

# CHAPTER C2

## DEFINITIONS

### SECTION ECC C201

#### GENERAL

**C201.1 Scope.** Unless stated otherwise, the words and terms provided in italics within this code shall have the meanings as defined in Section R202, C202 or as defined within the chapter or appendix where the word or term is found, except as provided in Sections C201.3 and C201.4.

**C201.2 Interchangeability.** Words and terms used in the present tense include the future; words and terms in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural includes the singular.

**C201.3 Words and terms defined in other codes.** Where italicized words and terms are not defined in this code but are defined in the New York City Building Code New York City Fire Code, New York City Fuel Gas Code, New York City Mechanical Code, New York City Plumbing Code, such terms shall have the meanings ascribed to them in those codes.

**C201.4 Words and terms not defined.** Where words and terms are not italicized or are italicized but not defined in this publication or in the publications listed in Section C201.3, such words and terms shall have the meanings defined in applicable referenced standards, statutes, or regulations or shall have the ordinarily accepted meanings such as the context implies.

### SECTION ECC C202

#### GENERAL DEFINITIONS

**2025 NYS ASHRAE 90.1.** The New York State-specific version of the publication entitled “Standard 90.1, Energy Standard for Buildings Except Low-rise Residential Buildings,” published by the International Code Council (ICC), and also known as “NYS ASHRAE 90.1-2025: New York State version of the Energy Standard for Buildings Except Low-Rise Residential Buildings.”

**2025 NYC ASHRAE 90.1.** New York City amendments to *2025 NYS ASHRAE 90.1*

**ABOVE-GRADE WALL.** See “*Wall, above-grade.*”

**ACCESS (TO).** That which enables a device, appliance or equipment to be reached by *ready access* or by a means that first requires the removal or movement of a panel or similar obstruction.

**ADDITION.** An extension or increase in the floor area, number of stories or height of a *building* or structure.

**AIR BARRIER.** One or more materials joined together in a continuous manner to restrict or prevent the passage of air through the *building thermal envelope* and its assemblies.

**AIR CURTAIN UNIT.** A device installed at the building entrance that generates and discharges a laminar airstream intended to prevent the *infiltration* of external, unconditioned air into the conditioned spaces or the loss of interior, conditioned air to the outside.

**AIR LEAKAGE.** The uncontrolled airflow through the *building thermal envelope* caused by pressure differences across the *building thermal envelope*. Air leakage can be inward (*infiltration*) or outward (*exfiltration*) through the *building thermal envelope*.

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

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

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

**APPROVED SOURCE.** An independent person, firm or corporation *approved* by the *building official*, who is competent and experienced in the relevant subject matter and, where applicable, the application of engineering principles to materials, methods or systems analyses.

**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 insulation or thermal resistance value for floor, wall, or ceiling insulation, or fenestration performance in a building. As an example, the area-weighted average for window fenestration U-factors equals  $(\text{Area 1} \times \text{U-factor 1}) + (\text{Area 2} \times \text{U-factor 2}) + \dots / \text{Total Area} = \text{weighted average fenestration U-factor}$ .

**AUTHORITY HAVING JURISDICTION.** The governmental unit or agency responsible for administration and enforcement of the New York City Building Codes and NYCECC.

**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 OR CELLAR, ENERGY CODE.** A story that is not a story above grade plane. See the definition of "Story above grade plane."

**BELOW-GRADE WALL.** See "*Wall, below-grade*."

**BEST EFFICIENCY POINT (BEP).** The pump hydraulic power operating point (consisting of both flow and head conditions) that results in the maximum efficiency.

**BIODIESEL BLEND.** A homogeneous mixture of hydrocarbon oils and mono alkyl esters of long chain fatty acids.

**BIOGAS.** A mixture of hydrocarbons that is a gas at 60°F (15.5°C) and 1 atmosphere of pressure that is produced through the anaerobic digestion of organic matter.

**BIOMASS WASTE.** Organic nonfossil material of biological origin that is a byproduct or a discarded product. *Biomass waste* includes municipal solid waste from biogenic sources; landfill gas; sludge waste; agricultural crop byproducts; straw; and other biomass solids, liquids and biogases, but excludes wood and wood-derived fuels (including black liquor), biofuel feedstock, biodiesel and fuel ethanol.

**BOILER, MODULATING.** A boiler that is capable of more than a single firing rate in response to a varying temperature or heating load.

**BOILER SYSTEM.** One or more boilers, the piping and controls that work together to supply steam or hot water to heat output devices remote from the boiler.

