

## CHAPTER 2

# DEFINITIONS

### SECTION 201 GENERAL

**201.1 Scope.** Unless stated otherwise, the following words and terms in this code shall have the meanings indicated in this chapter.

**201.2 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 includes the singular.

**201.3 Terms defined in other codes.** Terms that are not defined in this code but are defined in the *Florida Building Code, Building, Florida Building Code, Fuel Gas Code, Florida Building Code, Mechanical, Florida Building Code, Plumbing* or the *Florida Building Code, Residential* shall have the meanings ascribed to them in those codes.

**201.4 Terms not defined.** Terms not defined by this chapter shall have the meanings stated in *ANSI/ASHRAE/IESNA Standard 90.1*, in codes referenced from Section 201.3, in Webster's Ninth *New Collegiate Dictionary*, as revised, or in ordinarily accepted meanings such as the context implies.

### SECTION 202 GENERAL DEFINITIONS

**ABOVE-GRADE WALL.** A wall more than 50 percent above grade and enclosing *conditioned space*. This includes between-floor spandrels, peripheral edges of floors, roof and basement knee walls, dormer walls, gable end walls, walls enclosing a mansard roof and skylight shafts.

**ABSORPTANCE.** The ratio of the total absorbed radiation to the total incident radiation; equal to 1 (unity) minus the transmittance.

**ACCESSIBLE.** Admitting close approach as a result of not being guarded by locked doors, elevation or other effective means (see "Readily accessible").

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

**ADJACENT WALL, CEILING or FLOOR.** A wall, ceiling or floor of a structure that separates *conditioned space* from enclosed but unconditioned space, such as an unconditioned attached garage, storage or utility room.

**AEROSOL SEALANT.** A closure product for duct and plenum systems, which is delivered internally to leak sites as aerosol particles using a pressurized air stream.

**AIR BARRIER.** Relating to air distribution systems, a material object(s) which impedes or restricts the free movement of air under specified conditions. For fibrous glass duct, the air barrier is its foil cladding; for flexible non-metal duct, the air barrier is the non-porous core; and for sheet metal duct and air handling units, the air barrier is the metal in contact with the air

stream. For mechanical closets, the air barrier may be a uniform panelized material such as gypsum wall board which meets ASTM C 36, or it may be a membrane which alone acts as an air barrier which is attached to a panel, such as the foil cladding of fibrous glass duct board.

Relating to the building envelope, air barriers comprise the planes of primary resistance to air flow between the interior spaces of a building and the outdoors and the planes of primary air flow resistance between adjacent air zones of a building, including planes between adjacent conditioned and unconditioned air spaces of a building. To be classed as an air barrier, a building plane must be substantially leak free; that is, it shall have an air leakage rate not greater than 0.5 cfm/ft<sup>2</sup> when subjected to an air pressure gradient of 25 pascal. In general, air barriers are made of durable, non-porous materials and are sealed to adjoining wall, ceiling or floor surfaces with a suitable long-life mastic. House wraps and taped and sealed dry-wall may constitute an air barrier but dropped acoustical tile ceilings (T-bar ceilings) may not. Batt insulation facings and asphalt-impregnated fiberboard and felt paper are not considered air barriers.

**AIR CONDITIONING.** The treatment of air so as to control simultaneously the temperature, humidity, cleanness and distribution of the air to meet the requirements of a conditioned space.

**AIR DISTRIBUTION SYSTEM.** Any system of ducts, plenums and air-handling *equipment* that circulates air within a space or spaces and includes systems made up of one or more air-handling units.

**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.

**ANNUAL FUEL UTILIZATION EFFICIENCY (AFUE).** Efficiency descriptor of the ratio of annual output energy to annual input energy as developed in accordance with the requirements of U.S. Department of Energy (DOE) 10 CFR Part 430.

**APPROVED.** Approval by the *code official* as a result of investigation and tests conducted by him or her, or by reason of accepted principles or tests by nationally recognized organizations.

**ASTRONOMICAL TIME SWITCH.** A device that turns the lighting on at a time relative to sunset and off at a time relative to sunrise, accounting for geographic location and day of year.

**ATTIC.** An enclosed unconditioned space located immediately below an uninsulated roof and immediately above the ceiling of a building.

**AUTOMATIC.** Self-acting, operating by its own mechanism when actuated by some impersonal influence, as, for example,

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a change in current strength, pressure, temperature or mechanical configuration (see “Manual”).

**BASEMENT WALL.** A wall 50 percent or more below grade and enclosing *conditioned space*.

**BEDROOM.** Any residential room which has an area of 70 square feet or more and a clothes storage closet, and is not part of the common living area. For the purposes of this Code, the number of “main” bedrooms for homes of three bedrooms or more is the total number of bedrooms less one. In one and two bedroom homes, all bedrooms are “main” bedrooms.

**BELOW-GRADE WALLS.** Below-grade walls are basement or first-story walls associated with the exterior of the building that are at least 85 percent below grade.

**BTU (British Thermal Unit).** The standard unit for measuring heat energy, such as the heat content of fuel. It is the amount of heat energy necessary to raise the temperature of one pound of water one degree Fahrenheit. 1 BTU per minute = 17.6 watts.

**BUILDING.** Any structure used or intended for supporting or sheltering any use or occupancy. For each purpose of this Code each portion of a building separated from other portions by a firewall shall be considered as a separate building. The term “building” shall be construed as if followed by the words “or part thereof.”

**BUILDING THERMAL ENVELOPE.** The basement walls, exterior walls, floor, roof, and any other building element that enclose *conditioned space*. This boundary also includes the boundary between *conditioned space* and any exempt or unconditioned space. See “Adjacent wall, ceiling or floor.”

**C-FACTOR (THERMAL CONDUCTANCE).** The coefficient of heat transmission (surface to surface) through a building component or assembly, equal to the time rate of heat flow per unit area and the unit temperature difference between the warm side and cold side surfaces ( $\text{Btu/h ft}^2 \times ^\circ\text{F}$ ) [ $\text{W}/(\text{m}^2 \times \text{K})$ ].

**CIRCULATING SYSTEM.** A domestic or service hot water distribution system that includes a closed circulation circuit designed to maintain usage temperatures in hot water pipes near terminal devices (e.g., lavatory faucets, shower heads) in order to reduce the time required to obtain hot water when the terminal device valve is opened. The motive force for circulation is either natural (due to water density variations with temperature) or mechanical (circulation pump).

