

CHAPTER 2

DEFINITIONS

SECTION ECC 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 *Energy Law*, the *Uniform Fire Prevention and Building Code*, or the *New York City Construction Codes* shall have the meanings ascribed to them in those codes.

201.4 Terms not defined.

Terms not defined by this chapter shall have ordinarily accepted meanings such as the context implies.

***SECTION ECC 202 GENERAL DEFINITIONS

*Section ECC 202 was amended by: [Local Law 85 of 2009](#) – Update #34. This law has an effective date of July 01, 2010.

**Section ECC 202 was amended by: [Local Law 48 of 2010](#) – Update #50. This law has an effective date of December 28, 2010.

***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

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.

ACCESSIBLE. Admitting close approach or egress 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.

*Section ECC 202 was amended by: [Local Law 85 of 2009](#) – Update #34. This law has an effective date of July 01, 2010.

***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

AIR BARRIER. Material(s) assembled and joined together to provide a barrier to air leakage through the building envelope. An air barrier may be a single material or a combination of materials.

AIR-IMPERMEABLE INSULATION. An insulation having an air permeance equal to, or less than 0.02 L/s-m² at 75 Pa pressure differential tested according to ASTM E 2178 or E 283.

***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.

*Section ECC 202 was amended by: [Local Law 85 of 2009](#) – Update #34. This law has an effective date of July 01, 2010.

*****APPROVED.** See Section 28-101.5 of the *Administrative Code*.

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***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

*****APPROVED AGENCY.** See Section 28-101.5 of the *Administrative Code*.

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AREA WEIGHTED AVERAGE. A mathematical technique for combining different amounts of various components, based on proportional relevance, into a single number. Weighted averaging may be used where there is more than one R-value for floor, wall, or ceiling insulation, or more than one U-factor for fenestration in a building. As an example, the area weighted average for window fenestration U-factors equals $(\text{Area 1} \times \text{U-factor 1}) + (\text{Area 2} \times \text{U-factor 2}) + \dots / \text{Total Area} = \text{maximum allowable fenestration U-factor}$.

*****AUTHORITY HAVING JURISDICTION.** The commissioner or the commissioner’s designee.

***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

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

*****BUILDING.** See Section 28-101.5 of the *Administrative Code*.

***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

BUILDING SYSTEM. A combination of central or terminal equipment or components or controls, accessories, interconnecting means, and terminal devices by which energy is transformed so as to perform a specific function, such as heating, ventilation and air conditioning, service water heating or illumination.

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.

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 $(\text{Btu/h-ft}^2 \times ^\circ\text{F}) [\text{W}/(\text{m}^2 \times \text{K})]$.

*****CODE ENFORCEMENT OFFICIAL.** The commissioner or the commissioner’s designee.

***Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.

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

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

CONDITIONED SPACE. An area or room within a building which is within the thermal envelope of a building which is heated or cooled using fossil fuel or electricity as the energy source.

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 ZONES.

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 the 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 (10 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 occupancy of spaces served by the system is less than design occupancy.

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.

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.

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 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, automatic closers and contain over 50 percent glass specifically designed to withstand heavy use and possibly abuse.

EXTERIOR WALL. Walls including both above grade walls and basement walls.

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 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 non-glass glazing materials.

F-FACTOR. The perimeter heat loss factor for slab-on-grade floors (Btu/h-ft-°F) [W/(m-K)].

GROUP R BUILDINGS. Are commercial buildings for the purposes of this code when used as described in the *Building Code* (Section 310) of New York State as R-1 uses (eg., transient hotels) or any of the following building uses when over 3 stories in height: R-2 (eg., apartment building or dormitory use), R-3 or R-4.

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

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.

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.

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

INFILTRATION. The uncontrolled inward air leakage into a building caused by the pressure effects of wind or the effect of differences in the indoor and outdoor air density or both.

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

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.

*****LEAD ENERGY PROFESSIONAL.** The registered design professional who signs and seals the energy analysis for an entire project. Such individual may be the same registered design professional who signs and seals the design drawings for the same project.

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LISTED. Equipment, materials, products or services included in a list published by an organization acceptable to the code enforcement 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-VOLTAGE LIGHTING. Lighting equipment powered through a transformer such as a cable conductor, a rail conductor and track lighting.

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

MODULATING AQUASTAT. A control installed on a boiler that modulates water temperature in the boiler in response to an outdoor temperature sensor or to the frequency and/or demand for heat.

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

****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.

****Section ECC 202 was amended by: [Local Law 48 of 2010](#) – Update #50. This law has an effective date of December 28, 2010.**

****PHOTOSENSOR.** A device that detects the presence of visible light.

****Section ECC 202 was amended by: [Local Law 48 of 2010](#) – Update #50. This law has an effective date of December 28, 2010.**

*****PROFESSIONAL CERTIFICATION.** See Section 28-101.5 of the *Administrative Code*.

*****Section ECC 202 was amended by: [Local Law 01 of 2011](#) – Update #50. This law has an effective date of December 28, 2010.**

*****PROJECT.** A design and construction undertaking comprised of work related to one or more buildings and the site improvements. A project is represented by one or more plan/work applications, including construction documents compiled in accordance with Section 106 of the *New York City Building Code*, that relate either to the construction of a new building or buildings or to the demolition or alteration of an existing building or buildings. Applications for a project may have different registered design professionals and different job numbers, and may result in the issuance of one or more permits.

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PROPOSED DESIGN. A description of the proposed building used to estimate annual energy use for determining compliance based on total building performance.

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”).

REGISTERED DESIGN PROFESSIONAL. An individual who is a licensed and registered architect (RA) in accordance with Article 147 of the New York State Education Law or a licensed and registered professional engineer (PE) in accordance with Article 145 of the New York State Education Law.

RENEWABLE ENERGY SOURCES. Sources of energy (excluding minerals) derived from incoming solar radiation, including natural daylighting and photosynthetic processes; from phenomena resulting therefrom, including wood, wind, waves and tides, lake or pond thermal differences; and from the internal heat of the earth, including nocturnal thermal exchanges.

REPAIR. The reconstruction or renewal of any part of an existing building.

RESIDENTIAL BUILDING. For the purposes of this code, residential building includes detached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three stories in height above grade, manufactured homes (as defined in Executive Law Section 601[7]), and factory manufactured homes (as defined in 19 NYCRR Section 1209.1[g]). R-3 buildings, as well as R-2 and R-4 buildings three stories or less in height above grade.

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.

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

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.

SITE-BUILT GLAZED PRODUCT. Fenestration products that are designed to be field glazed or field assembled units comprised of specified frame and glazing components, including operable and fixed windows, curtain walls, window walls, storefronts, sloped glazing and skylights.

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.

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 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.

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.

STOREFRONT. A nonresidential system of doors and windows mullied as a composite fenestration structure that has been designed to resist heavy use and possible abuse and provide a high level of resistance to wind load and impact from wind borne debris. 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.

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.

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.

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

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

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.

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.