

## Part II — Definitions

### CHAPTER 2 DEFINITIONS

#### SECTION R201 GENERAL

**R201.1 Scope.** Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings indicated in this chapter.

**R201.2 Interchangeability.** Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular.

**R201.3 Terms defined in other codes.** Where terms are not defined in this code such terms shall have meanings ascribed to them as in other code publications of the International Code Council.

**R201.4 Terms not defined.** Where terms are not defined through the methods authorized by this section, such terms shall have ordinarily accepted meanings such as the context implies.

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**ACCESSIBLE.** Signifies access that requires the removal of an access panel or similar removable obstruction.

**ACCESSIBLE, READILY.** Signifies access without the necessity for removing a panel or similar obstruction.

**ACCESSORY STRUCTURE.** A structure not greater than 3,000 square feet (279 m<sup>2</sup>) in floor area, and not over two stories in height, the use of which is customarily accessory to and incidental to that of the dwelling(s) and which is located on the same lot.

**ADDITION.** An extension or increase in floor area or height of a building or structure.

**AIR ADMITTANCE VALVE.** A one-way valve designed to allow air into the plumbing drainage system when a negative pressure develops in the piping. This device shall close by gravity and seal the terminal under conditions of zero differential pressure (no flow conditions) and under positive internal pressure.

**AIR BREAK (DRAINAGE SYSTEM).** An arrangement in which a discharge pipe from a fixture, appliance or device drains indirectly into a receptor below the flood-level rim of the receptor, and above the trap seal.

**AIR CIRCULATION, FORCED.** A means of providing space conditioning utilizing movement of air through ducts or plenums by mechanical means.

**AIR-CONDITIONING SYSTEM.** A system that consists of heat exchangers, blowers, filters, supply, exhaust and return-air systems, and shall include any apparatus installed in connection therewith.

**AIR GAP, DRAINAGE SYSTEM.** The unobstructed vertical distance through free atmosphere between the outlet of a waste pipe and the flood-level rim of the fixture or receptor into which it is discharging.

**AIR GAP, WATER-DISTRIBUTION SYSTEM.** The unobstructed vertical distance through free atmosphere between the lowest opening from a water supply discharge to the flood-level rim of a plumbing fixture.

**ALTERATION.** Any construction or renovation to an existing structure other than repair or addition that requires a permit. Also, a change in a mechanical system that involves an extension, addition or change to the arrangement, type or purpose of the original installation that requires a permit.

**ANCHORS.** See “Supports.”

**ANTISIPHON.** A term applied to valves or mechanical devices that eliminate siphonage.

**APPLIANCE.** A device or apparatus that is manufactured and designed to utilize energy and for which this code provides specific requirements.

**APPROVED.** Acceptable to the building official.

**APPROVED AGENCY.** An established and recognized agency regularly engaged in conducting tests or furnishing inspection services, when such agency has been approved by the building official.

**ASPECT RATIO.** The ratio of the height to width (h/w) of a shear wall. The shear wall height is the maximum clear height from top of foundation or diaphragm to bottom of diaphragm framing above and the shear wall width is the sheathed dimension in the direction of applied force on the shear wall.

**ATTIC.** The unfinished space between the ceiling joists of the top story and the roof rafters.

**BACKFLOW, DRAINAGE.** A reversal of flow in the drainage system.

**BACKFLOW PREVENTER.** A device or means to prevent backflow.

**BACKFLOW PREVENTER, REDUCED-PRESSURE-ZONE TYPE.** A backflow-prevention device consisting of two independently acting check valves, internally force loaded to a normally closed position and separated by an intermediate chamber (or zone) in which there is an automatic relief means of venting to atmosphere internally loaded to a normally open

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position between two tightly closing shutoff valves and with means for testing for tightness of the checks and opening of relief means.

**BACKFLOW, WATER DISTRIBUTION.** The flow of water or other liquids into the potable water-supply piping from any sources other than its intended source. Backsiphonage is one type of backflow.

**BACKPRESSURE.** Pressure created by any means in the water distribution system, which by being in excess of the pressure in the water supply mains causes a potential backflow condition.

**BACKPRESSURE, LOW HEAD.** A pressure less than or equal to 4.33 psi (29.88 kPa) or the pressure exerted by a 10-foot (3048 mm) column of water.

**BACKSIPHONAGE.** The flowing back of used or contaminated water from piping into a potable water-supply pipe due to a negative pressure in such pipe.

**BACKWATER VALVE.** A device installed in a drain or pipe to prevent backflow of sewage.

**BALCONY, EXTERIOR.** An exterior floor projecting from and supported by a structure without additional independent supports.

**BALL COCK.** A valve that is used inside a gravity-type water closet flush tank to control the supply of water into the tank. It may also be called a flush-tank fill valve or water control.

**BASEMENT.** That portion of a building that is partly or completely below grade (see “Story above grade”).

**BASEMENT WALL.** The opaque portion of a wall that encloses one side of a basement and has an average below grade wall area that is 50 percent or more of the total opaque and non-opaque area of that enclosing side.

**BASIC WIND SPEED.** Three-second gust speed at 33 feet (10 058 mm) above the ground in Exposure C (see Section R301.2.1) as given in Figure R301.2(4).

**BATHROOM GROUP.** A group of fixtures, including or excluding a bidet, consisting of a water closet, lavatory, and bathtub or shower. Such fixtures are located together on the same floor level.

**BEND.** A drainage fitting, designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line (see “Elbow” and “Sweep”).

**BOILER.** A self-contained appliance from which hot water is circulated for heating purposes and then returned to the boiler, and which operates at water pressures not exceeding 160 pounds per square inch gage (psig) (1102 kPa gauge) and at water temperatures not exceeding 250°F (121°C).

**BOND BEAM.** A horizontal grouted element within masonry in which reinforcement is embedded.

**BRACED WALL LINE.** A series of braced wall panels in a single story constructed in accordance with Section R602.10 for wood framing or Section R603.7 or R301.1.1 for cold-formed steel framing to resist racking from seismic and wind forces.

**BRACED WALL PANEL.** A section of a braced wall line constructed in accordance with Section R602.10 for wood framing or Section R603.7 or R301.1.1 for cold-formed steel framing, which extend the full height of the wall.

**BRANCH.** Any part of the piping system other than a riser, main or stack.

**BRANCH, FIXTURE.** See “Fixture branch, drainage.”

**BRANCH, HORIZONTAL.** See “Horizontal branch, drainage.”

**BRANCH INTERVAL.** A vertical measurement of distance, 8 feet (2438 mm) or more in developed length, between the connections of horizontal branches to a drainage stack. Measurements are taken down the stack from the highest horizontal branch connection.

**BRANCH, MAIN.** A water-distribution pipe that extends horizontally off a main or riser to convey water to branches or fixture groups.

**BRANCH, VENT.** A vent connecting two or more individual vents with a vent stack or stack vent.

**BTU/H.** The listed maximum capacity of an appliance, absorption unit or burner expressed in British thermal units input per hour.

**BUILDING.** Building shall mean any one- and two-family dwelling or portion thereof, including townhouses, that is used, or designed or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, and shall include accessory structures thereto.

**BUILDING DRAIN.** The lowest piping that collects the discharge from all other drainage piping inside the house and extends 30 inches (762 mm) in developed length of pipe, beyond the exterior walls and conveys the drainage to the building sewer.