**CODE OFFICIAL.** The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

**COEFFICIENT OF PERFORMANCE (COP) – COOLING.** The ratio of the rate of heat removal to the rate of energy input, in consistent units, for a complete refrigerating system or some specific portion of that system under designated operating conditions.

**COEFFICIENT OF PERFORMANCE (COP) - (HEAT PUMP)–HEATING.** Heating: the ratio of the rate of heat delivered to the rate of energy input, in consistent units, for a complete heat pump system, including the compressor and, if applicable, auxiliary heat, under designated operating conditions.

**COMBUSTION APPLIANCE, DIRECT VENT.** A system consisting of: (1) an appliance for indoor installation; (2) combustion air connections between the appliance and the outdoor atmosphere; (3) flue gas connections between the appliance and the vent cap; and, (4) vent cap for installation outdoors, supplied by the manufacturer and constructed so that all air for combustion is obtained from the outdoor atmosphere and all flue gases are discharged to the outdoor atmosphere.

**COMMERCIAL BUILDING.** For this code, all buildings that are not included in the definition of “Residential buildings.”

**COMMON WALL, CEILING or FLOOR.** The assembly separating conditioned tenancies, one from the other.

**CONDITIONED FLOOR AREA.** The horizontal projection of that portion of space which is conditioned directly or indirectly by an energy-using system.

**CONDITIONED SPACE.** An area or room within a building being heated or cooled, containing uninsulated ducts, or with a fixed opening directly into an adjacent *conditioned space*. See “Space.”

**CONTINUOUS INSULATION (cont. ins. or ci).** Insulation that is continuous across all structural members without thermal bridges other than fasteners and service openings. It is installed on the interior, exterior, or is integral to any opaque surface of the building envelope.

**CONTROL.** To regulate the operation of equipment.

**CONTROL DEVICE.** A specialized device used to regulate the operation of equipment.

**CRAWL SPACE WALL.** The opaque portion of a wall that encloses a crawl space and is partially or totally below grade.

**CURTAIN WALL.** Fenestration products used to create an external nonload-bearing wall that is designed to separate the exterior and interior environments.

### DAYLIGHT ZONE.

- 1. Under skylights.** The area under skylights whose horizontal dimension, in each direction, is equal to the skylight dimension in that direction plus either the floor-to-ceiling height or the dimension to a ceiling height opaque partition, or one-half the distance to adjacent skylights or vertical fenestration, whichever is least.
- 2. Adjacent to vertical fenestration.** The area adjacent to vertical fenestration which receives daylight through the fenestration. For purposes of this definition and unless more detailed analysis is provided, the daylight *zone* depth is assumed to extend into the space a distance of 15 feet (4572 mm) or to the nearest ceiling height opaque partition, whichever is less. The daylight *zone* width is assumed to be the width of the window plus 2 feet (610 mm) on each side, or the window width plus the distance to an opaque partition, or the window width plus one-half the distance to adjacent skylight or vertical fenestration, whichever is least.

**DEMAND CONTROL VENTILATION (DCV).** A ventilation system capability that provides for the automatic reduction of outdoor air intake below design rates when the actual occu-

pancy of spaces served by the system is less than design occupancy.

**DESIGN ENERGY COST.** The annual energy cost calculated for a proposed design.

**DESIGN PROFESSIONAL.** An architect or engineer licensed to practice in accordance with applicable state licensing laws.

**DUCT.** A tube or conduit utilized for conveying air. The air passages of self-contained systems are not to be construed as air ducts.

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

**DUCTS IN CONDITIONED SPACE.** For ductwork to qualify as being in conditioned space, it shall be located interior to both the thermal envelope and the pressure envelope of the building. These spaces shall not require supply or return outlets.

**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.

**ECONOMIZER, AIR.** A duct and damper arrangement and automatic control system that allows a cooling system to supply outside air to reduce or eliminate the need for mechanical cooling during mild or cold weather.

**ECONOMIZER, WATER.** A system where the supply air of a cooling system is cooled indirectly with water that is itself cooled by heat or mass transfer to the environment without the use of mechanical cooling.

**EFFECTIVE AIR SPACE EMITTANCE.** The radiation heat transfer property  $E$  of an air space determined by the emissivity of the surfaces bounding that air space. (See the 2005 ASHRAE *Handbook of Fundamentals*, Chapter 38, Table 3.)

**EFFICACY (of a lamp).** The ratio of the total luminous output of a lamp to the total power input to the lamp. Typically expressed in lumens per watt.

**EFFICIENCY.** Performance at specified rating conditions.

**EMISSIVITY.** The ratio of the total radiant flux emitted by a body to that emitted by an ideal black body at the same temperature.

**EMITTANCE.** The ratio of the radiant heat flux emitted by a specimen to that emitted by a blackbody at the same temperature and under the same conditions.

**ENERGY.** The capacity for doing work. It takes a number of forms that may be transformed from one into another such as thermal (heat), mechanical (work), electrical, and chemical. Customary measurement units are British thermal units (Btu).

**ENERGY ANALYSIS.** A method for estimating the annual energy use of the *proposed design* and *standard reference design* based on estimates of energy use.

**ENERGY COST.** The total estimated annual cost for purchased energy for the building functions regulated by this code, including applicable demand charges.

**ENERGY COST BUDGET.** The annual energy cost for the budget building.

**ENERGY EFFICIENCY RATIO (EER).** The ratio of net cooling capacity in Btu/h to total rate of electric input in watts under designated operating conditions.

**ENERGY FACTOR (EF).** A measure of water heater overall efficiency.

**ENERGY MANAGEMENT SYSTEM.** A control system designed to monitor the environment and the use of energy in a facility and to adjust the parameters of local control loops to conserve energy while maintaining a suitable environment.

**ENERGY PERFORMANCE LEVEL.** An indicator of the energy-related performance of a building, including, but not limited to, the levels of insulation, the amount and type of glass, and the HVAC and water heating system efficiencies.

**ENERGY RECOVERY VENTILATION SYSTEM.** Systems that employ air-to-air heat exchangers to recover energy from exhaust air for the purpose of preheating, precooling, humidifying or dehumidifying outdoor ventilation air prior to supplying the air to a space, either directly or as part of an HVAC system.

**ENERGY SIMULATION TOOL.** An *approved* software program or calculation-based methodology that projects the annual energy use of a building.

