

CHAPTER 2

DEFINITIONS

SECTION 201 GENERAL

201.1 Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter.

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

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the *Oregon Structural Specialty Code*, *Oregon Energy Efficiency Specialty Code*, *Oregon Fire Code*, *Oregon Mechanical Specialty Code* or *Oregon Plumbing Specialty Code*, such terms shall have the meanings ascribed to them as in those codes.

201.4 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.

SECTION 202 DEFINITIONS

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

[B] 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.

[B] APPROVED. Acceptable to the *code official* or authority having jurisdiction.

[B] APPROVED AGENCY. An established and recognized agency regularly engaged in conducting tests or furnishing *commissioning* services, where such agency has been *approved*.

[B] APPROVED SOURCE. An independent person, firm or corporation, *approved* by the *code official*, who is competent and experienced in the application of engineering principles to materials, methods or systems analyses.

AREA, OCCUPIED FLOOR. The area of any *story*, portion of a *story*, or aggregate of multiple *stories* that is used for a specific occupancy or function.

AREA, TOTAL BUILDING FLOOR. The total of the total floor areas on all stories of the *building*.

AREA, TOTAL FLOOR. The total area of a *story* as measured from the interior side of the exterior walls.

[E] AUTOMATIC. Self-acting, operating by its own mechanism when actuated by some impersonal influence, such as, for

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

BIO-BASED MATERIAL. A commercial or industrial material or product, other than food or feed, that is composed of, or derived from, in whole or in significant part, biological products or renewable domestic agricultural materials, including plant, animal, and marine materials, or forestry materials.

BRANCH CIRCUIT. The circuit conductors between the final overcurrent device protecting the circuit and the outlet(s).

[M] BTU. Abbreviation for British thermal unit, which is the amount of heat required to raise the temperature of 1 pound (0.454 kg) of water from 59°F to 60°F (15°C to 16°C) (1 Btu = 1055 J).

[B] BUILDING. Any *structure* used or intended for supporting or sheltering any use or occupancy, including the energy using systems and site sub-systems powered through the building’s electrical service.

BUILDING CODE. Means the *Oregon Structural Specialty Code* (OSSC).

BUILDING COMMISSIONING (BCx). A process that verifies and documents that the selected building systems have been designed, installed, and function according to the owner’s project requirements and construction documents, and to minimum code requirements except as noted herein.

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

BUILDING SITE. A *lot*, or a combination of adjoining *lots*, that are being developed and maintained subject to the provisions of this code. A *building* site shall be permitted to include public ways, private roadways, bikeways and pedestrian ways that are developed as an element of the total development.

[E] BUILDING THERMAL ENVELOPE. The basement walls, exterior walls, floor, roof, and any other *building* element(s) that enclose *conditioned space*. This boundary also includes the boundary between *conditioned space* and any exempt or unconditioned space.

CHANGE OF OCCUPANCY. A change in the purpose or level of activity within a *building* that involves a change in application of the requirements of this code.

CODE OFFICIAL. See “Building official.”

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

COMMISSIONING. A process that verifies and documents that the selected *building* and site systems have been designed, installed, and function in accordance with the owner’s project requirements and *construction documents*, and minimum code requirements.

DEFINITIONS

COMPLEX MECHANICAL SYSTEM. An HVAC system serving multiple zones per the *Energy Code*, Section 503.4. Not a “Simple mechanical system” as defined by the *Energy Code*, Section 503.3.

[B] 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*, includes required completed checklist.

CONTROL. A specialized *automatic* or *manual* device or system used to regulate the operation of lighting, equipment or appliances.

Captive key control. An *automatic* control device or system that energizes circuits when the key that unlocks the sleeping unit is inserted into the device and that de-energizes those circuits when the key is removed.

Daylight control. An *automatic* control device or system complying with Section 505.2.2.3.3 of the *Energy Code*. [Section number based on change proposed for incorporation in the 2012 IECC].

Occupant sensor control. An *automatic* control device or system complying with Section 505.2.2.3.1 of the *Energy Code*. Occupant sensors are permitted to incorporate an integral maximum three (3) watt LED nightlight that functions when loads are shut off. [Section number based on change proposed for incorporation in the 2012 IECC].