**BUILDING, EXISTING.** Existing building is a building erected prior to the adoption of this code, or one for which a legal building permit has been issued.

**BUILDING LINE.** The line established by law, beyond which a building shall not extend, except as specifically provided by law.

**BUILDING OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code.

**BUILDING SEWER.** That part of the drainage system that extends from the end of the building drain and conveys its discharge to a public sewer, private sewer, individual sewage-disposal system or other point of disposal.

**BUILDING THERMAL ENVELOPE.** The basement walls, exterior walls, floor, roof and any other building element that enclose conditioned spaces.

**BUILT-UP ROOF COVERING.** Two or more layers of felt cemented together and surfaced with a cap sheet, mineral aggregate, smooth coating or similar surfacing material.

**CEILING HEIGHT.** The clear vertical distance from the finished floor to the finished ceiling.

**CHIMNEY.** A primary vertical structure containing one or more flues, for the purpose of carrying gaseous products of combustion and air from a fuel-burning appliance to the outside atmosphere.

**CHIMNEY CONNECTOR.** A pipe that connects a fuel-burning appliance to a chimney.

#### CHIMNEY TYPES

**Residential-type appliance.** An approved chimney for removing the products of combustion from fuel-burning, residential-type appliances producing combustion gases not in excess of 1,000°F (538°C) under normal operating conditions, but capable of producing combustion gases of 1,400°F (760°C) during intermittent forced firing for periods up to 1 hour. All temperatures shall be measured at the appliance flue outlet. Residential-type appliance chimneys include masonry and factory-built types.

**CIRCUIT VENT.** A vent that connects to a horizontal drainage branch and vents two traps to a maximum of eight traps or trapped fixtures connected into a battery.

**CLADDING.** The exterior materials that cover the surface of the building envelope that is directly loaded by the wind.

**CLEANOUT.** An accessible opening in the drainage system used for the removal of possible obstruction.

**CLOSET.** A small room or chamber used for storage.

**COMBINATION WASTE AND VENT SYSTEM.** A specially designed system of waste piping embodying the horizontal wet venting of one or more 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.

**COMBUSTIBLE MATERIAL.** Any material not defined as noncombustible.

**COMBUSTION AIR.** The air provided to fuel-burning equipment including air for fuel combustion, draft hood dilution and ventilation of the equipment enclosure.

**COMMON VENT.** A single pipe venting two trap arms within the same branch interval, either back-to-back or one above the other.

**CONDENSATE.** The liquid that separates from a gas due to a reduction in temperature, e.g., water that condenses from flue gases and water that condenses from air circulating through the cooling coil in air conditioning equipment.

**CONDENSING APPLIANCE.** An appliance that condenses water generated by the burning of fuels.

**CONDITIONED AIR.** Air treated to control its temperature, relative humidity or quality.

**CONDITIONED AREA.** That area within a building provided with heating and/or cooling systems or appliances capable of maintaining, through design or heat loss/gain, 68°F (20°C) during the heating season and/or 80°F (27°C) during the cooling season, or has a fixed opening directly adjacent to a conditioned area.

**CONDITIONED FLOOR AREA.** The horizontal projection of the floors associated with the conditioned space.

**CONDITIONED SPACE.** For energy purposes, space within a building that is provided with heating and/or cooling equipment or systems capable of maintaining, through design or heat loss/gain, 50°F (10°C) during the heating season and 85°F (29°C) during the cooling season, or communicates directly with a conditioned space. For mechanical purposes, an area, room or space being heated or cooled by any equipment or appliance.

**CONFINED SPACE.** A room or space having a volume less than 50 cubic feet per 1,000 Btu/h (4.83 L/W) of the aggregate input rating of all fuel-burning appliances installed in that space.

**CONSTRUCTION DOCUMENTS.** Written, graphic and pictorial documents prepared or assembled for describing the design, location and physical characteristics of the elements of a project necessary for obtaining a building permit. Construction drawings shall be drawn to an appropriate scale.

**CONTAMINATION.** An impairment of the quality of the potable water that creates an actual hazard to the public health through poisoning or through the spread of disease by sewage, industrial fluids or waste.

**CONTINUOUS WASTE.** A drain from two or more similar adjacent fixtures connected to a single trap.

**CONTROL, LIMIT.** An automatic control responsive to changes in liquid flow or level, pressure, or temperature for limiting the operation of an appliance.

**CONTROL, PRIMARY SAFETY.** A safety control responsive directly to flame properties that senses the presence or absence of flame and, in event of ignition failure or unintentional flame extinguishment, automatically causes shutdown of mechanical equipment.

**CONVECTOR.** A system-incorporating heating element in an enclosure in which air enters an opening below the heating element, is heated and leaves the enclosure through an opening located above the heating element.

**CORROSION RESISTANCE.** The ability of a material to withstand deterioration of its surface or its properties when exposed to its environment.

**COURT.** A space, open and unobstructed to the sky, located at or above grade level on a lot and bounded on three or more sides by walls or a building.

**CRIPPLE WALL.** A framed wall extending from the top of the foundation to the underside of the floor framing of the first story above grade plane.

**CROSS CONNECTION.** Any connection between two otherwise separate piping systems whereby there may be a flow from one system to the other.

**DALLE GLASS.** A decorative composite glazing material made of individual pieces of glass that are embedded in a cast matrix of concrete or epoxy.

**DAMPER, VOLUME.** A device that will restrict, retard or direct the flow of air in any duct, or the products of combustion of heat-producing equipment, vent connector, vent or chimney.

**DEAD END.** A branch leading from a DWV system terminating at a developed length of 2 feet (610 mm) or more. Dead

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ends shall be prohibited except as an approved part of a rough-in for future connection.

**DEAD LOADS.** The weight of all materials of construction incorporated into the building, including but not limited to walls, floors, roofs, ceilings, stairways, built-in partitions, finishes, cladding, and other similarly incorporated architectural and structural items, and fixed service equipment.

**DECK.** An exterior floor system supported on at least two opposing sides by an adjoining structure and/or posts, piers, or other independent supports.

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

**DESIGN PROFESSIONAL.** See definition of “Registered design professional.”

**DEVELOPED LENGTH.** The length of a pipeline measured along the center line of the pipe and fittings.

**DIAMETER.** Unless specifically stated, the term “diameter” is the nominal diameter as designated by the approved material standard.

**DIAPHRAGM.** A horizontal or nearly horizontal system acting to transmit lateral forces to the vertical resisting elements. When the term “diaphragm” is used, it includes horizontal bracing systems.

**DILUTION AIR.** Air that enters a draft hood or draft regulator and mixes with flue gases.

**DIRECT-VENT APPLIANCE.** A fuel-burning appliance with a sealed combustion system that draws all air for combustion from the outside atmosphere and discharges all flue gases to the outside atmosphere.

**DRAFT.** The pressure difference existing between the appliance or any component part and the atmosphere, that causes a continuous flow of air and products of combustion through the gas passages of the appliance to the atmosphere.

**Induced draft.** The pressure difference created by the action of a fan, blower or ejector, that is located between the appliance and the chimney or vent termination.

**Natural draft.** The pressure difference created by a vent or chimney because of its height, and the temperature difference between the flue gases and the atmosphere.

