., footings on foundation plans

HID lamp: High-intensity discharge lamp

Hip rafters: A member that extends diagonally from the corner of the plate to the ridge

Hip roof: A structural sloped roof design with sloped perimeters from ridge to plate line

Hoisting equipment: Commercially manufactured lifting equipment designed to lift and position a load of known weight to a location at some known elevation and horizontal distance from the equipment's center of rotation. Hoisting equipment includes but is not limited to cranes, derricks, tower cranes, barge-mounted derricks or cranes, gin poles, and gantry hoist systems.

A come-a-long (a mechanical device, usually consisting of a chain or cable attached at each end that is used to facilitate movement of materials through leverage) is not considered hoisting equipment

Hole: A void or gap 2 inches (5.1 centimeters) or more in the least dimension in a floor, roof, or other walking/working surface

Hollow-core door: A lightweight flush door with an interior core of glued strips forming a honeycomb and two exterior smooth panels

Honeycomb: Voids or open spaces left in concrete due to a loss or a shortage of mortar

Horizontal branch: A drain pipe extending laterally from a soil, waste stack, or drain

Horsepower (HP): A unit of power equal to 746 watts that describes the output of electric motors

Hose bibb: A faucet used to connect a hose

Hub: A device which connects to several other devices, usually in a star topology

Hub and spigot: Piping made with an enlarged diameter or hub at one end and plain or spigot at the other end; the joint is made tight by oakum, lead, or gasket

Hubless: Soil piping with plain ends; the joint is made tight with a clamp and gasket

HVAC: Heating, Ventilating and Air Conditioning

Hybrid: An electronic circuit that uses different cable types to complete the circuit

Hydraulic cement: A cement used in a concrete mix capable of curing under water

I

Impedance (Z): The total opposition offered to the flow of AC from resistance and reactance measured in ohms

Increaser: A pipe coupling used between pipes of different sizes

Indirect waste pipe: A pipe that does not connect directly with the drainage system but discharges into a plumbing fixture or receptacle that is connected directly to the drainage system

Individual-rung/step ladders: Ladders without a side rail or center rail support. Such ladders are made by mounting individual steps or rungs directly to the side or wall of the structure

Individual vent: A pipe installed to vent a fixture trap that connects with the vent system above the fixture served or terminates in air

Induced siphonage: Loss of liquid from a fixture trap due to pressure differential between the inlet and outlet of the trap

Inductance (L): The property of a circuit that determines how much voltage will be induced into it by a change in current of another circuit; measured in henrys (H).

Inductive circuit: A circuit in which current lags voltage.

Inductive reactance (X_L): The opposition to the flow of AC in a circuit due to inductance, measured in ohms.

Industrial waste: All liquid or water-borne waste from industrial or commercial processes

In-phase: The state when voltage and current reach maximum amplitude and zero level at the same time

Insanitary: A condition which is contrary to sanitary principles or is unhealthy

Insulating glass: A window or door glass consisting of two sheets of glass separated by a sealed air space

Insulation: Any material capable of resisting thermal, sound, or electrical travel

Insulation resistance: The R factor in insulation calculations

Insulator: Material in which current cannot flow easily

Integrally cast: Element (such as concrete joist and top slab) cast in one piece. See Monolithic

Interceptor: A device that separates and retains hazardous or undesirable matter from normal wastes and permits normal liquid wastes to discharge into the disposal terminal by gravity

Interface: The point at which two systems connect.

Invert: The lowest point on the interior of a horizontal pipe

Isolated grounded receptacle: Minimizes electrical noise by providing a separate grounding path

Isolation transformer: A one-to-one transformer used to isolate equipment at the secondary from earth ground

Isometric projection: A pictorial drawing positioned so that its principal axis make equal angles with the plane of projection

J

Jack: A receptacle (female) used with a plug (male) to make a connection

Jack rafter: A part of the roof structure raftering that does not extend the full length from the ridge beam to the top plate

Jacking operation: Lifting vertically a slab (or group of slabs) from one location to another for example, from the casting location to a temporary (parked) location, or from a temporary location to another temporary location, or to the final location in the structure during a lift-slab construction operation

Jamb: The part that surrounds a door or window frame

Job-made ladder: A ladder that is fabricated by employees, typically at the construction site, and is not commercially manufactured. This definition does not apply to any individual-rung/step ladders

Joint compound: Material used with a paper or fiber tape for sealing indentations and breaks in drywall construction

Joist: A structural horizontal framing member used for floor and ceiling support

Joist hangers: Metal brackets that hold up the joist.

Joule: A unit of electrical energy also called a watt-second

Jumper: Patch cable or wire used to establish a circuit, often temporarily, for testing

Junction box: A box, usually metal, that encloses cable connections

K

Kalamein door: A metal-covered, fireproof door

Key: A depression made in a footing so that the foundation or wall can be poured into the footing, preventing the wall or foundation from moving during changes in temperature or settling

Kicker blocks: Cement poured behind each bend or angle of water pipe for support

Kiln-dried lumber: Lumber that is seasoned under controlled conditions

Kilo: The metric system prefix meaning one thousand

King stud: A full-length stud from the bottom plate to the top plate, supporting both sides of a wall opening

Knee wall: Vertical framing members supporting and shortening the span of the roof rafters

kWH: Kilowatt hour. The basic unit of electrical energy for utilities, equal to one thousand watts of power supplied for one hour

L

Labeled: Equipment or materials bearing a label of a listing agency

Ladder stand: A mobile, fixed-size, self-supporting ladder consisting of a wide, flat-tread ladder in the form of stairs. The assembly may include handrails

Lally column: A vertical steel pipe, usually filled with concrete, used to support beams and girders

Laminated plastic: Layers of cloth or other fiber impregnated with plastic

Lamination: A method of constructing by placing layer upon layer of material and bonding with an adhesive