**ENTRANCE DOOR.** Fenestration products used for ingress, egress and access in nonresidential buildings, including, but not limited to, exterior entrances that utilize latching hardware and automatic closers and contain over 50-percent glass specifically designed to withstand heavy use and possibly abuse.

**EQUIPMENT.** Devices for comfort conditioning, electric power, lighting, transportation, or service water heating including, but not limited to, furnaces, boilers, air conditioners, heat pumps, chillers, water heaters, lamps, luminaires, ballasts, elevators, escalators, or other devices or installations.

**EXISTING BUILDING.** A building or portion thereof that was previously occupied or approved for occupancy by the authority having jurisdiction.

**EXISTING EQUIPMENT.** Equipment previously installed in an existing building.

**EXISTING SYSTEM.** A system or systems previously installed in an existing building.

**EXTERIOR WALL.** Walls including both above-grade walls and basement walls which form a boundary between a conditioned and an outdoor space.

**FAN BRAKE HORSEPOWER (BHP).** The horsepower delivered to the fan's shaft. Brake horsepower does not include the mechanical drive losses (belts, gears, etc.).

**FAN SYSTEM BHP.** The sum of the fan brake horsepower of all fans that are required to operate at fan system design conditions to supply air from the heating or cooling source to the

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*conditioned space(s)* and return it to the source or exhaust it to the outdoors.

**FAN SYSTEM DESIGN CONDITIONS.** Operating conditions that can be expected to occur during normal system operation that result in the highest supply fan airflow rate to conditioned spaces served by the system.

**FAN SYSTEM MOTOR NAMEPLATE HP.** The sum of the motor nameplate horsepower of all fans that are required to operate at design conditions to supply air from the heating or cooling source to the *conditioned space(s)* and return it to the source or exhaust it to the outdoors.

**FENESTRATION.** Skylights, roof windows, vertical windows (fixed or moveable), opaque doors, glazed doors, glazed block and combination opaque/glazed doors. Fenestration includes products with glass and nonglass glazing materials.

**FENESTRATION AREA.** Total area of the fenestration measured using the rough opening and including the glazing, sash, and frame. For doors where the glazed vision area is less than 50% of the door area, the fenestration area is the glazed vision area. For all other doors, the fenestration area is the door area.

**FENESTRATION, VERTICAL.** All fenestrations other than skylights.

**F-FACTOR.** The perimeter heat loss factor for slab-on-grade floors ( $\text{Btu/h} \times \text{ft} \times ^\circ\text{F}$ ) [ $\text{W}/(\text{m} \times \text{K})$ ].

**FIREWALL.** Fire resistant wall, having protective openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall.

**FIXTURE.** The component of a luminaire that houses the lamp or lamps, positions the lamp, shields it from view, and distributes the light. The fixture also provides for connection to the power supply, which may require the use of a ballast.

**FLOOR, ENVELOPE.** That lower portion of the building envelope, including opaque area and fenestration, that has conditioned or semiheated space above and is horizontal or tilted at an angle of less than 60 degrees from horizontal but excluding slab-on-grade floors. For the purposes of determining building envelope requirements, the classifications are defined as follows:

1. mass floor: a floor with a heat capacity that exceeds (1) 7  $\text{Btu}/\text{ft}^2 \cdot ^\circ\text{F}$  or (2) 5  $\text{Btu}/\text{ft}^2 \cdot ^\circ\text{F}$  provided that the floor has a material unit mass not greater than 120  $\text{lb}/\text{ft}^3$ .
2. steel joist floor: a floor that (1) is not a mass floor and (2) that has steel joist members supported by structural members.
3. wood framed and other floors: all other floor types, including wood joist floors.

(See “Building envelope,” “Fenestration,” “Opaque area,” and “Slab-on-grade floor.”)

**FLOOR AREA, GROSS.** The sum of the floor areas of the spaces within the building including basements, mezzanine and intermediate-floored tiers, and penthouses with headroom height of 7.5 ft or greater. It is measured from the exterior faces of exterior walls or from the centerline of walls separating

buildings, but excluding covered walkways, open roofed-over areas, porches and similar spaces, pipe trenches, exterior terraces or steps, chimneys, roof overhangs, and similar features.

1. Gross building envelope floor area: the gross floor area of the building envelope, but excluding slab-on-grade floors.
2. Gross conditioned floor area: the gross floor area of conditioned spaces.
3. Gross lighted floor area: the gross floor area of lighted spaces.
4. Gross semiheated floor area: the gross floor area of semiheated spaces. (See “Building envelope,” “Floor,” “Slab-on-grade floor,” and “Space.”)

**FLUE DAMPER.** A device in the flue outlet or in the inlet of or upstream of the draft control device of an individual, automatically operated, fossil fuel-fired appliance that is designed to automatically open the flue outlet during appliance operation and to automatically close the flue outlet when the appliance is in a standby condition.

**FOSSIL FUEL.** Fuel derived from a hydrocarbon deposit such as petroleum, coal, or natural gas derived from living matter of a previous geologic time.

**FUEL.** A material that may be used to produce heat or generate power by combustion.

**GASKETING.** A compressible, resilient elastic packing, made of foam rubber or of a synthetic foam polymer. A gasket is distinct from the components being joined and must be capable of closing all air leakage pathways between the air barriers of the joint and of creating an air-tight seal.

**GLAZING.** Sunlight-transmitting fenestration, including the area of sash, curbing or other framing elements, that enclose conditioned space. Glazing includes the area of sunlight-transmitting fenestration assemblies in walls bounding conditioned basements.

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

**GROSS AREA: FLOOR, LIGHTED, ROOF, WALL.** See “Floor,” “Glazing,” “Lighting,” “Roof,” and “Wall.”

**HEAT.** The form of energy that is transferred by virtue of a temperature difference or a change in the state of a material.

**HEAT CAPACITY (HC).** The amount of heat necessary to raise the temperature of a given mass 1 $^\circ\text{F}$ . Numerically, the sum of the products of the mass per unit area of each individual material in the roof, wall, or floor surface multiplied by its individual specific heat ( $\text{Btu}/\text{ft}^2 \cdot ^\circ\text{F}$ ).

**HEAT PUMP.** A mechanical refrigeration-cycle system which has been designed to accomplish space heating, water heating or both and, when the evaporator and condenser effects are reversed, may be used for space air conditioning or water chilling.