**BUBBLE POINT.** The refrigerant liquid saturation temperature at a specified pressure.

**BUILDING.** Any structure used or intended for supporting or sheltering any use or occupancy or for affording shelter to persons, animals or property, including any mechanical systems, service water-heating systems and electric power and lighting systems located in the *building* or on the *building site* and supporting the *building*. The term “building” shall include, but shall not be limited to, factory manufactured homes (as defined in Section 372(8) of the Executive Law) and mobile homes (as defined in Section 372(13) of the Executive Law).

**BUILDING COMMISSIONING.** 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.

**BUILDING ENTRANCE.** Any doorway, set of doors, revolving door, vestibule, or other form of portal that is ordinarily used to gain access to the building or to exit from the building by its users and occupants. This does not include doors solely used to directly enter mechanical, electrical, and other building utility service equipment rooms.

**BUILDING OFFICIAL.** The Commissioner of Buildings of the City of New York or his or her duly authorized representative. See Section 28-101.5 of the Administrative Code.

**BUILDING SITE.** A contiguous area of land that is under the ownership or control of one entity.

**BUILDING SYSTEM.** The term “*building system*” means 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 exterior walls, floors, slabs, ceilings, roofs, fenestration and any other building element assemblies (above and below grade) that enclose conditioned space or provide a boundary between conditioned space and unconditioned space.

**CAPTIVE KEY OVERRIDE.** A lighting control that will not release the key that activates the override when the lighting is on.

**CAVITY INSULATION.** Insulating material located between framing members.

**CERTIFICATE OF OCCUPANCY.** A document issued by the *authority having jurisdiction* certifying that the building, or portion thereof, complies with the *approved construction documents* that have been submitted to and *approved* by the *authority having jurisdiction*, indicating it to be in a condition suitable for occupancy.

**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 (Btu/h × ft<sup>2</sup> × °F) [W/(m<sup>2</sup> × K)].

**CHANGE OF OCCUPANCY.** A change in the use of a *building* or a portion of a *building* that results in any of the following:

1. A *change of occupancy* classification.
2. A change from one group to another group within an occupancy classification.
3. Any change in use within a group for which there is a change in the application of the requirements of this code.

**CHARACTER-DEFINING FEATURES.** Those visual aspects, physical elements and spaces that comprise the appearance of a *historic building* and that are significant to the historical, architectural, and cultural values, including the overall shape of the *historic building* or property, its materials, craftsmanship, decorative details, interior spaces and features, as well as the various aspects of its site and environment.

**CHI-FACTOR ( $\chi$ -FACTOR).** See “Thermal Bridge”.

**CIRCULATING HOT WATER SYSTEM.** A specifically designed water distribution system where one or more pumps are operated in the service hot water piping to circulate heated water from the water-heating equipment to the fixture supply and back to the water-heating equipment.

**CLEAN WATER PUMP.** A device that is designed for use in pumping water with a maximum nonabsorbent free solid content of 0.016 lb/ft<sup>3</sup> (0.256 kg/m<sup>3</sup>) and with a maximum dissolved solid content of 3.1 lb/ft<sup>3</sup> (49.66 kg/m<sup>3</sup>), provided that the total gas content of the water does not exceed the saturation volume, and disregarding any additives necessary to prevent the water from freezing at a minimum of 14°F (-10°C).

**CLEAR FIELD THERMAL BRIDGE.** See “Thermal Bridge”.

**CLEAR FIELD U-FACTOR.** See “Thermal Bridge”.

**CLIMATE ZONE.** A geographical region based on climatic criteria as specified in this code.

**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) – 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.

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

**COMMISSIONER.** The Commissioner of Buildings of the City of New York, or his or her duly authorized representative. (See “Authority Having Jurisdiction” and “Building official”).

**COMMISSIONING PLAN.** See Section C408.2.1, Commissioning plan.

**COMMON AREAS.** All conditioned spaces within *Group R* occupancy buildings that are not *dwelling units* or *sleeping units*.

**COMMUNITY RENEWABLE ENERGY FACILITY.** A facility that produces energy harvested from *renewable energy resources* and is qualified as a community energy facility under applicable jurisdictional statutes and rules.

**COMPUTER ROOM.** A room whose primary function is to house equipment for the processing and storage of electronic data which has a design total *information technology equipment* (ITE) equipment power density less than or equal to 20 watts per square foot (20 watts per 0.092 m<sup>2</sup>) of conditioned area or a design total ITE equipment load less than or equal to 10 kW.