Lamp: A light source; reference is to a light bulb

Landing: A platform in a flight of stairs to change the direction or break a run

Lanyard: A flexible line of rope, wire rope, or strap that generally has a connector at each end for connecting the body belt or body harness to a deceleration device, lifeline, or anchorage

Lap weld pipe: Made by welding along a scarfed longitudinal seam in which one part is overlapped by the other

Lapped joint: A pipe joint made by using loose flanges on lengths of pipe whose ends are lapped over to produce a bearing surface for a gasket or metal-to-metal joint

Lateral: Underground electrical service

Lateral sewer: A sewer which does not receive sewage from any other common sewer except house connections

Lath: Backup support for plaster; may be of wood, metal, or gypsum board

Lavatory: Bathroom; vanity basin

Lay-in ceiling: A suspended ceiling system

Leaching well: A pit or receptacle having porous walls which permit the contents to seep into the ground; also called a dry well

Leach line: A perforated pipe used as a part of a septic system to allow liquid overflow to dissipate into the soil

Lead joint: A joint made by pouring molten lead into the space between a bell and spigot and making the lead tight by caulking

Leader: The water conductor from the roof to the building storm drain

Leading edge: The edge of a floor, roof, or formwork for a floor or other walking/working surface (such as the deck) which changes location as additional floor, roof, decking, or formwork sections are placed, formed, or constructed

Leakage current: Current that flows through insulation

Ledger: Structural framing member used to support ceiling and roof joists at the perimeter walls

Leg (circuit): One of the conductors in a supply circuit in which the maximum voltage is maintained

Level-transit: An optical device that is a combination of a level and a means for checking vertical and horizontal angles

Lifeline: A component consisting of a flexible line for connection to an anchorage at one end to hang vertically (vertical lifeline), or for connection to anchorages at both ends to stretch horizontally (horizontal lifeline), and that serves as a means for connecting other components of a personal fall arrest system to the anchorage

Lift: Any layer of material or soil placed upon another

Lift slab: A method of concrete construction in which floor and roof slabs are cast on or at ground level and, using jacks, are lifted into position

Limited access zone: An area alongside a masonry wall that is under construction and that is clearly demarcated to limit access by employees

Lintel: Support for a masonry opening, usually steel angles or special forms

Lip union: A union characterized by a lip that prevents a gasket from being squeezed into the pipe

Liquid waste: The discharge of a plumbing system which does not receive fecal matter

Listed: Equipment or materials that comply with approved standards or has been tested and found suitable for use in a specified manner

Live load: Any movable equipment or personal weight to which a structure is subjected

Load: The amount of electric power used by any electrical unit or appliance at any given moment

Load: The weight of a building

Load conditions: The conditions under which a roof must perform

Load factor: The percentage of the total connected fixture unit flow which is likely to occur at any point in a drainage system

Location, damp: Partially protected locations, such as under canopies, roofed open porches, basements, barns, etc.

Location, wet: Locations underground, in concrete slabs, where saturation occurs, or outdoors

Locked rotor: Condition when a motor is loaded so heavily that the shaft cannot turn

Locked rotor current (LRC): The steady-state current with the rotor locked and the voltage applied

Locked rotor torque (LRT): The torque a motor produces when the rotor is stationary and full power is applied

Lockset: The doorknob and associated locking parts inserted in a door

Longitudinal: The long dimension of an object

Lookout: The structural member running from the outside wall to the ends of rafters to carry the plancier or soffit

Louver: A ventilated opening in the attic, usually at a gabled end, made of inclined horizontal slats, to permit air to pass but to exclude moisture

Lower levels: Those areas to which an employee can fall from a stairway or ladder. Such areas include ground levels, floors, roofs, ramps, runways, excavations, pits, tanks, material, water, equipment, and similar surfaces. It does not include the surface from which the employee falls

Low-slope roof: A roof having a slope less than or equal to 4 in 12 (vertical to horizontal)

Lumen (lm): The unit used to measure the total amount of light produced by a source

M

Magnetic field: The invisible field produced by a current-carrying conductor, coil, etc. which develops a north and south polarity

Magnetic flux: The invisible lines of force that make up a magnetic field

Main: The principal artery of a system of continuous piping, to which branches may be connected

Main vent: A vent header to which vent stacks are connected

Malleable: Capable of being shaped by hammer or rolling pressure

Malleable iron: Cast iron that is heat-treated

Manifold: A fitting with a number of branches in line connecting to smaller pipes

Masonry: Manufactured materials of clay (brick), concrete (CMU), and stone

Mastic: An adhesive used to hold tiles in place; also refers to adhesives used to glue many types of materials

Mat: Asphalt as it comes out of a spreader box or paving machine in a smooth, flat form

Maximum density and optimum moisture: The highest point on the moisture-density curve; considered the best compaction of the soil

Maximum intended load: The total load of all employees, equipment, tools, materials, transmitted loads, and other loads anticipated to be applied to a ladder component at any one time

Medium pressure: Means that valves and fittings are suitable for a working pressure of 125 to 175 psi

MEE pipe: Pipe that has been milled on each end and left rough in the center; MEE stands for "milled each end"

Membrane roofing: Built-up roofing

Mesh: Common term for welded-wire fabric, plaster lath

Metal decking: A commercially manufactured, structural grade, cold rolled metal panel formed into a series of parallel ribs; for this subpart, this includes metal floor and roof decks, standing seam metal roofs, other metal roof systems, and other products such as bar gratings, checker plate, expanded metal panels, and similar products. After installation and proper fastening, these decking materials serve a combination of functions including, but not limited to: a structural element designed in combination with the structure to resist, distribute, and transfer loads, stiffen the structure, and provide a diaphragm action; a walking/working surface; a form for concrete slabs; a support for roofing systems; and a finished floor or roof

Mil: 0.001 inch

Mill length: Also known as random length; run-of mill pipe is 16 to 20 feet in length; some pipe is made in double lengths of 30 to 35 feet

Minute: 1/60th of a degree

MOA pipe: Pipe that has been milled end to end; MOA stands for "milled over all"

Modular measurement: The design of a structure to use standard-size building materials. In the customary system of measurement the module is 4 inches. In the metric system, the recommended module is 100 millimeters

Moisture barrier: A material used for the purpose of resisting exterior moisture penetration

Moisture-density Curve: A graph showing at what point of added moisture the maximum density occurs

Moldings: Trim mounted around windows, floors, etc.