[B] COURT. An open, uncovered space, unobstructed to the sky, bounded on three or more sides by exterior *building* walls or other enclosing devices.

DAYLIT AREA. That portion of a *building's* interior floor area that is regularly illuminated by natural light, as determined in accordance with Section 808.3.

DAYLIGHT SATURATION. The percentage of daytime hours throughout the year when 30 foot-candles (323 lux) of natural light are provided at a height of 30 inches (762 mm) above the floor. Partial credit is allowed for times when less than 30 foot-candles of natural light are provided. Credit is not allowed for times when 450 foot-candles (4844 lux) or more of natural light are provided.

DAYLIGHT ZONE, SIDELIGHTING. The floor area adjacent to fenestration in an *unobstructed exterior wall*. This area extends back from the exterior wall to the nearest 56-inch-high (1400 mm) partition, up to two times the height from the floor to the top of the fenestration, and laterally from the edge of the fenestration to the nearest 56-inch-high (1400 mm) partition, up to 0.5 times the height from the floor to the top of the fenestration.

DAYLIGHT ZONE, TOPLIGHTING. The floor area beneath a *skylight* or monitor in an *unobstructed roof*. This area extends laterally and longitudinally beyond the edge of the *skylight* or monitor to the nearest 56-inch-high (1400 mm) partition, up to 0.7 times the height from the floor to the bottom of the *skylight* well.

DECIBELS (dB). Term used to identify 10 times the common logarithm of the ratio of two like quantities proportional to the power of energy.

DECONSTRUCTION. The process of taking a *building* or *structure* apart, piece by piece, with the intent of recycling or salvaging as many of the materials and components as possible.

DEMAND LIMIT. The shedding of loads when predetermined peak demand limits are about to be exceeded.

DEMAND RESPONSE, AUTOMATED (AUTO-DR). Fully automated demand response initiated by a signal from a utility or other appropriate entity, providing fully automated connectivity to customer energy end-use control strategies.

DEMAND RESPONSE, AUTOMATION INTERNET SOFTWARE. Software that resides in a *Building Energy Management Control System* that can receive a demand response signal and automatically reduce HVAC and lighting system loads. Demand Response programs developed by the electric utility and the *independent system operator* typically depend upon timely and reliable communications of events and information to the *buildings* that are participating in the programs.

DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE OF BUILDING ENERGY SIMULATION. A *building modeling professional* responsible for the review and coordination of the *building* energy simulation documents and files of the project, as determined by the *code official*, for compatibility with the design and simulation of *building* components and energy-using systems of the *building* or *structure*, including submittal documents prepared by others, deferred submittal documents and phased submittal documents. This *building modeling professional* is responsible for maintaining minimum competency in *building* energy simulation science in accordance with applicable certifications of minimum competence and nationally recognized standards. A *registered design professional* or a certified energy modeler as defined in the Whole Building Approach Instructions for Section 506 of the *Energy Code*. See also “Registered design professional.”

DIVERSE USE CATEGORIES. Categories of occupancies and land uses which are designated as either retail, service or community facilities:

Retail uses. The retail use category includes: convenience store, florist, hardware store, pharmacy, grocery or supermarket and similar retail uses.

Service uses. The service use category includes: bank, coffee shop or restaurant; hair care; health club or fitness center; laundry or dry cleaner, medical or dental office and similar service uses.

Community facilities. The community facilities category includes: child care; civic or community center; a *building* containing a place of worship; police or fire station; post office, public library, public park, school, senior care facility, homeless shelter, and similar social services facilities.

DRAIN TILE LOOP. A continuous length of drain tile or perforated pipe extending around all or part of the internal or external perimeter of a *basement* or crawl space footing.

[B] 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.

EFFECTIVE APERTURE. The effective aperture for vertical fenestration is the area of glazing in the unobstructed wall times the visible transmittance (VT) of this glazing, divided by the floor area in the *daylight zone*. The effective aperture for *skylights* is the area of glazing in the unobstructed roof times the visible transmittance (VT) of this glazing, divided by the floor area in the *daylight zone*.

ELECTRICAL CODE. Means the *Oregon Electrical Specialty Code* (OESC).

ENCLOSED SPACE. Means a single area without separation walls.

ENERGY CODE. Means the *Oregon Energy Efficiency Specialty Code* (OEESC).