**DRAFT HOOD.** A device built into an appliance, or a part of the vent connector from an appliance, which is designed to provide for the ready escape of the flue gases from the appliance in the event of no draft, backdraft or stoppage beyond the draft hood; prevent a backdraft from entering the appliance; and neutralize the effect of stack action of the chimney or gas vent on the operation of the appliance.

**DRAFT REGULATOR.** A device that functions to maintain a desired draft in the appliance by automatically reducing the draft to the desired value.

**DRAFT STOP.** A material, device or construction installed to restrict the movement of air within open spaces of concealed areas of building components such as crawl spaces, floor-ceiling assemblies, roof-ceiling assemblies and attics.

**DRAIN.** Any pipe that carries soil and water-borne wastes in a building drainage system.

**DRAINAGE FITTING.** A pipe fitting designed to provide connections in the drainage system that have provisions for establishing the desired slope in the system. These fittings are made from a variety of both metals and plastics. The methods of coupling provide for required slope in the system (see “Durham fitting”).

**DUCT SYSTEM.** A continuous passageway for the transmission of air which, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances.

**DURHAM FITTING.** A special type of drainage fitting for use in the durham systems installations in which the joints are made with recessed and tapered threaded fittings, as opposed to bell and spigot lead/oakum or solvent/cemented or soldered joints. The tapping is at an angle (not 90 degrees) to provide for proper slope in otherwise rigid connections.

**DURHAM SYSTEM.** A term used to describe soil or waste systems where all piping is of threaded pipe, tube or other such rigid construction using recessed drainage fittings to correspond to the types of piping.

**DWELLING.** Any building that contains one or two dwelling units used, intended, or designed to be built, used, rented, leased, let or hired out to be occupied, or that are occupied for living purposes.

**DWELLING UNIT.** A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation.

**DWV.** Abbreviated term for drain, waste and vent piping as used in common plumbing practice.

**EFFECTIVE OPENING.** The minimum cross-sectional area at the point of water-supply discharge, measured or expressed in terms of diameter of a circle and if the opening is not circular, the diameter of a circle of equivalent cross-sectional area. (This is applicable to air gap.)

**ELBOW.** A pressure pipe fitting designed to provide an exact change in direction of a pipe run. An elbow provides a sharp turn in the flow path (see “Bend” and “Sweep”).

**EMERGENCY ESCAPE AND RESCUE OPENING.** An operable exterior window, door or similar device that provides for a means of escape and access for rescue in the event of an emergency.

**EQUIPMENT.** All piping, ducts, vents, control devices and other components of systems other than appliances that are permanently installed and integrated to provide control of environmental conditions for buildings. This definition shall also include other systems specifically regulated in this code.

**EQUIVALENT LENGTH.** For determining friction losses in a piping system, the effect of a particular fitting equal to the

friction loss through a straight piping length of the same nominal diameter.

**ESSENTIALLY NONTOXIC TRANSFER FLUIDS.** Fluids having a Gosselin rating of 1, including propylene glycol; mineral oil; polydimethyloil oxane; hydrochlorofluorocarbon, chlorofluorocarbon and hydrofluorocarbon refrigerants; and FDA-approved boiler water additives for steam boilers.

**ESSENTIALLY TOXIC TRANSFER FLUIDS.** Soil, water or gray water and fluids having a Gosselin rating of 2 or more including ethylene glycol, hydrocarbon oils, ammonia refrigerants and hydrazine.

**EVAPORATIVE COOLER.** A device used for reducing air temperature by the process of evaporating water into an airstream.

**EXCESS AIR.** Air that passes through the combustion chamber and the appliance flue in excess of that which is theoretically required for complete combustion.

**EXHAUST HOOD, FULL OPENING.** An exhaust hood with an opening at least equal to the diameter of the connecting vent.

**EXISTING INSTALLATIONS.** Any plumbing system regulated by this code that was legally installed prior to the effective date of this code, or for which a permit to install has been issued.

**EXTERIOR INSULATION FINISH SYSTEMS (EIFS).** Synthetic stucco cladding systems typically consisting of five layers: adhesive, insulation board, base coat into which fiberglass reinforcing mesh is embedded, and a finish coat in the desired color.

**EXTERIOR WALL.** An above-grade wall that defines the exterior boundaries of a building. Includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and basement walls with an average below-grade wall area that is less than 50 percent of the total opaque and nonopaque area of that enclosing side.

**FACTORY-BUILT CHIMNEY.** A listed and labeled chimney composed of factory-made components assembled in the field in accordance with the manufacturer's instructions and the conditions of the listing.

**FENESTRATION.** Skylights, roof windows, vertical windows (whether fixed or moveable); opaque doors; glazed doors; glass block; and combination opaque/glazed doors.

**FIBER CEMENT SIDING.** A manufactured, fiber-reinforcing product made with an inorganic hydraulic or calcium silicate binder formed by chemical reaction and reinforced with organic or inorganic non-asbestos fibers, or both. Additives which enhance manufacturing or product performance are permitted. Fiber cement siding products have either smooth or textured faces and are intended for exterior wall and related applications.

**FIREBLOCKING.** Building materials installed to resist the free passage of flame to other areas of the building through concealed spaces.

**FIREPLACE.** An assembly consisting of a hearth and fire chamber of noncombustible material and provided with a chimney, for use with solid fuels.

**Factory-built fireplace.** A listed and labeled fireplace and chimney system composed of factory-made components, and assembled in the field in accordance with manufacturer's instructions and the conditions of the listing.

**Masonry chimney.** A field-constructed chimney composed of solid masonry units, bricks, stones or concrete.

**Masonry fireplace.** A field-constructed fireplace composed of solid masonry units, bricks, stones or concrete.

**FIREPLACE STOVE.** A free-standing, chimney-connected solid-fuel-burning heater designed to be operated with the fire chamber doors in either the open or closed position.

**FIREPLACE THROAT.** The opening between the top of the firebox and the smoke chamber.

**FIRE SEPARATION DISTANCE.** The distance measured from the building face to one of the following:

1. To the closest interior lot line; or
2. To the centerline of a street, an alley or public way; or
3. To an imaginary line between two buildings on the lot.

The distance shall be measured at a right angle from the face of the framing.

**FIXTURE.** See "Plumbing fixture."

**FIXTURE BRANCH, DRAINAGE.** A drain serving two or more fixtures that discharges into another portion of the drainage system.

**FIXTURE BRANCH, WATER-SUPPLY.** A water-supply pipe between the fixture supply and a main water-distribution pipe or fixture group main.

**FIXTURE DRAIN.** The drain from the trap of a fixture to the junction of that drain with any other drain pipe.

#### FIXTURE FITTING

**Supply fitting.** A fitting that controls the volume and/or directional flow of water and is either attached to or accessible from a fixture or is used with an open or atmospheric discharge.

**Waste fitting.** A combination of components that conveys the sanitary waste from the outlet of a fixture to the connection of the sanitary drainage system.

**FIXTURE GROUP, MAIN.** The main water-distribution pipe (or secondary branch) serving a plumbing fixture grouping such as a bath, kitchen or laundry area to which two or more individual fixture branch pipes are connected.