Monolithic concrete: Concrete placed as a single unit including footings

Mortar: A concrete mix used for bonding masonry

Motor: A machine that develops torque on a shaft to produce work

Motor efficiency: The effectiveness of a motor to convert electrical energy into mechanical energy

Motor starter: An electrically operated switch (contactor) that includes overload protection

Motor torque: The force that produces rotation in a shaft

Multiple lift rigging: A rigging assembly manufactured by wire rope rigging suppliers that facilitates the attachment of up to five independent loads to the hoist rigging of a crane

Multiplex: To combine multiple input signals into one for transmission over a single high-speed channel

N

Natural grade: Existing or original grade elevation

Neat cement: A pure cement mixture, with no sand or other material added

NEC: National Electrical Code, which contains safety rules for installations

Needle valve: A valve with a long tapering point in place of an ordinary valve disk

Nipple: A tubular pipe fitting normally threaded on both ends and less than 12 inches in length

No-load current: The current demand of a transformer primary when no current demand is made on the secondary

Nominal size: A general classification term used to designate size of commercial products, such as a 2 × 4. This is not an actual size

Nominal size: Original cut size of a piece of lumber prior to milling and drying; size of a masonry unit, including mortar bed and head joint.

Nonbearing: Not supporting any structural load.

Normally closed contacts: Contacts that are closed before being energized.

Normally open contacts: Contacts that are open before being energized.

Nosing: That portion of a tread projecting beyond the face of the riser immediately below

Nuclear test: A test to determine soil compaction by sending nuclear impulses into the compacted soil and measuring the returned impulses reflected from the compacted particles

O

O.D. pipe: Pipe that measures over 14 inches normal pipe size, where the nominal size is the outside diameter and not the inside diameter

Offset: A combination of pipe and/or fittings which join two nearly parallel sections of a pipe line

Ohm: The unit of measurement of electrical resistance

Ohm's law: A law which describes the mathematical relationship among voltage, current, and resistance

On center (O/C): The distance between the centers of two adjacent components

Open circuit: A condition that provides no path for electric current to flow in a circuit

Open-circuit voltage: The maximum voltage produced without a load applied

Open-web joist: Roof joist made of wood or steel construction with a top chord and bottom chord connected by diagonal braces. Some manufacturers make a joist with chords of wood and a steel web and refer to it as a truss joist

Opening: A gap or void 12 inches (30.5 cm) or more in its least dimension in a floor, roof, or other walking/working surface. For the purposes of this subpart, skylights and smoke domes that do not meet the strength requirements of §1926.754(e)(3) shall be regarded as openings; a gap or void 30 inches (76 centimeters) or more high and 18 inches (46 centimeters) or more wide in a wall or partition through which employees can fall to a lower level

Orthographic projection: The basis of architectural plan and elevation drawings

Oscillation: Fluctuations in a circuit

Outfall sewers: Sewers receiving sewage from a collection system and carrying it to the point of final discharge or treatment

Outlet: Where the current is taken to supply equipment.

Overload protection: A device that prevents overloading a circuit or motor

Oxidized sewage: Sewage in which the organic matter has been combined with oxygen, resulting in natural stability

P

Package air conditioner or boiler: All components are packaged in a single unit

Pad: In earthwork or concrete foundation work, the base materials used on which to place the concrete footing and/or slab

Panel door: A door of solid frame strips with inset panels

Parallel circuit: More than one path through which current flows

Parapet: An extension of an exterior wall above the line of the roof

Parging: A thin moisture-protection coating of plaster or mortar over a masonry wall

Partition: An interior wall separating two rooms or areas of building; usually nonbearing

Penny (d): Unit of measure of nails used by carpenters

Percolation: The seeping of a liquid downward through a filtering medium

Perimeter: The outside edges of a plot of land or building; it represents the sum of all the individual sides

Perimeter insulation: Insulation placed around the outside edges of a slab

Permanent floor: A structurally completed floor at any level or elevation (including slab on grade)

Personal fall arrest system: A system used to arrest an employee in a fall from a working level. A personal fall arrest system consists of an anchorage, connectors, and a body harness and may include a lanyard, deceleration device, lifeline, or suitable combination of these. The use of a body belt for fall arrest is prohibited as of January 1, 1998.

Photovoltaic: Changing light into electricity

Pier: A heavy column of masonry between two openings used to support other structural members

Pilaster: A column projecting on the outside or inside of a masonry wall to add strength or decorative effect

Pile: A steel or wooden pole driven into the ground sufficiently to support the weight of a wall and building

Pillar: A pole or reinforced wall section used to support the floor and consequently the building

Pitch: The amount of slope or grade given to horizontal piping and expressed in inches; the slant or slope from the ridge to the plate

Plan view: A bird's-eye view of a construction layout cut at 5'0" above finish floor level

Plancier: The board or panel forming the underside of the eave or cornice

Plaster: A mixture of cement, water, and sand

Plat: A drawing of a parcel of land indicating lot number, location, boundaries, and dimensions. Contains information as to easements and restrictions

Plate: A roof member which has the rafters fastened to it at their lower ends

Platform framing: Also known as western framing; structural construction in which all studs are only one story high with joists over

Plenum: A chamber in an A/C system which receives air under pressure before distribution to ducts

Plug Valve: A valve with a short section of a cone or tapered plug

Plumb: Perpendicular or vertical. Also: to make a structure vertical

Plumbing: The practice, materials, and fixtures used in the installation, maintenance, and alteration of all piping, fixtures, appliances, etc., in connection with sanitary or storm drainage facilities; venting systems; public or private water supply systems within or adjacent to any building or structure

Plumbing appliance: A plumbing fixture which is intended to perform a special function; its operation may be dependent on one or more energized components; and these fixtures may operate automatically through a time cycle, temperature range, pressure range, etc.