**HEAT TRAP.** An arrangement of piping and fittings, such as elbows, or a commercially available heat trap that prevents thermosiphoning of hot water during standby periods.

**HEATED BUILDING.** Any building with heating equipment installed at the time of construction, or designed for the future installation of heating equipment, using electricity or fossil fuels.

**HEATED SLAB.** Slab-on-grade construction in which the heating elements, hydronic tubing, or hot air distribution system is in contact with, or placed within or under, the slab.

**HEATING SEASONAL PERFORMANCE FACTOR (HSPF).** The total heating output of a heat pump during its normal annual usage period for heating (in Btu) divided by the total electric energy input during the same period.

**HIGH-EFFICACY LAMPS.** Compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy of:

1. 60 lumens per watt for lamps over 40 watts,
2. 50 lumens per watt for lamps over 15 watts to 40 watts, and
3. 40 lumens per watt for lamps 15 watts or less.

**HISTORIC.** A building or space that has been specifically designated as historically significant by the adopting authority, or is listed in “The National Register of Historic Places,” or has been determined to be eligible for listing by the U.S. Secretary of the Interior.

**HOME INSULATION.** Any material, mainly insulation, used to retard the flow of heat through the building envelope that is tested and labeled with an installed *R*-value as required by the Federal Trade Commission rules, 16 *U.S. Code of Federal Regulations* (CFR) Part 460.

**HORSEPOWER (HP).** Unit of power; work done at a rate equal to 745.7 Watts, 550 foot lb. per second, or 33,000 foot lb. per minute.

**HUMIDISTAT.** A regulatory device, actuated by changes in humidity, used for automatic control of relative humidity.

**HVAC.** Heating, ventilating and air conditioning.

**HVAC SYSTEM.** The equipment, distribution systems, and terminals that provide, either collectively or individually, the processes of heating, ventilating, or air conditioning to a building or portion of a building.

**INDIRECTLY CONDITIONED SPACE.** See “Space.”

**INDOOR.** Within the conditioned building envelope.

**INFILTRATION.** The uncontrolled inward air leakage through cracks and crevices in any building element and around windows and doors of a building caused by pressure differences across these elements due to factors such as wind, inside and outside temperature differences (stack effect), and imbalance between supply and exhaust air systems.

**INSULATING SHEATHING.** An insulating board with a core material having a minimum *R*-value of R-2.

**INSULATION.** Material mainly used to retard the flow of heat. See “Home insulation.”

**INTEGRATED ENERGY EFFICIENCY RATIO (IEER).** A single-number figure of merit expressing cooling part-load EER efficiency for commercial unitary air-conditioning and

heat pump equipment on the basis of weighted operation at various load capacities for the equipment.

**INTEGRATED PART-LOAD VALUE (IPLV).** A single-number figure of merit based on part-load EER, COP, or kW/ton expressing part-load efficiency for air-conditioning and heat pump equipment on the basis of weighted operation at various load capacities for the equipment.

**INTERIOR LIGHTING POWER.** The power in watts of all permanently installed general, task, and furniture lighting systems and luminaires.

**KILOWATT (kW).** The basic unit of electric power, equal to 1,000 Watts.

**KNEE WALLS.** Vertical walls which separate conditioned space from the attic.

**LABELED.** Equipment, materials or products to which have been affixed a label, seal, symbol or other identifying mark of a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation that maintains periodic inspection of the production of the above-labeled items and whose labeling indicates either that the equipment, material or product meets identified standards or has been tested and found suitable for a specified purpose.

**LIGHTING, DECORATIVE.** Lighting that is purely ornamental and installed for aesthetic effect. Decorative lighting shall not include general lighting.

**LIGHTING, GENERAL.** Lighting that provides a substantially uniform level of illumination throughout an area. General lighting shall not include decorative lighting or lighting that provides a dissimilar level of illumination to serve a specialized application or feature within such area.

**LIGHTING, TASK.** Lighting designed to provide illumination over a relatively small task area without providing significant general surrounding lighting.

**LIGHTING POWER DENSITY (LPD).** The maximum lighting power per unit area of a building classification of space function.

**LIGHTING SYSTEM.** A group of luminaires circuited or controlled to perform a specific function.

**LISTED.** Equipment, materials, products or services included in a list published by an organization acceptable to the *code official* and concerned with evaluation of products or services that maintains periodic inspection of production of *listed* equipment or materials or periodic evaluation of services and whose listing states either that the equipment, material, product or service meets identified standards or has been tested and found suitable for a specified purpose.

**LOW-RISE RESIDENTIAL.** Single-family houses, multi-family structures of three stories or fewer above grade, manufactured houses (mobile homes), and manufactured houses (modular).

**LOW-VOLTAGE LIGHTING.** Lighting equipment powered through a transformer such as a cable conductor, a rail conductor and track lighting.

**LUMINAIRE.** A complete lighting unit consisting of a lamp or lamps together with the housing designed to distribute the

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light, position and protect the lamps, and connect the lamps to the power supply.

**MANUAL.** Capable of being operated by personal intervention (see “Automatic”).

**MANUFACTURER.** The company engaged in the original production and assembly of products or equipment or a company that purchases such products and equipment manufactured in accordance with company specifications.

**MASS FLOOR.** Floors weighing at least (1) 35 pounds per square foot (170 kg/m<sup>2</sup>) of floor surface area or (2) 25 pounds per square foot (120 kg/m<sup>2</sup>) of floor surface area if the material weight is not more than 120 pounds per cubic foot (1900 kg/m<sup>3</sup>). See “Floor.”

**MASS WALL.** Walls weighing at least (1) 35 pounds per square foot (170 kg/m<sup>2</sup>) of wall surface area or (2) 25 pounds per square foot (120 kg/m<sup>2</sup>) of wall surface area, if the material weight is not more than 120 pounds per cubic foot (1900 kg/m<sup>3</sup>). See “Wall.”

### MASS WALL INSULATION POSITION.

1. Exterior Insulation Position—a wall having all or nearly all of its mass exposed to the room air with the insulation on the exterior of that mass.
2. Integral Insulation Position—a wall having mass exposed to both room and outside air with substantially equal amounts of mass on the inside and outside of the insulation layer.
3. Interior Insulation Position—a wall not meeting either of the above definitions, particularly a wall having most of its mass external to an insulation layer.

**MECHANICAL CLOSET.** For the purposes of this code, a closet used as an air plenum which contains the blower unit or air handler of a central air conditioning or heating unit.