**FIXTURE SUPPLY.** The water-supply pipe connecting a fixture or fixture fitting to a fixture branch.

**FIXTURE UNIT, DRAINAGE (d.f.u.).** A measure of probable discharge into the drainage system by various types of plumbing fixtures, used to size DWV piping systems. The drainage fixture-unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a

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single drainage operation and on the average time between successive operations.

**FIXTURE UNIT, WATER-SUPPLY (w.s.f.u.).** A measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures used to size water-piping systems. The water-supply fixture-unit value for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation and on the average time between successive operations.

**FLAME SPREAD.** The propagation of flame over a surface.

**FLAME SPREAD INDEX.** The numeric value assigned to a material tested in accordance with ASTM E 84.

**FLOOD-LEVEL RIM.** The edge of the receptor or fixture from which water overflows.

**FLOOR DRAIN.** A plumbing fixture for recess in the floor having a floor-level strainer intended for the purpose of the collection and disposal of waste water used in cleaning the floor and for the collection and disposal of accidental spillage to the floor.

**FLOOR FURNACE.** A self-contained furnace suspended from the floor of the space being heated, taking air for combustion from outside such space, and with means for lighting the appliance from such space.

**FLOW PRESSURE.** The static pressure reading in the water-supply pipe near the faucet or water outlet while the faucet or water outlet is open and flowing at capacity.

**FLUE.** See “Vent.”

**FLUE, APPLIANCE.** The passages within an appliance through which combustion products pass from the combustion chamber to the flue collar.

**FLUE COLLAR.** The portion of a fuel-burning appliance designed for the attachment of a draft hood, vent connector or venting system.

**FLUE GASES.** Products of combustion plus excess air in appliance flues or heat exchangers.

**FLUSH VALVE.** A device located at the bottom of a flush tank that is operated to flush water closets.

**FLUSHOMETER TANK.** A device integrated within an air accumulator vessel that is designed to discharge a predetermined quantity of water to fixtures for flushing purposes.

**FLUSHOMETER VALVE.** A flushometer valve is a device that discharges a predetermined quantity of water to fixtures for flushing purposes and is actuated by direct water pressure.

**FOAM BACKER BOARD.** Foam plastic used in siding applications where the foam plastic is a component of the siding.

**FOAM PLASTIC INSULATION.** A plastic that is intentionally expanded by the use of a foaming agent to produce a reduced-density plastic containing voids consisting of open or closed cells distributed throughout the plastic for thermal insulating or acoustic purposes and that has a density less than 20 pounds per cubic foot (320 kg/m<sup>3</sup>) unless it is used as interior trim.

**FOAM PLASTIC INTERIOR TRIM.** Exposed foam plastic used as picture molds, chair rails, crown moldings, baseboards, handrails, ceiling beams, door trim and window trim and similar decorative or protective materials used in fixed applications.

**FUEL-PIPING SYSTEM.** All piping, tubing, valves and fittings used to connect fuel utilization equipment to the point of fuel delivery.

**FULLWAY VALVE.** A valve that in the full open position has an opening cross-sectional area equal to a minimum of 85 percent of the cross-sectional area of the connecting pipe.

**FURNACE.** A vented heating appliance designed or arranged to discharge heated air into a conditioned space or through a duct or ducts.

**GLAZING AREA.** The interior surface area of all glazed fenestration, including the area of sash, curbing or other framing elements, that enclose conditioned space. Includes the area of glazed fenestration assemblies in walls bounding conditioned basements.

**GRADE.** The finished ground level adjoining the building at all exterior walls.

**GRADE FLOOR OPENING.** A window or other opening located such that the sill height of the opening is not more than 44 inches (1118 mm) above or below the finished ground level adjacent to the opening.

**GRADE, PIPING.** See “Slope.”

**GRADE PLANE.** A reference plane representing the average of the finished ground level adjoining the building at all exterior walls. Where the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the area between the building and the lot line or, where the lot line is more than 6 ft (1829 mm) from the building between the structure and a point 6 ft (1829 mm) from the building.

**GRIDDED WATER DISTRIBUTION SYSTEM.** A water distribution system where every water distribution pipe is interconnected so as to provide two or more paths to each fixture supply pipe.

**GROSS AREA OF EXTERIOR WALLS.** The normal projection of all exterior walls, including the area of all windows and doors installed therein.

**GROUND-SOURCE HEAT PUMP LOOP SYSTEM.** Piping buried in horizontal or vertical excavations or placed in a body of water for the purpose of transporting heat transfer liquid to and from a heat pump. Included in this definition are closed loop systems in which the liquid is recirculated and open loop systems in which the liquid is drawn from a well or other source.

**GUARD.** A building component or a system of building components located near the open sides of elevated walking surfaces that minimizes the possibility of a fall from the walking surface to the lower level.

**HABITABLE SPACE.** A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

**HANDRAIL.** A horizontal or sloping rail intended for grasping by the hand for guidance or support.

**HANGERS.** See “Supports.”

**HAZARDOUS LOCATION.** Any location considered to be a fire hazard for flammable vapors, dust, combustible fibers or other highly combustible substances.

**HEATING DEGREE DAYS (HDD).** The sum, on an annual basis, of the difference between 65°F (18°C) and the mean temperature for each day as determined from “NOAA Annual Degree Days to Selected Bases Derived from the 1960-1990 Normals” or other weather data sources acceptable to the code official.

**HEAT PUMP.** An appliance having heating or heating/cooling capability and that uses refrigerants to extract heat from air, liquid or other sources.

**HEIGHT, BUILDING.** The vertical distance from grade plane to the average height of the highest roof surface.

**HEIGHT, STORY.** The vertical distance from top to top of two successive tiers of beams or finished floor surfaces; and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to the top of the roof rafters.

**HIGH-TEMPERATURE (H.T.) CHIMNEY.** A high temperature chimney complying with the requirements of UL 103. A Type H.T. chimney is identifiable by the markings “Type H.T.” on each chimney pipe section.

**HORIZONTAL BRANCH, DRAINAGE.** A drain pipe extending laterally from a soil or waste stack or building drain, that receives the discharge from one or more fixture drains.

**HORIZONTAL PIPE.** Any pipe or fitting that makes an angle of less than 45 degrees (0.79 rad) with the horizontal.

**HOT WATER.** Water at a temperature greater than or equal to 110°F (43°C).

**HURRICANE-PRONE REGIONS.** Areas vulnerable to hurricanes, defined as the U.S. Atlantic Ocean and Gulf of Mexico coasts where the basic wind speed is greater than 90 miles per hour (40 m/s), and Hawaii, Puerto Rico, Guam, Virgin Islands, and America Samoa.

**HYDROGEN GENERATING APPLIANCE.** A self-contained package or factory-matched packages of integrated systems for generating gaseous hydrogen. Hydrogen generating appliances utilize electrolysis, reformation, chemical, or other processes to generate hydrogen.

**IGNITION SOURCE.** A flame, spark or hot surface capable of igniting flammable vapors or fumes. Such sources include appliance burners, burner ignitions and electrical switching devices.

**INDIRECT WASTE PIPE.** A waste pipe that discharges into the drainage system through an air gap into a trap, fixture or receptor.

**INDIVIDUAL SEWAGE DISPOSAL SYSTEM.** A system for disposal of sewage by means of a septic tank or mechanical treatment, designed for use apart from a public sewer to serve a single establishment or building.