Plumbing appurtenances: A manufactured device, prefabricated assembly, or job-assembled component which is added to a basic plumbing system

Plumbing fixtures: Installed receptacles, devices, or appliances which are supplied with water or which receive liquid or liquid-borne wastes and discharge such wastes into a drainage system

Plumbing inspector: Is authorized to inspect plumbing and drainage as defined in the code for the municipality.

Plumbing system: All potable water supply and distribution pipes, plumbing fixtures and traps, drainage and vent pipes, and all building (house) drains, devices, receptacles, and appurtenances within the property lines of the premises.

Pocket door: A door which slides into a partition or wall

Point of access: All areas used by employees for work-related passage from one area or level to another. Such open areas include doorways, passageways, stairway openings, studded walls, and various other permanent or temporary openings used for such travel

Point of beginning (POB): The point on a property from which all measurements and azimuths are established

Polarity: The particular state of an object, either positive or negative

Polymer: A chemical compound formed by polymerization

Polyvinyl chloride (PVC): A plastic material commonly used for pipe and plumbing

Pool: A water receptacle used for swimming or bathing, designed to accommodate more than one person

Portable ladder: A ladder that can be readily moved or carried

Portland cement: One variety of cement and the basis of concrete and mortar

Positioning device system: A body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface such as a wall, and work with both hands free while leaning backwards

Post: A structural member with a longitudinal axis that is essentially vertical, that: (1) weighs 300 pounds or less and is axially loaded (a load presses down on the top end), or (2) is not axially loaded but is laterally restrained by the above member. Posts typically support stair landings, wall framing, mezzanines, and other substructures

Post-and-beam construction: A type of wood frame construction using timber for the structural support

Post-tensioning: The application of stretching steel cables embedded in a concrete slab to aid in strengthening the concrete

Potable water: Water which is satisfactory for drinking, cooking, etc.

Power: A basic unit of electrical energy, measured in watts

Power factor: The ratio of true power (kW) to apparent power (kVA)

Precast concrete: Concrete members (such as walls, panels, slabs, columns, and beams) that have been formed, cast, and cured prior to final placement in a structure

Precipitation: The total measurable supply of water received directly from clouds as snow, rain, etc., expressed in inches

Prehung: Refers to doors or windows that are already mounted in a frame and are ready for installation

Pressure treatment: Impregnating lumber with a preservative chemical under pressure in a tank

Prestressed concrete: Concrete in which the steel is tensioned (stretched) and anchored to compress the concrete

Primary winding: The input side of a transformer

Primer: The first coat of paint or glue when more than one coat will be applied

Private sewage disposal system: A septic tank with the effluent discharging into a subsurface disposal field and/or one or more seepage pits

Private sewer: A sewer not directly controlled by public authority

Private use: Plumbing fixtures in residences, apartments, private bathrooms in hotels and hospitals, rest rooms in commercial establishments containing restricted-use single fixture or groups of single fixtures, etc. where the fixtures are intended for use of family or individual

Project structural engineer of record: The registered, licensed professional responsible for the design of structural steel framing and whose seal appears on the structural contract documents

Public sewer: A common sewer directly controlled by public authority

Public use: Applies to locked and unlocked bathrooms used by employees, occupants, or patrons in any premises

Punch list: A list of work that requires correction or completion

Purlin (in systems-engineered metal buildings): A "Z" or "C" shaped member formed from sheet steel spanning between primary framing and supporting roof material; a horizontal framing member spanning between rafters

Putrefaction: Biological decomposition of organic matter with the production of foul-smelling products

Q

Qualified person: One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated the ability to solve or resolve problems relating to the subject matter, the work, or the project

Quarry tile: An unglazed clay or shale flooring material produced by extrusion

Quick set: A fast-curing cement plaster

R

Rabbet: A groove cut in or near the edge of a piece of lumber to fit the edge of another piece

Raceway: Any partially or totally enclosed container for placing electrical wires

Rafter: In sloped roof construction, the framing member extending from the ridge or hip to the top plate

Reactance (X): The measure of inductance of a circuit, measured in ohms

Rebar: A reinforcement steel rod in a concrete footing

Receptacle: An electrical outlet to which an electrical device may be connected by means of a plug

Receptor: A plumbing fixture that receives the discharge from indirect waste pipes that is made and located to be cleaned easily

Reduced-size vent: Dry vents which are smaller than those allowed by codes

Reducer: A pipe fitting with inside threads that are larger at one end than at the other

Register: A grille used to cover an air duct opening

Reglet: A long narrow slot in concrete to receive flashing or to serve as anchorage

Relay: A device that controls one electrical circuit by opening and closing the contacts in another circuit

Relief valve: Designed to open automatically to relieve excess pressure

Relief vent: A vent designed to provide circulation of air between drainage and vent systems or to act as an auxiliary vent

Reshoring: The construction operation in which shoring equipment (also called reshores or reshoring equipment) is placed as the original forms and shores are removed in order to support partially cured concrete and construction loads

Residual pressure: Pressure remaining in a system while water is being discharged from outlets

Resilient flooring: Flooring made of plastics rather than wood products

Resistance (R): The opposition to the flow of current in an electrical circuit, measured in ohms

Resistance-weld pipe: Pipe made by bending plate into circular form and passing current through to obtain a welding heat

Resistive circuit: A circuit containing resistive loads such as heating elements.

Resonance (f): When the inductive reactance (X_L) equals capacitive reactance (X_C) in a circuit, measured in hertz (H_z)

Return offset: A double offset installed to return a pipe to its original alignment

Revent oipe: That part of a vent pipe line which connects directly with an individual waste or group of wastes, underneath or back of the fixture, and extends to the main or branch vent pipe

R factor: The numerical rating given any material that is able to resist heat transfer for a specific period of time.