**MECHANICAL COOLING.** Reducing the temperature of a gas or liquid by using vapor compression, absorption, desiccant dehumidification combined with evaporative cooling, or another energy-driven thermodynamic cycle. Indirect or direct evaporative cooling alone is not considered mechanical cooling.

**MECHANICAL EQUIPMENT PLENUM CHAMBER.** In an air distribution system, that part of the casing, or an air chamber furnace, to or from which the air duct system delivers conditioned air.

**MECHANICAL HEATING.** Raising the temperature of a gas or liquid by use of fossil fuel burners, electric resistance heaters, heat pumps, or other systems that require energy to operate.

**MECHANICAL VENTILATION.** The process of supplying or removing air by mechanical means to or from any space.

**METAL BUILDING.** A complete integrated set of mutually dependent components and assemblies that form a building, which consists of a steel-framed superstructure and metal skin.

**MULTIPLE FAMILY RESIDENCE.** Any residential dwelling unit that is attached to another such unit by a common wall,

ceiling or floor such as a duplex, townhouse, condominium or similar unit, regardless of ownership.

**MULTI-SCENE CONTROL.** A lighting control device or system that allows for two or more pre-defined lighting settings, in addition to all off, for two or more groups of luminaires to suit multiple activities in the space, and allows the automatic recall of those settings.

**MULTI-ZONE SYSTEM(S).** One or more HVAC system(s) designed to supply conditioned air to more than one independently serviced area of a building. Each zone must have separate thermostats and be separated by walls or closable doors not exceeding forty square feet between zones.

**NAMEPLATE HORSEPOWER.** The nominal motor horsepower rating stamped on the motor nameplate.

**NON-DEPLETABLE ENERGY SOURCES.** Sources of energy derived from incoming solar radiation, including photo-synthetic processes, wind, waves, and tides, lake or pond thermal differences and energy derived from the internal heat of the earth, including nocturnal thermal exchanges.

**NONRENEWABLE ENERGY.** Energy derived from a fossil fuel source.

**NONRESIDENTIAL.** All occupancies other than residential. See “Residential.”

**NON-STANDARD PART LOAD VALUE (NPLV).** A single number part-load efficiency figure of merit calculated and referenced to conditions other than IPLV conditions, for units that are not designed to operate at AHRI Standard Rating Conditions.

**NORMATIVE.** Made an integral part of a standard or code.

**OCCUPANCY.** The purpose for which a building, or part thereof, is used or intended to be used. For the purposes of determining changes of occupancy for this Code, the occupancy shall be considered the major occupancy group designations established by Chapter 3 of the *Florida Building Code, Building*.

**OCCUPANT SENSOR.** A device that detects the presence or absence of people within an area and causes lighting, equipment, or appliances to be regulated accordingly.

**OPAQUE.** All areas in the building envelope, except fenestration and building service openings such as vents and grilles. (See “Building thermal envelope” and “Fenestration.”)

**OPERABLE APERTURE AREAS.** Areas of windows, sliding glass doors and screened entry doors that provide access to incoming breezes in their fully extended open position.

**OPTIMUM START CONTROLS.** Controls that are designed to automatically adjust the start time of an HVAC system each day with the intention of bringing the space to desired occupied temperature levels immediately before scheduled occupancy.

**ORIENTATION.** The direction an envelope element faces, i.e., the direction of a vector perpendicular to and pointing away from the surface outside of the element.

**OUTDOOR.** The environment exterior to the building structure.

**OUTDOOR (OUTSIDE) AIR.** Air that is outside the building envelope or is taken from outside the building that has not been previously circulated through the building.

**OUTSIDE.** The environment exterior to the conditioned space of the building and may include attics, garages, crawlspaces, etc., but not return air plenums.

**OVERHANG SEPARATION.** The vertical measure of the distance from the top of a window frame to the bottom of an overhang.

**PACKAGED TERMINAL AIR CONDITIONER (PTAC).** A factory selected wall sleeve and separate unencased combination of heating and cooling components, assemblies, or sections. It may include heating capability by hot water, steam, or electricity and is intended for mounting through the wall to serve a single room or zone.

**PACKAGED TERMINAL HEAT PUMP (PTHP).** A PTAC capable of using the refrigerating system in a reverse cycle or heat pump mode to provide heat.

**PERMANENTLY INSTALLED.** Equipment that is fixed in place and is not portable or movable.

**PHOTOSENSOR.** A device that detects the presence of visible light, infrared transmission (IR) and/or ultraviolet (UV) energy.

**PLENUM.** A compartment or chamber to which one or more ducts are connected, that forms a part of the air distribution system, and that is not used for occupancy or storage. A plenum often is formed in part or in total by portions of the building.

**POOL.** Any structure, basin, or tank containing an artificial body of water for swimming, diving, or recreational bathing. The term includes, but is not limited to, swimming pool, whirlpool, spa, hot tub.

**POSITIVE INDOOR PRESSURE.** A positive pressure condition within a conditioned space caused by bringing in more outside air than the amount of air that is exhausted and/or lost through air leakage.

**PRESSURE ENVELOPE.** The primary air barrier of a building; that part of the envelope that provides the greatest resistance to air flow to or from the building.

**PRESSURE-SENSITIVE TAPE.** Tape used for sealing duct system components and air barriers which adheres when pressure is applied and is not heat activated.

**PRIMARY AIR SYSTEM.** The central air-moving heating and cooling equipment that serves multiple zones through mixing boxes, VAV boxes, or reheat coils.

**PRIMARY LIVING AREA.** A family room or great room, or a living room if no family room or great room is present. Formal living rooms, where a family room or great room is present, dining rooms and kitchens are not considered primary living areas.

**PROJECTION FACTOR (PF).** The ratio of the horizontal depth of the external shading projection divided by the sum of the height of the fenestration and the distance from the top of the fenestration to the bottom of the farthest point of the external shading projection, in consistent units.

**PROPOSED DESIGN.** A description or computer representation of the proposed building used to estimate annual energy use for determining compliance based on total building performance or design energy cost.

**RADIANT BARRIER SYSTEM (RBS).** A building construction consisting of a low emittance (normally 0.1 or less) surface (usually aluminum foil) bounded by an open air space. A RBS is used for the sole purpose of limiting heat transfer by radiation and is not specifically intended to reduce heat transfer by convection or conduction.