**INDIVIDUAL VENT.** A pipe installed to vent a single-fixture drain that connects with the vent system above or terminates independently outside the building.

**INDIVIDUAL WATER SUPPLY.** A supply other than an approved public water supply that serves one or more families.

**INSULATING CONCRETE FORM (ICF).** A concrete forming system using stay-in-place forms of rigid foam plastic insulation, a hybrid of cement and foam insulation, a hybrid of cement and wood chips, or other insulating material for constructing cast-in-place concrete walls.

**INSULATING SHEATHING.** An insulating board having a minimum thermal resistance of R-2 of the core material.

**JURISDICTION.** The governmental unit that has adopted this code under due legislative authority.

**KITCHEN.** Kitchen shall mean an area used, or designated to be used, for the preparation of food.

**LABEL.** An identification applied on a product by the manufacturer which contains the name of the manufacturer, the function and performance characteristics of the product or material, and the name and identification of an approved agency and that indicates that the representative sample of the product or material has been tested and evaluated by an approved agency. (See also “Manufacturer’s designation” and “Mark.”)

**LABELED.** Devices, equipment or materials to which have been affixed a label, seal, symbol or other identifying mark of a testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above labeled items that attests to compliance with a specific standard.

**LIGHT-FRAMED CONSTRUCTION.** A type of construction whose vertical and horizontal structural elements are primarily formed by a system of repetitive wood or light gage steel framing members.

**LISTED AND LISTING.** Terms referring to equipment that is shown in a list published by an approved testing agency qualified and equipped for experimental testing and maintaining an adequate periodic inspection of current productions and whose listing states that the equipment complies with nationally recognized standards when installed in accordance with the manufacturer’s installation instructions.

**LIVE LOADS.** Those loads produced by the use and occupancy of the building or other structure and do not include construction or environmental loads such as wind load, snow load, rain load, earthquake load, flood load or dead load.

**LIVING SPACE.** Space within a dwelling unit utilized for living, sleeping, eating, cooking, bathing, washing and sanitation purposes.

**LOT.** A portion or parcel of land considered as a unit.

**LOT LINE.** A line dividing one lot from another, or from a street or any public place.

**MACERATING TOILET SYSTEMS.** A system comprised of a sump with macerating pump and with connections for a water closet and other plumbing fixtures, that is designed to accept, grind and pump wastes to an approved point of discharge.

## DEFINITIONS

**MAIN.** The principal pipe artery to which branches may be connected.

**MAIN SEWER.** See “Public sewer.”

**MANIFOLD WATER DISTRIBUTION SYSTEMS.** A fabricated piping arrangement in which a large supply main is fitted with multiple branches in close proximity in which water is distributed separately to fixtures from each branch.

**MANUFACTURED HOME.** Manufactured home means a structure, transportable in one or more sections, which in the traveling mode is 8 body feet (2438 body mm) or more in width or 40 body feet (12 192 body mm) or more in length, or, when erected on site, is 320 square feet (30 m<sup>2</sup>) or more, and which is built on a permanent chassis and designed to be used as a dwelling with or without a permanent foundation when connected to the required utilities, and includes the plumbing, heating, air-conditioning and electrical systems contained therein; except that such term shall include any structure that meets all the requirements of this paragraph except the size requirements and with respect to which the manufacturer voluntarily files a certification required by the secretary (HUD) and complies with the standards established under this title. For mobile homes built prior to June 15, 1976, a label certifying compliance to the Standard for Mobile Homes, NFPA 501, in effect at the time of manufacture is required. For the purpose of these provisions, a mobile home shall be considered a manufactured home.

**MANUFACTURER’S DESIGNATION.** An identification applied on a product by the manufacturer indicating that a product or material complies with a specified standard or set of rules. (See also “Mark” and “Label.”)

**MANUFACTURER’S INSTALLATION INSTRUCTIONS.** Printed instructions included with equipment as part of the conditions of listing and labeling.

**MARK.** An identification applied on a product by the manufacturer indicating the name of the manufacturer and the function of a product or material. (See also “Manufacturer’s designation” and “Label.”)

**MASONRY CHIMNEY.** A field-constructed chimney composed of solid masonry units, bricks, stones or concrete.

**MASONRY HEATER.** A masonry heater is a solid fuel burning heating appliance constructed predominantly of concrete or solid masonry having a mass of at least 1,100 pounds (500 kg), excluding the chimney and foundation. It is designed to absorb and store a substantial portion of heat from a fire built in the firebox by routing exhaust gases through internal heat exchange channels in which the flow path downstream of the firebox includes at least one 180-degree (3.14-rad) change in flow direction before entering the chimney and which deliver heat by radiation through the masonry surface of the heater.

**MASONRY, SOLID.** Masonry consisting of solid masonry units laid contiguously with the joints between the units filled with mortar.

**MASONRY UNIT.** Brick, tile, stone, glass block or concrete block conforming to the requirements specified in Section 2103 of the *International Building Code*.

**Clay.** A building unit larger in size than a brick, composed of burned clay, shale, fire clay or mixtures thereof.

**Concrete.** A building unit or block larger in size than 12 inches by 4 inches by 4 inches (305 mm by 102 mm by 102 mm) made of cement and suitable aggregates.

**Glass.** Nonload-bearing masonry composed of glass units bonded by mortar.

**Hollow.** A masonry unit whose net cross-sectional area in any plane parallel to the loadbearing surface is less than 75 percent of its gross cross-sectional area measured in the same plane.

**Solid.** A masonry unit whose net cross-sectional area in every plane parallel to the loadbearing surface is 75 percent or more of its cross-sectional area measured in the same plane.

**MASS WALL.** Masonry or concrete walls having a mass greater than or equal to 30 pounds per square foot (146 kg/m<sup>2</sup>), solid wood walls having a mass greater than or equal to 20 pounds per square foot (98 kg/m<sup>2</sup>), and any other walls having a heat capacity greater than or equal to 6 Btu/ft<sup>2</sup> · °F [266 J/(m<sup>2</sup> · K)].

**MEAN ROOF HEIGHT.** The average of the roof eave height and the height to the highest point on the roof surface, except that eave height shall be used for roof angle of less than or equal to 10 degrees (0.18 rad).

**MECHANICAL DRAFT SYSTEM.** A venting system designed to remove flue or vent gases by mechanical means, that consists of an induced draft portion under nonpositive static pressure or a forced draft portion under positive static pressure.

**Forced-draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static pressure.

**Induced draft venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under nonpositive static vent pressure.

**Power venting system.** A portion of a venting system using a fan or other mechanical means to cause the removal of flue or vent gases under positive static vent pressure.

**MECHANICAL EXHAUST SYSTEM.** A system for removing air from a room or space by mechanical means.

**MECHANICAL SYSTEM.** A system specifically addressed and regulated in this code and composed of components, devices, appliances and equipment.

**METAL ROOF PANEL.** An interlocking metal sheet having a minimum installed weather exposure of at least 3 square feet (0.28 m<sup>2</sup>) per sheet.

**METAL ROOF SHINGLE.** An interlocking metal sheet having an installed weather exposure less than 3 square feet (0.28 m<sup>2</sup>) per sheet.

**MEZZANINE, LOFT.** An intermediate level or levels between the floor and ceiling of any story with an aggregate

floor area of not more than one-third of the area of the room or space in which the level or levels are located.