**CONDENSING UNIT.** A factory-made assembly of refrigeration components designed to compress and liquefy a specific refrigerant. The unit consists of one or more refrigerant compressors, refrigerant condensers (air-cooled, evaporatively cooled or water-cooled), condenser fans and motors (where used) and factory-supplied accessories.

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

**CONDITIONED SPACE.** An area, room or space that is enclosed within the *building thermal envelope* and is directly or indirectly heated or cooled using fossil fuel or electricity as the energy source. Spaces are indirectly heated or cooled where they communicate through openings with *conditioned spaces*, where they are separated from *conditioned spaces* by uninsulated walls, floors or ceilings, or where they contain uninsulated *ducts*, piping or other sources of heating or cooling using fossil fuel or electricity.

**CONGREGATE LIVING FACILITIES.** A *building* or part thereof that contains *sleeping units* where residents share bathroom or kitchen facilities, or both.

**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.

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

**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.

**DATA CENTER.** A room or series of rooms that share *data center systems*, whose primary function is to house equipment for the processing and storage of electronic data and that has a design total ITE equipment power density exceeding 20 watts per square foot (20 watts per 0.092 m<sup>2</sup>) of conditioned area and a total design ITE equipment load greater than 10 kW.

**DATA CENTER SYSTEMS.** HVAC systems and equipment, or portions thereof, used to provide cooling or *ventilation* in a *data center*.

**DAYLIGHT RESPONSIVE CONTROL.** A device or system that provides *automatic* control of electric light levels based on the amount of daylight in a space.

**DAYLIGHT ZONE.** That portion of a building's interior floor area that is illuminated by natural light.

**DEDICATED OUTDOOR AIR SYSTEM (DOAS).** A ventilation system that supplies 100 percent outdoor air primarily for the purpose of *ventilation* and that is a separate system from the *zone* space-conditioning system.

**DEHUMIDIFIER.** A self-contained, electrically operated and mechanically encased product with the sole purpose of dehumidifying the space consisting of the following:

1. A refrigerated surface (evaporator) that condenses moisture from the atmosphere.
2. A refrigerating system, including an electric motor.
3. An air-circulating fan.
4. A means for collecting or disposing of the condensate.

A dehumidifier does not include a portable air conditioner, room air conditioner or packaged terminal air conditioner.

**DEMAND CONTROL KITCHEN VENTILATION (DCKV).** A system that provides *automatic*, continuous control over exhaust hood and makeup air fan speed in response to temperature, optical or infrared (IR) sensors that monitor cooking activity or through direct communication with cooking appliances.

**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.

**DEMAND RECIRCULATION WATER SYSTEM.** A water distribution system where one or more pumps prime the service hot water piping with heated water upon a demand for hot water.

**DEMAND RESPONSE SIGNAL.** A signal that indicates a price or a request to modify electricity consumption for a limited time period.

**DEMAND RESPONSIVE CONTROL.** A control capable of receiving and automatically responding to a *demand response signal*.

**DESSICANT DEHUMIDIFICATION SYSTEM.** A mechanical dehumidification technology that uses a solid or liquid material to remove moisture from the air.

**DIRECT DIGITAL CONTROL (DDC).** A type of control where controlled and monitored analog or binary data, such as temperature and contact closures, are converted to digital format for manipulation and calculations by a digital computer or microprocessor, then converted back to analog or binary form to control physical devices.

**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.

**DX-DEDICATED OUTDOOR AIR SYSTEM UNIT (DX-DOAS UNIT).** A type of air-cooled, water-cooled or water source factory-assembled product that dehumidifies 100 percent outdoor air to a low dew point and includes reheat that is capable of controlling the supply dry-bulb temperature of the dehumidified air to the designated supply air temperature. It may precondition outdoor air with an *energy recovery ventilation system*.

**DYNAMIC GLAZING.** Any fenestration product that has the fully reversible ability to change its performance properties, including *U-factor*, *solar heat gain coefficient* (SHGC) or *visible transmittance* (VT).

**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.

**EMITTANCE.** The ratio of the radiant heat flux emitted by a specimen measured on a scale from 0 to 1, where a value of 1 indicates perfect release of thermal radiation.

**ENCLOSED SPACE.** A volume surrounded by solid surfaces such as walls, floors, roofs and openable devices, such as doors and operable windows.