ENERGY MANAGEMENT AND CONTROL SYSTEM, BUILDING (EMCS). A computerized, intelligent network of electronic devices, designed to automatically monitor and control the energy using systems in a *building*.

ENERGY STAR. A joint program of the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE) designed to identify and promote energy-efficient products and practices.

[M] EQUIPMENT. All piping, ducts, vents, control devices and other components of systems other than appliances which 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 HEIGHT. The continuous height, in vertical degrees, of an obstruction that provides the same obstructive effect as a series of obstructions of variable height. The line of equivalent height is drawn where the area of obstruction above equals the area of obstruction below. Determination shall be made on a floor-by-floor basis.

[B] EXISTING STRUCTURE. See “*Building code*.”

EXTERIOR WALL, FULLY OBSTRUCTED. That portion of an exterior wall that does not face a public way or a yard or *court* complying with Section 1206 of the *International Building Code*.

EXTERIOR WALL, PARTIALLY OBSTRUCTED. That portion of an exterior wall that is not a *fully obstructed exterior wall*, but which faces *buildings, structures*, or geological formations with an *equivalent height* more than 30 degrees above the horizon. For the purposes of this determination, the maximum allowed height of *buildings* or *structures* on adjacent property under existing zoning regulations is permitted to be considered. Determination is made on a floor-by-floor basis.

EXTERIOR WALL, UNOBSTRUCTED. That portion of an exterior wall that is not an *obstructed exterior wall*, or a *partially obstructed exterior wall*.

FACILITY OPERATIONS. A facility is operational during the time when the primary activity that facility is designed for is taking place. For Group A and M occupancies, this is the time during which the facility is open to the public.

FEEDER CONDUCTORS. The conductors that connect the service equipment to the *branch circuit* overcurrent devices.

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

HARDSCAPE. Areas of a *building site* covered by man-made materials.

[B] HISTORIC BUILDINGS. *Buildings* that are *listed* in or eligible for listing in the National Register of Historic Places, or designated as historic under an appropriate state or local law.

IMPERVIOUS SURFACE. Paved concrete or asphalt and other similar surfaces that readily accommodate the flow of water with relatively little absorption, as typically used at exterior horizontal areas including, but not limited to, parking lots, bikeways, walkways, plazas and fire lanes.

INDEPENDENT SYSTEM OPERATOR (ISO). The electric system’s operator.

INFRARED EMITTANCE. The ratio of radiant heat emitted by a sample to that emitted by a black body radiator at the same temperature.

INFRASTRUCTURE. Facilities within a *jurisdiction* that provide community services and networks for travel and communication including: transportation services such as, but not limited to, roads, bikeways and pedestrian ways and *transit services*; utility systems such as, but not limited to, water, sanitary sewage, storm water management, telecommunications, power distribution and waste management; and community services such as, but not limited to, public safety, parks, schools and libraries.

INFRASTRUCTURE, ADEQUATE. The capacity of *infrastructure* systems, as determined by the *jurisdiction*, to serve the demands imposed by a new development on *building sites* within the *jurisdiction*. Adequacy can be determined based on existing *infrastructure* or on the *infrastructure* as augmented by a development project.

[B] JURISDICTION. The governmental unit that has adopted this code under due legislative authority.

[B] LABEL. An identification applied on a product by the manufacturer that 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*.

[B] LABELED. Equipment, materials or products to which has 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.

LABORATORY EXHAUST. Exhaust from fume hoods and laboratory process ventilation systems located in Group B, E and I-2 occupancies. Does not include exhaust from H occupancy areas within these occupancies.

DEFINITIONS

LIFE CYCLE ASSESSMENT. A technique to evaluate the relevant energy and material consumed and environmental emissions associated with the entire life of a *building*, product, process, activity or service.

LIGHTING BOUNDARY. Where the *lot line* abuts a public walkway, bikeway, plaza, or parking lot, the lighting boundary shall be a line 5 feet (1524 mm) from the *lot line* and located on the public property. Where the *lot line* abuts a public roadway or public transit corridor, the lighting boundary shall be the centerline of the public roadway or public transit corridor. In all other circumstances, the lighting boundary shall be at the *lot line*.

[B] 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.

[B] LOT. A portion or parcel of land considered as a unit.