**MODIFIED BITUMEN ROOF COVERING.** One or more layers of polymer modified asphalt sheets. The sheet materials shall be fully adhered or mechanically attached to the substrate or held in place with an approved ballast layer.

**MULTIPLE STATION SMOKE ALARM.** Two or more single station alarm devices that are capable of interconnection such that actuation of one causes all integral or separate audible alarms to operate.

**NATURAL DRAFT SYSTEM.** A venting system designed to remove flue or vent gases under nonpositive static vent pressure entirely by natural draft.

**NATURALLY DURABLE WOOD.** The heartwood of the following species: Decay-resistant redwood, cedars, black locust and black walnut.

Note: Corner sapwood is permitted if 90 percent or more of the width of each side on which it occurs is heartwood.

**NONCOMBUSTIBLE MATERIAL.** Materials that pass the test procedure for defining noncombustibility of elementary materials set forth in ASTM E 136.

**NONCONDITIONED SPACE.** A space that is not a conditioned space by insulated walls, floors or ceilings.

**OCCUPIED SPACE.** The total area of all buildings or structures on any lot or parcel of ground projected on a horizontal plane, excluding permitted projections as allowed by this code.

**OFFSET.** A combination of fittings that makes two changes in direction bringing one section of the pipe out of line but into a line parallel with the other section.

**OWNER.** Any person, agent, firm or corporation having a legal or equitable interest in the property.

**PELLET FUEL-BURNING APPLIANCE.** A closed combustion, vented appliance equipped with a fuel feed mechanism for burning processed pellets of solid fuel of a specified size and composition.

**PELLET VENT.** A vent listed and labeled for use with a listed pellet fuel-burning appliance.

**PERMIT.** An official document or certificate issued by the authority having jurisdiction that authorizes performance of a specified activity.

**PERSON.** An individual, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the foregoing.

**PITCH.** See "Slope."

**PLATFORM CONSTRUCTION.** A method of construction by which floor framing bears on load bearing walls that are not continuous through the story levels or floor framing.

**PLENUM.** A chamber that forms part of an air-circulation system other than the occupied space being conditioned.

**PLUMBING.** For the purpose of this code, plumbing refers to those installations, repairs, maintenance and alterations regulated by Chapters 25 through 32.

**PLUMBING APPLIANCE.** An energized household appliance with plumbing connections, such as a dishwasher, food-waste grinder, clothes washer or water heater.

**PLUMBING APPURTENANCE.** A device or assembly that is an adjunct to the basic plumbing system and demands no additional water supply nor adds any discharge load to the system. It is presumed that it performs some useful function in the operation, maintenance, servicing, economy or safety of the plumbing system. Examples include filters, relief valves and aerators.

**PLUMBING FIXTURE.** A receptor or device that requires both a water-supply connection and a discharge to the drainage system, such as water closets, lavatories, bathtubs and sinks. Plumbing appliances as a special class of fixture are further defined.

**PLUMBING SYSTEM.** Includes the water supply and distribution pipes, plumbing fixtures, supports and appurtenances; soil, waste and vent pipes; sanitary drains and building sewers to an approved point of disposal.

**POLLUTION.** An impairment of the quality of the potable water to a degree that does not create a hazard to the public health but that does adversely and unreasonably affect the aesthetic qualities of such potable water for domestic use.

**PORTABLE FUEL CELL APPLIANCE.** A fuel cell generator of electricity, which is not fixed in place. A portable fuel cell appliance utilizes a cord and plug connection to a grid-isolated load and has an integral fuel supply.

**POSITIVE ROOF DRAINAGE.** The drainage condition in which consideration has been made for all loading deflections of the roof deck, and additional slope has been provided to ensure drainage of the roof within 48 hours of precipitation.

**POTABLE WATER.** Water free from impurities present in amounts sufficient to cause disease or harmful physiological effects and conforming in bacteriological and chemical quality to the requirements of the public health authority having jurisdiction.

**PRECAST CONCRETE.** A structural concrete element cast elsewhere than its final position in the structure.

**PRESSURE-RELIEF VALVE.** A pressure-actuated valve held closed by a spring or other means and designed to automatically relieve pressure at the pressure at which it is set.

**PUBLIC SEWER.** A common sewer directly controlled by public authority.

**PUBLIC WATER MAIN.** A water-supply pipe for public use controlled by public authority.

**PUBLIC WAY.** Any street, alley or other parcel of land open to the outside air leading to a public street, which has been deeded, dedicated or otherwise permanently appropriated to the public for public use and that has a clear width and height of not less than 10 feet (3048 mm).

**PURGE.** To clear of air, gas or other foreign substances.

**QUICK-CLOSING VALVE.** A valve or faucet that closes automatically when released manually or controlled by mechanical means for fast-action closing.

## DEFINITIONS

**R-VALUE, THERMAL RESISTANCE.** The inverse of the time rate of heat flow through a building thermal envelope element from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ( $h \cdot \text{ft}^2 \cdot ^\circ\text{F}/\text{Btu}$ ).

**RAMP.** A walking surface that has a running slope steeper than 1 unit vertical in 20 units horizontal (5-percent slope).

**RECEPTOR.** A fixture or device that receives the discharge from indirect waste pipes.

**REFRIGERANT.** A substance used to produce refrigeration by its expansion or evaporation.

**REFRIGERANT COMPRESSOR.** A specific machine, with or without accessories, for compressing a given refrigerant vapor.

**REFRIGERATING SYSTEM.** A combination of interconnected parts forming a closed circuit in which refrigerant is circulated for the purpose of extracting, then rejecting, heat. A direct refrigerating system is one in which the evaporator or condenser of the refrigerating system is in direct contact with the air or other substances to be cooled or heated. An indirect refrigerating system is one in which a secondary coolant cooled or heated by the refrigerating system is circulated to the air or other substance to be cooled or heated.

**REGISTERED DESIGN PROFESSIONAL.** An individual who is registered or licensed to practice their respective design profession as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

**RELIEF VALVE, VACUUM.** A device to prevent excessive buildup of vacuum in a pressure vessel.

**REPAIR.** The reconstruction or renewal of any part of an existing building for the purpose of its maintenance.

**REROOFING.** The process of recovering or replacing an existing roof covering. See “Roof recover.”

**RETURN AIR.** Air removed from an approved conditioned space or location and recirculated or exhausted.

**RISER.** A water pipe that extends vertically one full story or more to convey water to branches or to a group of fixtures.

**ROOF ASSEMBLY.** A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly includes the roof deck, vapor retarder, substrate or thermal barrier, insulation, vapor retarder, and roof covering.

**ROOF COVERING.** The covering applied to the roof deck for weather resistance, fire classification or appearance.

**ROOF COVERING SYSTEM.** See “Roof assembly.”

**ROOF DECK.** The flat or sloped surface not including its supporting members or vertical supports.

**ROOF RECOVER.** The process of installing an additional roof covering over a prepared existing roof covering without removing the existing roof covering.

**ROOF REPAIR.** Reconstruction or renewal of any part of an existing roof for the purposes of its maintenance.

**ROOFTOP STRUCTURE.** An enclosed structure on or above the roof of any part of a building.

**ROOM HEATER.** A freestanding heating appliance installed in the space being heated and not connected to ducts.

**ROUGH-IN.** The installation of all parts of the plumbing system that must be completed prior to the installation of fixtures. This includes DWV, water supply and built-in fixture supports.