**RADIANT HEATING SYSTEM.** A heating system that transfers heat to objects and surfaces within the heated space primarily (greater than 50%) by infrared radiation.

**READILY ACCESSIBLE.** Capable of being reached quickly for operation, renewal or inspection without requiring those to whom ready access is requisite to climb over or remove obstacles or to resort to portable ladders or access equipment (see “Accessible”).

In public facilities, accessibility may be limited to certified personnel through locking covers or by placing equipment in locked rooms.

**RECOOLING.** Lowering the temperature of air that has been previously heated by a mechanical heating system.

**REFLECTANCE.** The ratio of the light reflected by a surface to the light incident upon it.

**REHEAT.** The application of sensible heat to supply air that has been previously cooled below the temperature of the conditioned space by either mechanical refrigeration or the introduction of outdoor air to provide space cooling.

**RENOVATION.** Any structural repair, reconstruction or restoration to a structure, the costs of which equals or exceeds, over a 1-year period, a cumulative total of 30 percent of the assessed value of the structure when that value is assessed, either:

1. Before the improvement or repair is started; or
2. Before the damage occurred, if the structure has been damaged.

For the purposes of this Code, renovation occurs when the first alteration of any wall, ceiling, floor, or other structural part or mechanical system of the building commences, whether or not that alteration affects the external dimensions of the structure.

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

**REPLACEMENT.** The installation of part or all of an existing mechanical or electrical system in an existing building.

**RESET.** Automatic adjustment of the controller set point to a higher or lower value.

**RESIDENTIAL.** Spaces in buildings used primarily for living and sleeping. Residential spaces include, but are not limited to, dwelling units, hotel/motel guest rooms, dormitories, nursing homes, patient rooms in hospitals, lodging houses, fraternity/sorority houses, hostels, prisons, and fire stations.

## DEFINITIONS

**RESIDENTIAL BUILDING.** For this code, includes R-3 buildings, as well as R-2 and R-4 buildings three stories or less in height above grade.

**RESISTANCE, ELECTRIC.** The property of an electric circuit or of any object used as part of an electric circuit that determines for a given circuit the rate at which electric energy is converted into heat or radiant energy and that has a value such that the product of the resistance and the square of the current gives the rate of conversion of energy.

**RETROFIT.** Modification of existing equipment or systems to incorporate improved performance of operation.

**ROOF.** The upper portion of the building envelope, including opaque areas and fenestration, that is horizontal or tilted at an angle of less than 60° from horizontal. For the purposes of determining building envelope requirements, the classifications are defined as follows:

1. Attic and other roofs: all other roofs, including roofs with insulation entirely below (inside of) the roof structure (i.e., attics, cathedral ceilings, and single-rafter ceilings), roofs with insulation both above and below the roof structure, and roofs without insulation but excluding metal building roofs.
2. Metal building roof: a roof that is constructed with (a) a metal, structural, weathering surface, (b) has no ventilated cavity, and (c) has the insulation entirely below deck (i.e., does not include composite concrete and metal deck construction nor a roof framing system that is separated from the superstructure by a wood substrate) and whose structure consists of one or more of the following configurations: (1) metal roofing in direct contact with the steel framing members or (2) insulation between the metal roofing and the steel framing members or (3) insulated metal roofing panels installed as described in (1) or (2).
3. Roof with insulation entirely above deck: a roof with all insulation (1) installed above (outside of) the roof structure and (2) continuous (i.e., uninterrupted by framing members).
4. Single-rafter roof: a subcategory of attic roofs where the roof above and the ceiling below are both attached to the same wood rafter and where insulation is located in the space between these wood rafters.

**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 covering, underlayment, roof deck, insulation, vapor retarder and interior finish.

**ROOM AIR CONDITIONER.** An encased assembly designed as a unit to be mounted in a window or through a wall, or as a console. It is designed primarily to provide direct delivery of conditioned air to an enclosed space, room, or zone. It includes a prime source of refrigeration for cooling and

dehumidification and a means for circulating and cleaning air. It may also include a means for ventilating and heating.

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

**SEASONAL ENERGY EFFICIENCY RATIO (SEER).** The total cooling output of an air conditioner during its normal annual usage period for cooling (in Btu) divided by the total electric energy input during the same period (in Wh).

**SCREW LAMP HOLDERS.** A lamp base that requires a screw-in-type lamp, such as a compact-fluorescent, incandescent, or tungsten-halogen bulb.

**SERVICE WATER HEATING.** Supply of hot water for purposes other than comfort heating.

**SETBACK.** Reduction of heating (by reducing the set point) or cooling (by increasing the set point) during hours when a building is unoccupied or during periods when lesser demand is acceptable.

**SETPOINT.** Point at which the desired temperature ( $^\circ\text{F}$ ) of the heated or cooled space is set.

**SHELL BUILDING.** A commercial building that is permitted prior to design completion or which will be finished in sections at a time after construction of the shell.

**SINGLE ASSEMBLY.** A roof and ceiling structure that is constructed as one unit with no attic space in between.

**SINGLE FAMILY RESIDENCE.** Detached residential building suited for tenancy by one family unit.

**SINGLE PACKAGE VERTICAL AIR CONDITIONER (SPVAC).** A type of air-cooled small or large commercial package air conditioning and heating equipment; factory assembled as a single package having its major components arranged vertically, which is an encased combination of cooling and optional heating components; is intended for exterior mounting on, adjacent interior to, or through an outside wall; and is powered by single or three-phase current. It may contain separate indoor grille(s), outdoor louvers, various ventilation options, indoor free air discharge, ductwork, wall plenum, or sleeve. Heating components may include electrical resistance, steam, hot water, gas or no heat but may not include reverse cycle refrigeration as a heating means.

**SINGLE PACKAGE VERTICAL HEAT PUMP (SPVHP).** An SPVAC that utilizes reverse cycle refrigeration as its primary heat source, with secondary supplemental heating by means of electrical resistance, steam, hot water or gas.

**SINGLE-ZONE SYSTEM.** An HVAC system serving a single HVAC zone.

**SITE-INSTALLED COMPONENTS AND FEATURES.** Equipment, materials, measures, practices and features which are affixed to a new manufactured home at its first set-up that are not initially installed by the manufacturer.



**SITE-RECOVERED ENERGY.** Waste energy recovered at the building site that is used to offset consumption of purchased fuel or electrical energy supplies.