Ridge: The highest point on a sloped roof.

Ridge Board: A horizontal member that connects the upper ends of the rafters on one side to the rafters on the opposite side.

Right-of-Way Line: A line on the side of a road marking the limit of the construction area and, usually, the beginning of private property.

Rim: An unobstructed open edge of a fixture.

Rise: In roofing, rise is the vertical distance between the top of the double plate and the center of the ridge board; in stairs, it is the vertical distance from the top of a stair tread to the top of the next tread.

Riser: A water supply pipe which extends vertically one full story or more to convey water to branches or fixtures; a vertical pipe used for fire protection to elevations above or below grade; the vertical part at the edge of a stair

Riser height: The vertical distance from the top of a tread to the top of the next higher tread or platform/landing or the distance from the top of a platform/landing to the top of the next higher tread or platform/landing

Rolling offset: Same as offset, but used where the two lines are not in the same vertical or horizontal plane

Roll roofing: A type of built-up roofing material made of rag, paper, and asphalt

Roof drain: A drain installed to remove water collecting on the surface of a roof and to discharge it into a leader

Roof jack: The sheet metal device placed around a pipe projecting through the roof to prevent moisture

Roof pitch: The ratio of total span to total rise expressed as a fraction

Rope grab: A deceleration device that travels on a lifeline and automatically, by friction, engages the lifeline and locks to arrest a fall

Rotary convertor: A type of phase convertor

Rotary-pressure joint: A joint for connecting a pipe under pressure to a rotating machine

Roughing-in: The installation of all parts of a plumbing system which can be completed prior to the installation of fixtures; this includes drainage, water supply, and vent piping

Rough opening: A large opening made in a wall frame or roof frame to allow the insertion of a door or window

RS: Reference Stake, from which measurements and grades are established

Run: A length of pipe made up of more than one piece; a portion of a fitting having its ends in line; the shortest horizontal distance measured from a plumb line through the center of the ridge to the outer edge of the plate

R value: The unit that measures the effectiveness of insulation; the higher the number, the better the insulation qualities

S

Saddle: A small, gable-type roof constructed between a vertical surface such as the chimney and a sloped roof

Saddle flange: A flange curved to fit a boiler or tank and to be attached to a threaded pipe

Safety deck attachment: An initial attachment that is used to secure an initially placed sheet of decking to keep proper alignment and bearing with structural support members

Safety-monitoring system: A safety system in which a competent person is responsible for recognizing and warning employees of fall hazards

Sand cone test: A test for determining the compaction level of soil, by removing an unknown quantity of soil and replacing it with a known quantity of sand

Sand filter: A water treatment device for removing solid or colloidal material

Sanitary sewer: A conduit or pipe carrying sanitary sewage

Saturated steam: Steam at the same temperature as water boils under the same pressure

Scabs: Boards used to join the ends of a girder

Scale: A measuring device with graduations for laying off distances. Also: the ratio of size that a structure is drawn, such as $\frac{1}{4}" \times 1'-0"$ which is $\frac{1}{4}$ size

Schedule: A list of details or sizes for building components, such as doors, windows, or beams

Schematic: A one-line drawing for electrical circuitry or isometric plumbing diagrams

Scissors truss: A truss constructed to the roof slope at the top chord with the bottom chord designed with a lower slope for interior vaulted or cathedral ceilings

Scraper: A digging, hauling, and grading machine having a cutting edge, a carrying bowl, a movable front wall, and a dumping mechanism

Scratch coat: First coat of plaster placed over lath in a three-coat plaster system

Screed: A template to guide finishers in leveling off the top of fresh concrete; screeding is "rough leveling"

Screwed flange: A flange screwed on a pipe

Screwed joint: A pipe joint consisting of threaded male and female parts

Scupper: An opening in a parapet wall attached to a downspout for water drainage from the roof

Scuttle: Attic or roof access with cover or door

Sealant: A material used to seal off openings against moisture and air penetration

Seamless Pipe: Pipe or tube formed by piercing a billet of steel and then rolling

Secondary Winding: The output side of a transformer

Section: A vertical drawing showing architectural or structural interior design developed at the point of a cutting-plane line on a plan view; the section may be transverse—the gable end—or longitudinal—parallel to the ridge

Seepage pit: A lined excavation in the ground which receives the discharge of a septic tank and the effluent seeps through its bottom and sides

Seismic design: Construction designed to withstand earthquakes

Self-retracting lifeline/lanyard: A deceleration device containing a drum-wound line which can be slowly extracted from or retracted onto the drum under minimal tension during normal employee movement and which, after onset of a fall, automatically locks the drum and arrests the fall

Septic system: A waste system that includes a line from the structure to a tank and a leach field

Septic tank: Receives the discharge of a drainage system so as to separate solids from liquids and digest organic matter through a period of retention

Series circuit: A circuit that has only one current path

Service fitting: A street ell or tee with male threads at one end and female at the other

Service pipe: A pipe connecting water or gas mains with a building

Set: Same as offset, but used where the connected pipes are not in the same vertical or horizontal plane

Setback: In a pipe bend, the distance measured back from the intersection of the center lines to start of bend

Setback: The distance from the property boundaries to the building location

Sewage: Any liquid waste containing animal, vegetable, or chemical wastes in suspension or solution

Sewage ejector: A mechanical device or pump for lifting sewage

Shakes: Shingles made of hand-split wood, in most cases western cedar

Shear connector: Headed steel studs, steel bars, steel lugs, and similar devices that are attached to a structural member for the purpose of achieving composite action with concrete

Shear wall: A wall construction designed to withstand shear pressure caused by wind or earthquake

Sheathing: The outside layer of wood applied to studs to close up a house or wall; also used to cover the rafters

Sheepsfoot roller: A compacting roller with feet expanded at their outer tips used in compacting soil

Shelf angles: Structural angles which are bolted to a concrete wall to support brick work, stone, or terra cotta