**RUNNING BOND.** The placement of masonry units such that head joints in successive courses are horizontally offset at least one-quarter the unit length.

**SANITARY SEWER.** A sewer that carries sewage and excludes storm, surface and groundwater.

**SCUPPER.** An opening in a wall or parapet that allows water to drain from a roof.

**SEISMIC DESIGN CATEGORY.** A classification assigned to a structure based on its Seismic Group and the severity of the design earthquake ground motion at the site.

**SEPTIC TANK.** A water-tight receptor that receives the discharge of a building sanitary drainage system and is constructed so as to separate solids from the liquid, digest organic matter through a period of detention, and allow the liquids to discharge into the soil outside of the tank through a system of open joint or perforated piping or a seepage pit.

**SEWAGE.** Any liquid waste containing animal matter, vegetable matter or other impurity in suspension or solution.

**SEWAGE PUMP.** A permanently installed mechanical device for removing sewage or liquid waste from a sump.

**SHALL.** The term, when used in the code, is construed as mandatory.

**SHEAR WALL.** A general term for walls that are designed and constructed to resist racking from seismic and wind by use of masonry, concrete, cold-formed steel or wood framing in accordance with Chapter 6 of this code and the associated limitations in Section R301.2 of this code.

**SIDE VENT.** A vent connecting to the drain pipe through a fitting at an angle less than 45 degrees (0.79 rad) to the horizontal.

**SINGLE PLY MEMBRANE.** A roofing membrane that is field applied using one layer of membrane material (either homogeneous or composite) rather than multiple layers.

**SINGLE STATION SMOKE ALARM.** An assembly incorporating the detector, control equipment and alarm sounding device in one unit that is operated from a power supply either in the unit or obtained at the point of installation.

**SKYLIGHT AND SLOPED GLAZING.** See Section R308.6.1.

**SKYLIGHT, UNIT.** See Section R308.6.1.

**SLIP JOINT.** A mechanical-type joint used primarily on fixture traps. The joint tightness is obtained by compressing a friction-type washer such as rubber, nylon, neoprene, lead or special packing material against the pipe by the tightening of a (slip) nut.

**SLOPE.** The fall (pitch) of a line of pipe in reference to a horizontal plane. In drainage, the slope is expressed as the fall in units vertical per units horizontal (percent) for a length of pipe.

**SMOKE-DEVELOPED RATING.** A numerical index indicating the relative density of smoke produced by burning assigned to a material tested in accordance with ASTM E 84.

**SOIL STACK OR PIPE.** A pipe that conveys sewage containing fecal material.

**SOLAR HEAT GAIN COEFFICIENT (SHGC).** The solar heat gain through a fenestration or glazing assembly relative to the incident solar radiation ( $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$ ).

**SOLID MASONRY.** Load-bearing or nonload-bearing construction using masonry units where the net cross-sectional area of each unit in any plane parallel to the bearing surface is not less than 75 percent of its gross cross-sectional area. Solid masonry units shall conform to ASTM C 55, C 62, C 73, C 145 or C 216.

**STACK.** Any main vertical DWV line, including offsets, that extends one or more stories as directly as possible to its vent terminal.

**STACK BOND.** The placement of masonry units in a bond pattern is such that head joints in successive courses are vertically aligned. For the purpose of this code, requirements for stack bond shall apply to all masonry laid in other than running bond.

**STACK VENT.** The extension of soil or waste stack above the highest horizontal drain connected.

**STACK VENTING.** A method of venting a fixture or fixtures through the soil or waste stack without individual fixture vents.

**STANDARD PLANS.** Plans authorized by the Development Services Department to be used in construction on a repetitive basis. Standard plans may include options allowing variations to the building design that may alter the interior and exterior appearance.

**STANDARD TRUSS.** Any construction that does not permit the roof/ceiling insulation to achieve the required *R*-value over the exterior walls.

**STATIONARY FUEL CELL POWER PLANT.** A self-contained package or factory-matched packages which constitute an automatically-operated assembly of integrated systems for generating useful electrical energy and recoverable thermal energy that is permanently connected and fixed in place.

**STORM SEWER, DRAIN.** A pipe used for conveying rainwater, surface water, subsurface water and similar liquid waste.

**STORY.** That portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above.

**STORY ABOVE GRADE.** Any story having its finished floor surface entirely above grade, except that a basement shall be considered as a story above grade where the finished surface of the floor above the basement is:

1. More than 6 feet (1829 mm) above grade plane.
2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter.

3. More than 12 feet (3658 mm) above the finished ground level at any point.

**STRUCTURAL INSULATED PANELS (SIPS).** Factory fabricated panels of solid core insulation with structural skins of oriented strand board (OSB) or plywood.

**STRUCTURE.** That which is built or constructed.

**SUMP.** A tank or pit that receives sewage or waste, located below the normal grade of the gravity system and that must be emptied by mechanical means.

**SUMP PUMP.** A pump installed to empty a sump. These pumps are used for removing storm water only. The pump is selected for the specific head and volume of the load and is usually operated by level controllers.

**SUNROOM.** A one-story structure attached to a dwelling with a glazing area in excess of 40 percent of the gross area of the structure's exterior walls and roof.

**SUPPLY AIR.** Air delivered to a conditioned space through ducts or plenums from the heat exchanger of a heating, cooling or ventilating system.

**SUPPORTS.** Devices for supporting, hanging and securing pipes, fixtures and equipment.

**SWEEP.** A drainage fitting designed to provide a change in direction of a drain pipe of less than the angle specified by the amount necessary to establish the desired slope of the line. Sweeps provide a longer turning radius than bends and a less turbulent flow pattern (see "Bend" and "Elbow").

**TEMPERATURE- AND PRESSURE-RELIEF (T AND P) VALVE.** A combination relief valve designed to function as both a temperature-relief and pressure-relief valve.

**TEMPERATURE-RELIEF VALVE.** A temperature-actuated valve designed to discharge automatically at the temperature at which it is set.

**THERMAL ISOLATION.** Physical and space conditioning separation from conditioned space(s). The conditioned space(s) shall be controlled as separate zones for heating and cooling or conditioned by separate equipment.

**THERMAL RESISTANCE, R-VALUE.** The inverse of the time rate of heat flow through a body from one of its bounding surfaces to the other for a unit temperature difference between the two surfaces, under steady state conditions, per unit area ( $\text{h} \cdot \text{ft}^2 \cdot ^\circ\text{F}/\text{Btu}$ ).

**THERMAL TRANSMITTANCE, U-FACTOR.** The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ( $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$ ).

**TOWNHOUSE.** A single-family dwelling unit constructed in a group of three or more attached units in which each unit extends from foundation to roof and with open space on at least two sides.

**TRAP.** A fitting, either separate or built into a fixture, that provides a liquid seal to prevent the emission of sewer gases without materially affecting the flow of sewage or waste water through it.

## DEFINITIONS

**TRAP ARM.** That portion of a fixture drain between a trap weir and the vent fitting.

**TRAP PRIMER.** A device or system of piping to maintain a water seal in a trap, typically installed where infrequent use of the trap would result in evaporation of the trap seal, such as floor drains.