**SITE-SOLAR ENERGY.** Thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site and used to offset consumption of purchased fuel or electrical energy supplies. For the purposes of applying this standard, site-solar energy shall not include passive heat gain through fenestration systems.

**SKYLIGHT.** Glass or other transparent or translucent glazing material installed at a slope of 15 degrees (0.26 rad) or more from vertical. Glazing material in skylights, including unit skylights, solariums, sunrooms, roofs and sloped walls is included in this definition.

**SLAB-ON-GRADE FLOOR.** That portion of a slab floor of the building envelope that is in contact with the ground and that is either above grade or is less than or equal to 24 inches below the final elevation of the nearest exterior grade.

1. heated slab-on-grade floor: a slab-on-grade floor with a heating source either within or below it.
2. unheated slab-on-grade floor: a slab-on-grade floor that is not a heated slab-on-grade floor.

**SLEEPING UNIT.** A room or space in which people sleep, which can also include permanent provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are also part of a dwelling unit are not *sleeping units*.

**SOLAR ENERGY SOURCE.** Source of thermal, chemical, or electrical energy derived from direct conversion of incident solar radiation at the building site.

**SOLAR HEAT GAIN COEFFICIENT (SHGC).** The ratio of the solar heat gain entering the space through the fenestration assembly to the incident solar radiation. Solar heat gain includes directly transmitted solar heat and absorbed solar radiation which is then reradiated, conducted or convected into the space. (See “Fenestration area”.)

**SOLAR SYSTEM.** A complete set of coordinated components, which may be comprised of collectors, piping, pumps, heat exchangers, photovoltaic (PV) arrays, wiring, controls, power converters, and applicable storage, the design of which is intended to convert and utilize incident solar radiation to either heat water for hot water or space conditioning needs or to produce photovoltaic (PV) power for electrical needs.

**SPACE.** An enclosed space within a building. The classifications of spaces are as follows for the purpose of determining building envelope requirements.

1. Conditioned space: a cooled space, heated space, or indirectly conditioned space or unvented attic assembly defined as follows.
  - a. Cooled space: an enclosed space within a building that is cooled by a cooling system whose sensible output capacity exceeds 5 Btu/h-ft<sup>2</sup> of floor area.
  - b. Heated space: an enclosed space within a building that is heated by a heating system whose output

capacity relative to the floor area is greater than or equal to 5 Btu/h-ft<sup>2</sup>.

- c. Indirectly conditioned space: an enclosed space within a building that is not a heated space or a cooled space, which is heated or cooled indirectly by being connected to adjacent space(s) provided (a) the product of the *U*-factor(s) and surface area(s) of the space adjacent to connected space(s) exceeds the combined sum of the product of the *U*-factor(s) and surface area(s) of the space adjoining the outdoors, unconditioned spaces, and to or from semiheated spaces (e.g., corridors) or (b) that air from heated or cooled spaces is intentionally transferred (naturally or mechanically) into the space at a rate exceeding 3 air changes per hour (ACH) (e.g., atria).
  - d. Unvented attic assembly: as defined in Section R806.4 of the *Florida Building Code, Residential*. These spaces shall not require supply or return outlets.
2. Semiheated space: an enclosed space within a building that is heated by a heating system whose output capacity is greater than or equal to 3.4 Btu/h-ft<sup>2</sup> of floor area but is not a conditioned space.
  3. Unconditioned space: an enclosed space within a building that is not a conditioned space or a semiheated space. Crawl spaces, attics, and parking garages with natural or mechanical ventilation are not considered enclosed spaces.

**SPACE CONSTRAINED PRODUCT.** A central air conditioner or heat pump:

1. that has rated cooling capabilities no greater than 30,000 BTU/h;
2. that has an outdoor or indoor unit having at least two overall exterior dimensions or an overall displacement that
  - a. is substantially smaller than those of other units that are either currently usually installed in site-built single family homes, and of a similar cooling and, if heat pump, heating capacity; and
  - b. if increased, would certainly result in a considerable increase in the usual cost of installation or would certainly result in a significant loss in the utility of the product to the consumer, and
3. is of a product type that was available for purchase in the United States as of December 1, 2000.

**SPACE PERMITTING – INSULATION.** Where an enclosed space exists in which insulation can be placed without the creation of space for that purpose only; e.g. dropped ceiling below a floor deck or space between joists.

**SPACE TYPE.** Descriptor of the visual activity to take place in a space; “space types” are those used for the Section 506 calculation.

**SPLIT SYSTEM.** Air conditioning system or heat pump with compressor and air handler in separate cabinets with the compressor typically located exterior to conditioned space.

## DEFINITIONS

**STANDARD REFERENCE DESIGN.** A version of the *proposed design* that meets the minimum requirements of this code and is used to determine the maximum annual energy use requirement for compliance based on total building performance.

**STEM WALL.** A type of raised floor system consisting of a wood floor supported above grade by a continuous stem wall around its perimeter.

**STOREFRONT.** A nonresidential system of doors and windows mullied as a composite fenestration structure that has been designed to resist heavy use. *Storefront* systems include, but are not limited to, exterior fenestration systems that span from the floor level or above to the ceiling of the same story on commercial buildings.

**STORY.** Portion of a building that is between one finished floor level and the next higher finished floor level or the roof, provided, however, that a basement or cellar shall not be considered a story.

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

**SUBSTANTIAL CONTACT.** A condition where adjacent building materials are placed so that proximal surfaces are contiguous, being installed and supported so they eliminate voids between materials without compressing or degrading the thermal performance of either product.

**SUBSTANTIALLY LEAK FREE.** Distribution system air leakage to outdoors is no greater than 3 cfm per 100 square feet of conditioned floor area at a pressure differential of 25 Pascal (0.10 in. w.c.) across the entire air distribution system, including the manufacturer's air handler enclosure.

**SUNROOM.** For the purposes of this code, the term "sunroom" as used herein shall be as follows and shall include conservatories, sunspaces, solariums, and porch or patio covers or enclosures. See also Section 301.2.1.1.2 of the *Florida Building Code, Residential*.

1. A room with roof panels that includes sloped glazing that is a one-story structure added to an existing dwelling with an open or glazed area in excess of 40 percent of the gross area of the sunroom structure's exterior walls and roof.
2. A one-story structure added to a dwelling with structural roof panels without sloped glazing. The sunroom walls may have any configuration, provided the open area of the longer wall and one additional wall is equal to at least 65 percent of the area below 6 feet 8 inches of each wall, measured from the floor.