**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 CODE.** *The New York City Energy Conservation Code.*

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

**ENERGY RECOVERY, SERIES.** A three-step process in which the first step is to remove energy from a single airstream without the use of mechanical cooling. In the second step, the airstream is mechanically cooled for the purpose of dehumidification. In the third step, the energy removed in the first step is reintroduced to the airstream.

**ENERGY RECOVERY RATIO, SERIES (SERR).** The difference between the dry-bulb air temperatures leaving the *series energy recovery* unit and leaving the dehumidifying coil divided by the difference between 75°F (24°C) and the dry-bulb temperature of the air leaving the dehumidifying cooling coil.

**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*.

**ENERGY STORAGE SYSTEM (ESS).** One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time.

**ENERGY USE INTENSITY (EUI).** The metric indicating the total amount of energy consumed by a *building* in 1 year divided by the gross floor area of the *building*.

**ENTHALPY RECOVERY RATIO (ERR).** Change in the enthalpy of the outdoor air supply divided by the difference between the outdoor air and entering exhaust air enthalpy, expressed as a percentage.

**ENTRANCE DOOR.** A vertical *fenestration* product used for occupant ingress, egress and access in nonresidential buildings, including, but not limited to, exterior entrances utilizing latching hardware and *automatic* closers and containing over 50 percent glazing specifically designed to withstand heavy-duty usage.

**EQUIPMENT ROOM.** A space that contains either electrical equipment, mechanical equipment, machinery, water pumps or hydraulic pumps that are a function of the building's services.

**EXISTING BUILDING.** A *building* that is legally occupied and/or for which a *certificate of occupancy* authorizing its use(s) has been issued, without regard to the date on which such legal occupancy began or the date on which such *certificate of occupancy* was issued.

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

**EXTERIOR WALL ENVELOPE.** A system or assembly of exterior wall components, including exterior wall finish materials, that provides protection of the building structural members, including framing and sheathing materials, and conditioned interior space from the detrimental effects of the exterior environment.

**FAN, EMBEDDED.** A fan that is part of a manufactured assembly where the assembly includes functions other than air movement.

**FAN ARRAY.** Multiple fans in parallel between two plenum sections in an air distribution system.

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

**FAN ELECTRICAL INPUT POWER.** The electrical input power in kilowatts required to operate an individual fan or *fan array* at design conditions. It includes the power consumption of motor controllers, where present.

**FAN ENERGY INDEX (FEI).** The ratio of the electric input power of a reference fan to the electric input power of the actual fan as calculated in accordance with AMCA 208.

**FAN NAMEPLATE ELECTRICAL INPUT POWER.** The nominal electrical input power rating stamped on a fan assembly nameplate.

**FAN SYSTEM.** All the fans that contribute to the movement of air serving spaces that pass through a point of a common *duct*, plenum or cabinet.

**FAN SYSTEM, COMPLEX.** A *fan system* that combines a *single-cabinet fan system* with other supply fans, exhaust fans or both.

**FAN SYSTEM, EXHAUST OR RELIEF.** A *fan system* dedicated to the removal of air from interior spaces to the outdoors.

**FAN SYSTEM, RETURN.** A *fan system* dedicated to removing air from the interior where some or all the air is to be recirculated except during economizer operation.

**FAN SYSTEM, SINGLE-CABINET.** A fan system that supplies air to a space and recirculates the air, wherein a single cabinet houses a single fan, a single *fan array*, a single set of fans operating in parallel or fans or fan arrays in series.

**FAN SYSTEM, TRANSFER.** A *fan system* that exclusively moves air from one occupied space to another.

**FAN SYSTEM AIRFLOW.** The sum of the airflow of all fans with *fan electrical input power* greater than 1 kW at *fan system design conditions*, excluding the airflow that passes through downstream fans with *fan electrical input power* less than 1 kW.

**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 spaces* 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, other than during *air economizer* operation.

**FAN SYSTEM ELECTRICAL INPUT POWER.** The sum of the fan electrical power 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 spaces* and/or return it to the source or exhaust it to the outdoors.

**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 spaces* and return it to the source or exhaust it to the outdoors.

**FAULT DETECTION AND DIAGNOSTICS (FDD) SYSTEM.** A software platform that utilizes building analytic algorithms to convert data provided by sensors and devices to automatically identify faults in building systems and provide a prioritized list of actionable resolutions to those faults based on cost or energy avoidance, comfort and maintenance impact.