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

LOW VOLTAGE DRY-TYPE DISTRIBUTION TRANSFORMER. A NEMA “Class 1” transformer that is air cooled, does not use oil as a coolant, has an input voltage ≤ 600 volts, and is rated for operation at a frequency of 60 Hertz.

[E] MANUAL. Capable of being operated by personal intervention (see “Automatic”).

MECHANICAL CODE. Means the *Oregon Mechanical Specialty Code* (OMSC).

MERV. Duct system air filter minimum efficiency reporting value.

METER. A water volume measuring device used to collect data and indicate water usage abnormalities. Such devices are provided by the water purveyor or the *building* owner.

OCCUPANT LOAD. The occupant load as calculated in accordance with the requirements of Chapter 10 of the *Building Code*.

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

POST-CONSUMER RECYCLED CONTENT. The proportion of recycled material in a product generated by households or by commercial, industrial, and institutional facilities in their role as end users of the product that can no longer be used for its intended purpose. This includes returns of material from the distribution chain.

POWER CONVERSION SYSTEM. The equipment used to convert incoming electrical power, to the force causing vertical motion of the elevator. In a traction system, this would include the electrical drive, motor, and transmission.

PRE-CONSUMER (POST-INDUSTRIAL) RECYCLED CONTENT. The proportion of recycled material in a product

diverted from the waste stream during the manufacturing process. Pre-consumer recycled content does not include reutilization of material such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it.

PROCESS LOADS. *Building* energy loads that are not related to *building* space conditioning, lighting, service water heating or *ventilation* for human comfort.

PROJECT ELECTIVE. The provisions contained in Table 303.1 for which compliance is not mandatory unless selected for a specific *building* project. The minimum total number of *project electives* that must be selected and complied with is indicated in Table 303.1.

PROPOSED DESIGN. A description of the proposed *building* used to estimate annual energy use for determining compliance based on total *building* performance including improvements in design such as the use of passive solar energy design concepts and technologies, improved *building thermal envelope* strategies, increased equipment and systems efficiency, increased use of daylighting, improved *control* strategies and improved lighting sources that will result in a decrease in annual energy.

[E] 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 ($h \times ft^2 \times ^\circ F/Btu$) [$m^2 \times K/W$].

REBOUND AVOIDANCE, EXTENDED AUTO-DR CONTROL. The *rebound avoidance, extended Auto-DR control* strategy is essentially an extension of the *rebound avoidance, slow recovery* strategy. Although a slow recovery strategy is critical to maximize the benefit of an *Auto-DR* strategy, the *building energy management and control system (EMCS)* programming for just such a strategy can be very complex or might not be possible for many conventional *EMCSs*. A *rebound avoidance, extended Auto-DR control* strategy also includes logic and controls for avoiding a rebound peak when the control signal is stopped.

REBOUND AVOIDANCE, SEQUENTIAL EQUIPMENT RECOVERY. Sequential equipment recovery that disperses short duration equipment start up spikes gradually, thereby avoiding a larger whole *building* demand spike.

REBOUND AVOIDANCE, SLOW RECOVERY. Slow recovery strategies slowly recover the target parameter that was controlled in the demand response strategy. Where this strategy is applied, the zone setpoints are gradually restored to the normal setpoints. Where air moving systems are targeted, a limit strategy is applied to the adjustable speed drive(s); fan adjustable speed drive limits are gradually shifted up.

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. See also “Design professional in responsible charge.”

REGULARLY OCCUPIED SPACE. A room or enclosed space which is regularly occupied for at least 1,000 daytime

hours per year. Restrooms, locker rooms, showers, changing rooms, closets, corridors, stairwells, mechanical and electrical equipment rooms are not considered to be regularly occupied.

RENEWABLE ENERGY SOURCE, ON-SITE. Energy derived from solar radiation, wind, waves, tides, landfill gas, biomass or the internal heat of the earth. The energy system providing on-site renewable energy is located on or adjacent to the *building site*, and generates energy for use on the *building site*.

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

[E] RESIDENTIAL BUILDING. For energy purposes only, detached one- and two-family dwellings, and multiple single-family dwellings (townhouses), *buildings* under the scope of the *Residential Code*, and Group R-2, R-3 and R-4 *buildings*, all of which are three stories or less in height above grade.