Shore: A supporting member that resists a compressive force imposed by a load

Shoring: Temporary support made of metal or wood, used to support other components

Short circuit: An undesired path for electrical current

Short nipple: A nipple whose length is longer than a close nipple

Shoulder nipple: Halfway between the length of a close nipple and a short nipple

Shunt: Denotes a parallel connection

Siamese: A hose fitting for combining the flow from two or more lines into a single stream

Side vent: A vent connected to a drain pipe through a fitting at an angle not greater than 45° to the vertical

Side-step fixed ladder: See Fixed ladder

Sill: A piece of wood that is anchored to the foundation

Sill cock: A hose bibb

Single-cleat ladder: A ladder consisting of a pair of side rails, connected together by cleats, rungs, or steps

Single-phase power: One of the three alternating currents in a circuit

Single-rail ladder: A portable ladder with rungs, cleats, or steps mounted on a single rail instead of the normal two rails used on most other ladders

Sinker nail: A nail for laying subflooring

Size: Size is a special coating used for walls before wallpaper is applied

Skewed: At an angle other than 99°

Slab: A flat area of concrete such as a floor or drive

Slab-on-grade: The foundation construction for a structure with no crawl space or basement

Sleeper: Wood strips laid over or embedded in a concrete floor for attaching a finished floor

Sleeve weld: Butting two pipes together and welding a sleeve over the outside

Slip-on flange: A flange slipped over the end of the pipe and then welded

Sludge: The accumulated suspended solids of sewage deposited in tanks, beds, or basins and mixed with water to form a semiliquid

Slump: The consistency of concrete at the time of placement

Snaphook: A connector consisting of a hook-shaped member with a normally closed keeper or similar arrangement which may be opened to permit the hook to receive an object and, when released, automatically closes to retain the object

Socket weld: A joint made by use of a socket-weld fitting which has a prepared female end for insertion of the pipe to which it is welded

Soffit: A covering for the underside of the overhang of a roof

Soil pipe: Any pipe which conveys the discharge of water closets, urinals, or fixtures to a building drain or sewer

Solder joint: A method of joining tube by use of solder

Solenoid: An electromagnet with a movable iron core

Soleplate: A 2×4 or 2×6 used to support studs in a horizontal position; it is placed against the flooring and nailed into position onto the subflooring

Solid-core door: A flush door having an interior core of solid wood blocks glued together and an exterior of finished veneer paneling or other material, such as hardboard

Span: The horizontal distance between exterior bearing walls in a transverse section

Spandrel beam: The beam in an exterior wall of a structure

Spandrel wall: The portion of a wall above the head of a window and below the sill of the window above

Special wastes: Wastes which require some special method of handling, such as corrosion-resistant piping, sand, oil or grease interceptors, condensers, or other pretreatment facilities

Specifications: The written instructions detailing the requirements for a project

Specs: Short for Specifications. The written directions and detailed instructions which are used with the blueprints

Spiral stairway: A series of steps attached to a vertical pole and progressing upward in a winding fashion within a cylindrical space

Spiral pipe: Pipe made by coiling a plate into a helix and riveting or welding the edges

Split-phase motor: A single-phase AC motor that has a running and a starting winding

Split-wired receptacle: A receptacle that has the metal tap removed between the hot terminals

Spoil site: Area used to dispose of unsuitable or excess excavation material

Spreader: Brace used across the top of concrete forms

Sprinkler System: An integrated system of underground and overhead piping designed in accordance with fire protection standards

Sprinkler system classification:

1. Wet-pipe systems
2. Dry-pipe systems
3. Pre-action systems
4. Deluge systems
5. Combined dry-pipe and pre-action systems

Square: Refers to a roof-covering area; a square consists of 100 square feet

Stack: The vertical main of a system of soil, waste, or vent piping extending through one or more stories

Stack group: The location of fixtures in relation to the stack

Stack vent: The extension of a soil or waste stack above the highest horizontal drain connected to the stack; also known as a waste or soil vent

Stain: A paintlike material that imparts a color to wood

Stainless steel pipe: An alloy steel pipe with corrosion-resisting properties

Stair rail system: A vertical barrier erected along the unprotected sides and edges of a stairway to prevent employees from falling to lower levels. The top surface of a stair rail system may also be a handrail

Standard pressure: Formerly used to designate cast-iron flanges, fittings, valves, etc., suitable for a maximum working steam pressure of 125 psi

Standpipe: A vertical pipe generally used for the storage and distribution of water for fire extinguishing purposes

Standpipe system: An arrangement of piping, valves, hose connections, and equipment installed in a structure with the hose connections located in such a manner that water can be discharged in streams or spray patterns for extinguishing fires

Stepped footing: A footing that may be located on a number of levels

Stool: The flat shelf that rims the bottom of a window frame on the inside of a wall

Stop valve: The control of water supply to a single fixture

Storm sewer: A sewer used for conveying rain water, surface water condensate, cooling water, or similar liquid wastes exclusive of sewage

Story: The space between two floors of a building or between a floor and the ceiling above

Strain: Change of shape or size of body produced by stress

Steel erection: The construction, alteration, or repair of steel buildings, bridges, and other structures, including the installation of metal decking and all planking used during the process of erection

Steel joist: An open web, secondary load-carrying member of 144 feet (43.9 m) or less, designed by the manufacturer, used for the support of floors and roofs. This does not include structural steel trusses or cold-formed joists

Steel joist girder: An open web, primary load-carrying member, designed by the manufacturer, used for the support of floors and roofs. This does not include structural steel trusses

Steel truss: An open web member designed of structural steel components by the project structural engineer of record. For the purposes of this subpart, a steel truss is considered equivalent to a solid web structural member

Steep roof: A roof having a slope greater than 4 in 12 (vertical to horizontal)

Step stool (ladder type): A self-supporting, foldable, portable ladder, nonadjustable in length, 32 inches or less in overall size with flat steps and without a pail shelf, designed to be climbed on the ladder top cap as well as all steps. The side rails may continue above the top cap