**FENESTRATION.** Products classified as either *skylights* or *vertical fenestration*.

**Skylights.** Glass units or other transparent or translucent glazing material installed at a slope of less than 60 degrees (1.05 rad) from horizontal, including unit skylights, tubular daylighting devices and glazing materials in solariums, sunrooms, roofs, greenhouses and sloped walls. A skylight includes the glazing assembly plus perimeter framing components.

**Vertical Fenestration.** Windows units that are fixed or operable, doors that are more than half glazed, glazed block and combination opaque and glazed doors composed of glass or other transparent or translucent glazing materials and installed at a slope of not less than 60 degrees (1.05 rad) from horizontal.

**FENESTRATION PRODUCT, FIELD-FABRICATED.** A fenestration product whose frame is made at the construction site of standard dimensional lumber or other materials that were not previously cut or otherwise formed with the specific intention of being used to fabricate a fenestration product or exterior door. Field-fabricated does not include site-built fenestration.

**FENESTRATION PRODUCT, SITE-BUILT.** A *fenestration* designed to be made up of field-glazed or field-assembled units using specific factory cut or otherwise factory-formed framing and glazing units. Examples of site-built fenestration include *storefront* systems, *curtain walls* and atrium roof systems.

**F-FACTOR.** The perimeter heat loss factor per unit perimeter length of slab-on-grade floors (Btu/h × ft × °F) [W/(m × K)].

**FINANCIAL RENEWABLE ENERGY POWER PURCHASE AGREEMENT.** A financial arrangement between a renewable electricity generator and a purchaser wherein the purchaser pays or guarantees a price to the generator for the project's renewable generation. Also known as a "financial power purchase agreement" and "virtual power purchase agreement."

**FLOOR AREA, NET.** The actual occupied area not including unoccupied accessory areas such as corridors, stairways, toilet rooms, mechanical rooms and closets.

**FUEL GAS.** A natural gas, manufactured gas, liquified petroleum gas or a mixture of these.

**FUEL OIL.** Kerosene or any hydrocarbon oil having a flash point not less than 100°F (38°C).

**GENERAL LIGHTING.** Interior lighting that provides a substantially uniform level of illumination throughout a space.

**GRADE, ENERGY FINISHED.** The final top surface of lawns, walks, driveways, areaways or other non-vertical surfaces where the surface meets the foundation, slab edge or exterior wall of a building.

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

**GREEN RETAIL TARIFF.** An electricity-rate structure qualified under applicable statutes or rules contracted by an electricity service provider to the building project owner to provide electricity generated with 100 percent *renewable energy resources* without the purchase of unbundled renewable energy certificates (RECs).

**GREENHOUSE.** A structure or a thermally isolated area of a *building* that maintains a specialized sunlit environment with a skylight roof ratio of 50 percent or more above the growing area exclusively used for, and essential to, the cultivation, protection or maintenance of plants. *Greenhouses* are those that are erected for a period of 180 days or more.

**GROUP R.** *Buildings* or portions of *buildings* that contain any of the following occupancies as established in the *Building Code of New York State*:

1. Group R-1.
2. Group R-3 where located more than three stories in height above grade plane.
3. Group R-2 where located more than three stories in height above grade plane.
4. Group R-4 where located more than three stories in height above grade plane.

**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 SPEED DOOR.** A nonswinging door used primarily to facilitate vehicular access or material transportation, with a minimum opening rate of 32 inches (813 mm) per second, a minimum closing rate of 24 inches (610 mm) per second and that includes an automatic-closing device.

**HIGH-CAPACITY GAS-FIRED WATER HEATER.** Gas-fired instantaneous *water heaters* with a rated input greater than 200,000 Btu/h (58.6 kW) and not less than 4,000 Btu/h per gallon (310 W per liter) of stored water. Also, gas-fired storage *water heaters* with a rated input greater than 105,000 Btu/h (30.8 kW) and less than 4,000 Btu/h per gallon (310 W per liter) of stored water.

**HIGH-END TRIM.** A lighting control setting that limits the maximum power to individual luminaires or groups of luminaires in a space.

**HISTORIC BUILDING.** An *existing building* or structure that is any of the following:

1. Listed, or certified as eligible for listing, in the National Register of Historic Places or in the New York State Register of Historic Places.
2. Designated as historic under an applicable state or local law.
3. Certified as a contributing resource within a National Register-listed, State Register-listed, or locally designated historic district.