**TRAP SEAL.** The trap seal is the maximum vertical depth of liquid that a trap will retain, measured between the crown weir and the top of the dip of the trap.

**TRIM.** Picture molds, chair rails, baseboards, handrails, door and window frames, and similar decorative or protective materials used in fixed applications.

**TRUSS DESIGN DRAWING.** The graphic depiction of an individual truss, which describes the design and physical characteristics of the truss.

**TYPE L VENT.** A listed and labeled vent conforming to UL 641 for venting oil-burning appliances listed for use with Type L vents or with gas appliances listed for use with Type B vents.

**U-FACTOR, THERMAL TRANSMITTANCE.** The coefficient of heat transmission (air to air) through a building envelope component or assembly, equal to the time rate of heat flow per unit area and unit temperature difference between the warm side and cold side air films ( $\text{Btu/h} \cdot \text{ft}^2 \cdot ^\circ\text{F}$ ).

**UNCONFINED SPACE.** A space having a volume not less than 50 cubic feet per 1,000 Btu/h ( $4.8 \text{ m}^3/\text{kW}$ ) of the aggregate input rating of all appliances installed in that space. Rooms communicating directly with the space in which the appliances are installed, through openings not furnished with doors, are considered a part of the unconfined space.

**UNDERLAYMENT.** One or more layers of felt, sheathing paper, nonbituminous saturated felt, or other approved material over which a roof covering, with a slope of 2 to 12 (17-percent slope) or greater, is applied.

**UNUSUALLY TIGHT CONSTRUCTION.** Construction in which:

1. Walls and ceilings comprising the building thermal envelope have a continuous water vapor retarder with a rating of 1 perm ( $5.7 \cdot 10^{-11} \text{ kg/Pa} \cdot \text{s} \cdot \text{m}^2$ ) or less with openings therein gasketed or sealed.
2. Storm windows or weatherstripping is applied around the threshold and jambs of opaque doors and openable windows.
3. Caulking or sealants are applied to areas such as joints around window and door frames between sole plates and floors, between wall-ceiling joints, between wall panels, at penetrations for plumbing, electrical and gas lines, and at other openings.

**VACUUM BREAKERS.** A device which prevents backsiphonage of water by admitting atmospheric pressure through ports to the discharge side of the device.

**VAPOR PERMEABLE MEMBRANE.** A material or covering having a permeance rating of 5 perms ( $2.9 \cdot 10^{-10} \text{ kg/Pa} \cdot \text{s} \cdot \text{m}^2$ ) or greater, when tested in accordance with the desiccant

method using Procedure A of ASTM E 96. A vapor permeable material permits the passage of moisture vapor.

**VAPOR RETARDER.** A vapor resistant material, membrane or covering such as foil, plastic sheeting, or insulation facing having a permeance rating of 1 perm ( $5.7 \cdot 10^{-11} \text{ kg/Pa} \cdot \text{s} \cdot \text{m}^2$ ) or less, when tested in accordance with the desiccant method using Procedure A of ASTM E 96. Vapor retarders limit the amount of moisture vapor that passes through a material or wall assembly.

**VEHICULAR ACCESS DOOR.** A door that is used primarily for vehicular traffic at entrances of buildings such as garages and parking lots, and that is not generally used for pedestrian traffic.

**VENT.** A passageway for conveying flue gases from fuel-fired appliances, or their vent connectors, to the outside atmosphere.

**VENT COLLAR.** See "Flue collar."

**VENT CONNECTOR.** That portion of a venting system which connects the flue collar or draft hood of an appliance to a vent.

**VENT DAMPER DEVICE, AUTOMATIC.** A device intended for installation in the venting system, in the outlet of an individual, automatically operated fuel burning appliance and that is designed to open the venting system automatically when the appliance is in operation and to close off the venting system automatically when the appliance is in a standby or shutdown condition.

**VENT GASES.** Products of combustion from fuel-burning appliances, plus excess air and dilution air, in the venting system above the draft hood or draft regulator.

**VENT STACK.** A vertical vent pipe installed to provide circulation of air to and from the drainage system and which extends through one or more stories.

**VENT SYSTEM.** Piping installed to equalize pneumatic pressure in a drainage system to prevent trap seal loss or blow-back due to siphonage or back pressure.

**VENTILATION.** The natural or mechanical process of supplying conditioned or unconditioned air to, or removing such air from, any space.

**VENTING.** Removal of combustion products to the outdoors.

**VENTING SYSTEM.** A continuous open passageway from the flue collar of an appliance to the outside atmosphere for the purpose of removing flue or vent gases. A venting system is usually composed of a vent or a chimney and vent connector, if used, assembled to form the open passageway.

**VERTICAL PIPE.** Any pipe or fitting that makes an angle of 45 degrees ( $0.79 \text{ rad}$ ) or more with the horizontal.

**VINYL SIDING.** A shaped material, made principally from rigid polyvinyl chloride (PVC), that is used to cover exterior walls of buildings.

**WALL, RETAINING.** A wall not laterally supported at the top, that resists lateral soil load and other imposed loads.

**WALLS.** Walls shall be defined as follows:

**Load-bearing wall** is a wall supporting any vertical load in addition to its own weight.

**Nonbearing wall** is a wall which does not support vertical loads other than its own weight.

**WASTE.** Liquid-borne waste that is free of fecal matter.

**WASTE PIPE OR STACK.** Piping that conveys only liquid sewage not containing fecal material.

**WATER-DISTRIBUTION SYSTEM.** Piping which conveys water from the service to the plumbing fixtures, appliances, appurtenances, equipment, devices or other systems served, including fittings and control valves.

**WATER HEATER.** Any heating appliance or equipment that heats potable water and supplies such water to the potable hot water distribution system.

**WATER MAIN.** A water-supply pipe for public use.

**WATER OUTLET.** A valved discharge opening, including a hose bibb, through which water is removed from the potable water system supplying water to a plumbing fixture or plumbing appliance that requires either an air gap or backflow prevention device for protection of the supply system.

**WATER-RESISTIVE BARRIER.** A material behind an exterior wall covering that is intended to resist liquid water that has penetrated behind the exterior covering from further intruding into the exterior wall assembly.

**WATER-SERVICE PIPE.** The outside pipe from the water main or other source of potable water supply to the water-distribution system inside the building, terminating at the service valve.

**WATER-SUPPLY SYSTEM.** The water-service pipe, the water-distributing pipes and the necessary connecting pipes, fittings, control valves and all appurtenances in or adjacent to the building or premises.

**WET VENT.** A vent that also receives the discharge of wastes from other fixtures.

**WIND BORNE DEBRIS REGION.** Areas within hurricane-prone regions within one mile of the coastal mean high water line where the basic wind speed is 110 miles per hour (49 m/s) or greater; or where the basic wind speed is equal to or greater than 120 miles per hour (54 m/s); or Hawaii.

**WINDER.** A tread with non-parallel edges.

**WOOD STRUCTURAL PANEL.** A panel manufactured from veneers; or wood strands or wafers; bonded together with waterproof synthetic resins or other suitable bonding systems. Examples of wood structural panels are plywood, OSB or composite panels.

**YARD.** An open space, other than a court, unobstructed from the ground to the sky, except where specifically provided by this code, on the lot on which a building is situated.