Street elbow: An elbow with male thread on one end and female thread on the other

Stress: Reactions within a body resisting external forces acting on it

Stress skin panels: Large prebuilt panels used as walls, floors, and roof decks built in a factory and hauled to the building site

String line: A nylon line usually strung tightly between supports to indicate both direction and elevation; used in checking grades or deviations in slopes or rises

Strip flooring: Wooden strips that are applied perpendicular to the joists

Strongbacks: Braces used across ceiling joints that help align, space, and strengthen joists for drywall installation

Structural steel: A steel member, or a member made of a substitute material (such as, but not limited to, fiberglass, aluminum, or composite members). These members include, but are not limited to, steel joists, joist girders, purlins, columns, beams, trusses, splices, seats, metal decking, girts, and all bridging, and cold-formed metal framing which is integrated with the structural steel framing of a building

Stucco: A type of masonry finish used on the outside of a building applied over a wire mesh

Studs: The vertical boards (usually 2 × 4 or 2 × 6) that make up the walls of a building

Subfloor: A platform that supports the rest of the structure underlayment

Subgrade: The uppermost level of material placed in embankments or left at cuts in the normal grading of a road bed

Sub-main sewer: A branch sewer into which the sewage from two or more lateral sewers is discharged

Subsoil drain: A drain which receives only subsurface or seepage water

Summit: The highest point of any area or grade

Sump: A tank or pit which receives sewage or liquid waste located below the grade of the gravity system

Sump pump: A mechanical device for removing liquid waste from a sump

Super: A continuous slope in one direction on a road

Superheated steam: Steam at a higher temperature than that at which water would boil under the same pressure

Superstructure: Frame of the building, usually above grade

Supervisory switch: A device attached to the handle of a valve, which, when the valve is closed, will announce a trouble signal

Supports: Devices for supporting and securing pipe and fixtures

Swale: A shallow dip made to allow the passage of water

Sway brace: A piece of 2 × 4 or similar material used to temporarily brace a wall from wind until it is secured

Swedes: A method of setting grades at a center point by sighting across the tops of three laths; two laths are placed at a known correct elevation and the third is adjusted until it is at the correct elevation

Swing Joint: An arrangement of screwed fittings and pipe that provides for expansion

Switch (Electrical): A device to start or stop the flow of electricity

Swivel joint: A joint employing a special fitting that is pressure-tight under movement

Symbol: A pictorial representation of a material or component on a plan

Systems-engineered metal building: A metal, field-assembled building system consisting of framing, roof, and wall coverings. Typically, many of these components are cold-formed shapes. These individual parts are fabricated in one or more manufacturing facilities and shipped to the job site for assembly into the final structure. The engineering design of the system is normally the responsibility of the systems-engineered metal building manufacturer

T

Tail joist: A short beam or joist supported in a wall on one end and by a header on the other

Tail/rafter tail: That portion of a roof rafter extending beyond the plate line

Tamp: To pack tightly; usually refers to making sand tightly packed or making concrete mixed properly in a form to get rid of air pockets

Tangent: A straight line from one point to another, which passes over the edge of a curve

Tank: A container for holding gases, liquids, or solids

Taping and bedding: Refers to drywall finishing; the application of specially prepared tape to drywall joints; bedding means embedding the tape in the joint to increase strength

Taps: Connecting points on a transformer coil

T-beam: Beam which has a T-shaped cross section

Tee: A fitting, either cast or wrought, that has one side outlet at right angles to the run

Tempered water: Water ranging in temperature from 85°F (29°C) up to 110°F (43°C)

Temporary service stairway: A stairway where permanent treads and/or landings are to be filled in at a later date

Tensile strength: The maximum stretching of a piece of metal (rebar, etc.) before breaking; calculated in kps

Tensioning: Pulling or stretching of steel tendons to reinforce concrete

Termite shield: Sheet metal placed in or on a foundation wall to prevent intrusion

Terrazzo: A mixture of concrete, crushed stone, calcium shells, and/or glass, polished to a tile-like finish

Texture paint: A very thick paint that will leave a texture or pattern

Thermal ceilings: Ceilings that are insulated with batts of insulation to prevent loss of heat or cooling

Thermal protection: Refers to an electrical device which has inherent protection from overheating

Thermostat: An automatic device controlling the operation of HVAC equipment

Three-phase power: A combination of three alternating currents in a circuit with their voltages displaced 120° or one-third of a cycle

Through fixed ladder: A fixed ladder that requires a person getting off at the top to step between the side rails of the ladder to reach the landing

Tie: A soft metal wire that is twisted around a rebar or rod and chair to hold in place until concrete is poured

Tied out: The process of determining the fixed location of existing objects (manholes, meter boxes, etc.) in a street so that they may be uncovered and raised after paving

Toe of slope: The bottom of an incline

Toeboard: A low protective barrier that prevents material and equipment from falling to lower levels and which protects personnel from falling

Top chord: The topmost member of a truss

Top plate: The horizontal framing member fastened to the top of the wall studs; usually doubled

Trailer park sewer: The horizontal piping of a drainage system which begins 2 feet downstream from the last trailer site connection, receives the discharge of the trailer site, and conveys it to a sewage disposal system

Transformer: A device which uses magnetic force to transfer electrical energy from one coil of wire to another

Transverse: Across the short dimension of an object or structure

Trap: A fitting designed to provide a liquid seal which will prevent the back passage of air without significantly affecting the flow of waste water through it

Trap primer: A device or system of piping to maintain a water seal in a trap

Trap seal: The maximum vertical depth of liquid that a trap will retain

Travel: See Offset

Tread: The part of a stair on which people step

Tread depth: The horizontal distance from front to back of a tread (excluding nosing, if any)

Tremie: A pipe through which concrete may be deposited under water

Trimmer: A piece of lumber, usually a 2 × 4, that is shorter than the stud or rafter but is used to fill in where the longer piece would normally have been spaced except for the opening in the roof, floor or wall

True power (P_T): The actual power used in an electrical circuit, measured in watts

Truss: A prefabricated sloped roof system incorporating a top chord, bottom chord, and bracing.