**SUPPLEMENTARY HEAT.** Heat provided, generally electric resistance heat, to make up the difference between heat provided by the refrigeration cycle of a heat pump and that required to meet the heating load at low temperatures. Supplementary heat shall not be construed as the heat required to provide 100% backup in case of system failure.

**SYSTEM.** A combination of equipment and auxiliary devices (e.g., controls, accessories, interconnecting means, and terminal elements) by which energy is transformed so it performs a specific function such as HVAC, service water heating, or lighting.

**SYSTEM, EXISTING.** A system or systems previously installed in an existing building.

**TANDEM WIRING.** Pairs of luminaires operating with lamps in each luminaire powered from a single ballast contained in one of the luminaires.

**TASK LIGHTING.** Lighting directed to a specific surface or area that provides illumination for visual tasks.

**TERMINAL.** A device by which energy from a system is finally delivered, e.g., registers, diffusers, lighting fixtures, faucets, etc.

**THERMAL CONDUCTANCE.** See "C-Factor."

**THERMAL EFFICIENCY.** For the purposes of this code, Thermal Efficiency shall be defined as included in the American National Standard Institute, Inc. standard ANSI Z 21.10.3.

**THERMAL ENVELOPE.** The primary insulation layer of a building; that part of the envelope that provides the greatest resistance to heat flow to or from the building.

**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 MASS.** Materials with mass heat capacity and surface area capable of affecting building loads by storing and releasing heat as the interior and/or exterior temperature and radiant conditions fluctuate.

**THERMAL RESISTANCE (R-VALUE).** The reciprocal of the time rate of heat flow through a unit area induced by a unit temperature difference between two defined surfaces of material or construction under steady-state conditions. Units of *R* are h·ft<sup>2</sup>·°F/Btu.

**THERMOSTAT.** An automatic control device used to maintain temperature at a fixed or adjustable set point.

**THERMOSTATIC CONTROL.** An automatic control device or system used to maintain temperature at a fixed or adjustable set point.

**THROUGH-THE-WALL AIR CONDITIONER and HEAT PUMP.** A central air conditioner or heat pump that is designed to be installed totally or partially within a fixed-size opening in an exterior wall, and:

1. is manufactured prior to January 23, 2010;
2. is not weatherized;
3. is clearly and permanently marked for installation-Only through an exterior wall;
4. has a rated cooling capacity no greater than 30,000 Btu/h;
5. exchanges all of its outdoor air across a single surface of the equipment cabinet, and
6. has a combined outdoor air exchange area of less than 800 square inches (split systems) or less than 1,210 square inches (single packaged systems) as measured on the surface described in item 5 above.

**TINTED.** As applied to fenestration: bronze, green, blue, or gray coloring that is integral with the glazing material. Tinting

does not include surface applied films such as reflective coatings, applied either in the field or during the manufacturing process.

**TOWNHOUSE.** A single-family dwelling unit constructed in a series or group of attached units with property lines separating such units. For the purpose of this code, townhouses shall be considered multifamily dwellings.

**TRANSFER GRILLE.** A louvered or perforated covering for an opening in an air passage through a wall or door allowing transport of return air from a separated conditioned space of a building to the space containing the air distribution system's primary return.

**U-FACTOR (THERMAL TRANSMITTANCE).** The coefficient of heat transmission (air to air) through a building 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 (Btu/h · ft<sup>2</sup> · °F) [W/(m<sup>2</sup> · K)].

**UNCONDITIONED SPACE.** See "SPACE."

**UNITARY COOLING EQUIPMENT.** One or more factory-made assemblies that normally include an evaporator or cooling coil and a compressor and condenser combination. Units that perform a heating function are also included.

**UNITARY HEAT PUMP.** One or more factory-made assemblies that normally include an indoor conditioning coil, compressor(s), and an outdoor refrigerant-to-air coil or refrigerant-to-water heat exchanger. These units provide both heating and cooling functions.

**VARIABLE AIR VOLUME (VAV) SYSTEM.** HVAC system that controls the dry-bulb temperature within a space by varying the volumetric flow of heated or cooled supply air to the space.

**VENT DAMPER.** A device intended for installation in the venting system of an individual, automatically operated, fossil fuel-fired appliance in the outlet or downstream of the appliance draft control device, which is designed to automatically open the venting system when the appliance is in operation and to automatically close off the venting system when the appliance is in a standby or shutdown condition.

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

**VENTILATION AIR.** That portion of supply air that comes from outside (outdoors) plus any recirculated air that has been treated to maintain the desired quality of air within a designated space.

**VISIBLE TRANSMITTANCE (VT).** Transmittance of glazing material over the visible portion of solar spectrum.

**WALL.** That portion of the building envelope, including opaque area and fenestration, that is vertical or tilted at an angle of 60 degrees from horizontal or greater. This includes above and below-grade walls, between floor spandrels, peripheral edges of floors, and foundation walls. For the purposes of determining building envelope requirements, the classifications are defined as follows:

1. Above-grade wall: a wall that is not a below-grade wall.

2. Below-grade wall: that portion of a wall in the building envelope that is entirely below the finish grade and in contact with the ground.
3. Mass wall: a wall with a heat capacity exceeding (1) 7 Btu/ft<sup>2</sup>·°F or (2) 5 Btu/ft<sup>2</sup>·°F provided that the wall has a material unit weight not greater than 120 lb/ft<sup>3</sup>.
4. Metal building wall: a wall whose structure consists of metal spanning members supported by steel structural members (i.e., does not include spandrel glass or metal panels in curtain wall systems).
5. Steel-framed wall: a wall with a cavity (insulated or otherwise) whose exterior surfaces are separated by steel framing members (i.e., typical steel stud walls and curtain wall systems).
6. Wood-framed and other walls: all other wall types, including wood stud walls.

**WALL AREA, GROSS.** The area of the wall measured on the exterior face from the top of the floor to the bottom of the roof.

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

**WATT.** The electrical unit of power or rate of doing work. One watt = 0.00134 h.p.

**WORST CASE.** A unit of a residential structure with the same general layout and percent glass which generates the highest Energy Performance Index in a Section 405 calculation. The worst case unit will have the largest amount of glass facing east and west (primary orientation) and south (secondary orientation).

**ZONE.** A space or group of spaces within a building with heating or cooling requirements that are sufficiently similar so that desired conditions can be maintained throughout using a single controlling device.