RESIDENTIAL CODE. Means *Oregon Residential Specialty Code* (ORSC).

ROOF, FULLY OBSTRUCTED. A roof that is below ground and covered by soil.

ROOF, PARTIALLY OBSTRUCTED. That portion of the roof which is shaded by any *building*, *structure*, or geological formation at the peak solar altitude on the spring equinox, and three hours before and after the peak solar altitude on the spring equinox. For the purposes of this determination, the maximum allowed heights of *buildings* or *structures* on adjacent property under existing zoning regulations are permitted to be considered.

ROOF, UNOBSTRUCTED. A roof that is not a *fully obstructed roof* or a *partially obstructed roof*.

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

SEQUENCE OF OPERATION (HVAC). Generated as a fully descriptive, detailed account of the operation of HVAC systems, the *registered design professional* describes the operation of systems in narrative terms accounting for all of the equipment that makes up the systems, how they are designed to operate and how they are to be controlled. A *sequence of operation* is developed during the design process, and finalized upon *commissioning*, when the operational details are initialized and validated. A *sequence of operation* is the final record of system operation, and is included on the control diagram “as-built,” or as part of the operation and maintenance (O&M) manuals that are turned over to the owner.

[B] SKYLIGHTS AND SLOPED GLAZING. 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, are included in this definition.

[B] 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 PHOTOVOLTAIC EQUIPMENT. Devices such as solar cells and inverters that are used to transform solar radiation into energy.

SOLAR REFLECTANCE. A measure of the ability of a surface material to reflect sunlight. It is the fraction of solar flux, including the visible, infrared and ultraviolet wavelengths, reflected by a surface, expressed as a percentage on a scale of 0 to 1. Solar reflectance is also referred to as “albedo.”

SOLAR REFLECTANCE INDEX (SRI). A value that incorporates both *solar reflectance* and *infrared emittance* in a single measure to represent a material’s temperature in the sun. SRI quantifies how hot a surface would get relative to standard black and standard white surfaces. SRI is calculated using equations based on previously measured values of *solar reflectance* and *infrared emittance* as laid out in ASTM E 1980. SRI is expressed as a fraction, 0.0 to 1.0, or percentage, 0 percent to 100 percent.

SOLAR THERMAL EQUIPMENT. A device that uses solar radiation to heat water or air for use within the facility for service water heating, space heating or space cooling.

[E] STANDARD REFERENCE DESIGN. A version of the *proposed design* that meets the minimum requirements of the *Energy Code* and the additional mandatory requirements of this code, and that is used to determine the maximum annual energy use for compliance based on total *building* performance.

STANDBY MODE (ELEVATOR). An operating mode during periods of inactivity in which electrical loads are reduced to conserve energy. For elevators, standby mode begins up to 5 minutes after an elevator is unoccupied and has parked and completed its last run and ends when the doors are re-opened. For escalators and moving walkways, standby mode begins after traffic has been absent for up to 5 minutes and ends when the next passenger arrives.

[B] 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. It is measured as 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.

[B] STRUCTURE. That which is built or constructed.

TRACTION ELEVATOR. An elevator system in which the cars are suspended by ropes wrapped around a sheave that is driven by an electric motor.

[E] 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 · ft² · °F) [W/(m² · K)].

VEGETATIVE ROOF.

Extensive vegetative roof. A low-profile roof with a growing medium less than 8 inches (203 mm) in depth, composed of plants that can thrive in a rooftop environment with limited water, shallow roots and sparse nutrients.

DEFINITIONS

Intensive vegetative roof. A high-profile roof with a growing medium 8 inches (203 mm) or more in depth that can support a wide range of vegetables, shrubs and small trees.

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

VOLTAGE DROP. A decrease in voltage caused by losses in the circuit conductors connecting the power source to the load.

WASTE ENERGY RECOVERY. The application and use of systems and equipment to capture and reuse any form of energy that would otherwise be discarded and not otherwise be used by the *building* and its systems.

WIND POWER CLASS. As a renewable energy source, wind is classified according to wind power classes, based on typical wind speeds. These classes range from Class 1 (the lowest) to Class 7 (the highest). At the 50 meter (164 feet) height, wind power Classes 4 and higher are considered good for development.