Turbulence: Any deviation from parallel flow in a pipe due to rough inner wall surfaces, obstructions, etc.

Typical (Typ): This term, when associated with any dimension or feature, means the dimension or feature applies to the locations that appear to be identical in size and shape unless otherwise noted

U

Underground piping: Piping in contact with the earth below grade

Underlayment: Also known as subfloor; used to support the rest of the building; also refers to the sheathing used to cover rafters

Unfaced insulation: Insulation which does not have a facing or plastic membrane over one side of it

Union ell: An ell with a male or female union at one end

Union joint: A pipe coupling, usually threaded, which permits disconnection without disturbing other sections

Union tee: A tee with a male or female union at one end of the run

Unit price: A predetermined price for a measurement of quantity of work to be performed under a contract. The designated unit price would include all labor, materials, equipment, or services associated with item

Unprotected sides and edges: Any side or edge (except at entrances to points of access) of a stairway where there is no stair rail system or wall 36 inches (.9 m) or more in height, and any side or edge (except at entrances to points of access) of a stairway landing or ladder platform where there is no wall or guardrail system 39 inches (1 m) or more in height

Upstream: Referring to a location in the direction of flow before reaching a reference point

V

Vacuum: Any pressure less than that exerted by the atmosphere

Vacuum breaker: A backflow preventer

Vacuum relief valve: A device to prevent excessive vacuum in a pressure vessel

Valley: The area of a roof where two sections come together and form a depression

Valley rafters: A rafter which extends diagonally from the plate to the ridge at the line of intersection of two roof surfaces

Vapor barrier: A moisture barrier

Veneer: A thin layer or sheet of wood

Veneered wall: A single-thickness (one-wythe) masonry unit wall with a backup wall of frame or other masonry; tied but not bonded to the backup wall

Vent: Usually a hole in the eaves or soffit to allow the circulation of air over an insulated ceiling; usually covered with a screen

Vent, loop: Any vent connecting a horizontal branch or fixture drain with the stack vent of the originating waste or soil stack

Ventilation: The movement of air through a building; may be done naturally through doors and windows or mechanically by fans

Vent stack: A system of pipes used for air circulation to prevent water from being suctioned from the traps in a waste disposal system

Vertical pipe: Any pipe or fitting installed in a vertical position or which makes an angle of not more than 45° with the vertical

Vertical slip forms: Forms that are jacked vertically during the placement of concrete

Vitrified clay tile: A ceramic tile fired at a high temperature to make it very hard and waterproof

Vitrified sewer pipe: Conduit made of fired and glazed earthenware

Void: Vacant space between material, such as a space in a column

Volt (E) or (V): The unit of measurement of electrical pressure (force)

Voltage drop: Voltage reduction due to resistance

W

Waler: A 2× piece of lumber installed horizontally to formwork to give added stability and strength

Walking/working surface: Any surface, whether horizontal or vertical, on which an employee walks or works, including but not limited to floors, roofs, ramps, bridges, runways, formwork, and concrete reinforcing steel. Does not include ladders, vehicles, or trailers on which employees must be located to perform their work duties

Warning line system: A barrier erected on a roof to warn employees that they are approaching an unprotected roof side or edge and which designates an area in which roofing work may take place without the use of guardrail, body belt, or safety net systems to protect employees in the area

Waste pipe: Discharge pipe from any fixture, appliance, or appurtenance in connection with a plumbing system which does not contain fecal matter

Water-cement ratio: The ratio of the weight of water to cement

Water conditioner: Treats a water supply to change its chemical content or remove suspended solids by filtration

Water-distributing pipe: A pipe which conveys potable water from a building supply pipe to the plumbing fixtures

Water hammer: The noise and vibration which develop in a piping system when a column of noncompressible liquid flowing through a pipe line at a given pressure and velocity is abruptly stopped

Water hammer arrester: A device designed to provide protection against excessive (hammering)

Water main: The water supply pipe for public or community use

Waterproofing: Preferably called moisture protection; materials used to protect below- and on-grade construction from moisture penetration

Water riser: A water supply pipe which extends vertically one full story or more

Water-service pipe: The pipe from a water main or other source of water supply to the building served

Water supply system: The building supply pipe, the water-distributing pipes, and the necessary connecting pipes, fittings, control valves, and all appurtenances carrying or supplying potable water in or adjacent to the building or premises

Water table: The amount that is present in any area

Watt (W): The measure of electrical power

Weep holes: Small holes in a wall to permit water to exit from behind

Welded-wire fabric (WWF): A reinforcement used for horizontal concrete

Welding-end valves: Valves with ends tapered and beveled for butt welding

Welding fittings: Beveled for welding to pipe

Wet vent: A vent which also serves as a drain

Winder: Fan-shaped steps that allow a stairway to change direction without a landing

Wind lift (wind load): The force exerted by the wind against a structure

Window apron: The flat part of the interior trim of a window located directly beneath the window stool

Window stool: The flat, narrow shelf which forms the top member of the interior trim at the bottom of a window

Windrow: The spill-off from the ends of a dozer or grader blade which forms a ridge of loose material

Wiped joint: A lead pipe joint in which molten solder is poured after scraping and fitting the parts together

Working drawings: A set of drawings which provide the necessary details and dimensions to construct the object. May include specs

Wrought iron: Iron refined to a plastic state in a puddling furnace

Wrought pipe: Refers to both wrought steel and wrought iron

Wye (Y): A fitting that has one side outlet at any angle other than 90°

Wye connection: Has one end of each coil connected together and the other end open for connections.

Wythe: A continuous masonry wall width.

X

X brace: Cross brace for joist construction

Y

Yoke vent: A pipe connecting upward from a soil or waste stack to a vent stack for the purpose of preventing pressure changes in the stacks

Z

Zoning: Governmental regulations on the use of privately owned land