**HORTICULTURAL LIGHTING.** Electric lighting used for horticultural production, cultivation or maintenance.

**HUMIDISTATIC CONTROLS.** *Automatic* controls used to maintain humidity at a setpoint.

**HVAC TOTAL SYSTEM PERFORMANCE RATIO (HVAC TSPR).** The ratio of the sum of a building's annual heating and cooling load in thousands of Btus to the sum of annual site energy consumption of the building HVAC systems in thousands of BTU.

**IEC DESIGN H MOTOR.** An electric motor that meets all of the following:

1. It is an induction motor designed for use with three-phase power.
2. It contains a cage rotor.
3. It is capable of direct-on-line starting.
4. It has four, six or eight poles.
5. It is rated from 0.4 kW to 1600 kW at a frequency of 60 hertz.

**IEC DESIGN N MOTOR.** An electric motor that meets all of the following:

1. It is an induction motor designed for use with three-phase power.
2. It contains a cage rotor.
3. It is capable of direct-on-line starting.
4. It has two, four, six or eight poles.
5. It is rated from 0.4 kW to 1600 kW at a frequency of 60 hertz.

**INDOOR GROW.** A space, other than a *greenhouse*, used exclusively for and essential to horticultural production, cultivation or maintenance.

**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.

**INFORMATION TECHNOLOGY EQUIPMENT (ITE).** Items including computers, data storage devices, servers and network and communication equipment.

**INTEGRATED HVAC SYSTEM.** An HVAC system designed to handle both sensible and latent heat removal. *Integrated HVAC systems* include, but are not limited to, HVAC systems with a sensible heat ratio of 0.65 or less and the capability of providing cooling, dedicated outdoor air systems, single-package air conditioners with at least one refrigerant circuit providing hot gas reheat, and *dehumidifiers* modified to allow external heat rejection.

**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 equipment.

**INTEGRATED SEASONAL COEFFICIENT OF PERFORMANCE (ISCOP).** A seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the two COP values for the heating season of a DX-DOAS unit water or air source heat pump, expressed in W/W.

**INTEGRATED SEASONAL MOISTURE REMOVAL EFFICIENCY (ISMRE).** A seasonal efficiency number that is a combined value based on the formula listed in AHRI Standard 920 of the four dehumidification moisture removal efficiency (MRE) ratings required for DX-DOAS units, expressed in lb of moisture/kWh.

**INTERNAL CURTAIN SYSTEM.** A system consisting of movable panels of fabric or plastic film used to cover and uncover the space enclosed in a *greenhouse* on a daily basis.

**ISOLATION DEVICES.** Devices that isolate HVAC *zones* so that they can be operated independently of one another. *Isolation devices* include separate systems, isolation dampers and controls providing shutoff at terminal boxes.

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

**LARGE-DIAMETER CEILING FAN.** A ceiling fan that is greater than or equal to 84<sup>1</sup>/<sub>2</sub> inches (2.15 m) in diameter. These fans are some-times referred to as High-Volume, Low-Speed (HVLS) fans.

**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.

**LIQUID FUEL.** A fuel oil or biodiesel blend.

**LINEAR THERMAL BRIDGE.** See "Thermal Bridge".

**LINER SYSTEM (Ls).** A system that includes the following:

1. A continuous vapor barrier liner membrane that is installed below the purlins and that is uninterrupted by framing members.
2. An uncompressed, unfaced insulation resting on top of the liner membrane and located between the purlins.

For multilayer installations, the last rated *R*-value of insulation is for unfaced insulation draped over purlins and then compressed when the metal roof panels are attached.

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

**LOW-VOLTAGE DRY-TYPE DISTRIBUTION TRANSFORMER.** A transformer that is air-cooled, does not use oil as a coolant, has an input voltage less than or equal to 600 volts and is rated for operation at a frequency of 60 hertz.

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

**MOISTURE REMOVAL EFFICIENCY (MRE).** A ratio of the moisture removal capacity in pounds of moisture per hour to the power input values in kilowatts at any given set of standard rating conditions expressed in lb of moisture/kWh.

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

**NEMA DESIGN A MOTOR.** A squirrel-cage motor that meets all of the following:

1. It is designed to withstand full-voltage starting and develop locked-rotor torque as shown in paragraph 12.38.1 of NEMA MG 1.
2. It has pull-up torque not less than the values shown in paragraph 12.40.1 of NEMA MG 1.
3. It has breakdown torque not less than the values shown in paragraph 12.39.1 of NEMA MG 1.
4. It has a locked-rotor current higher than the values shown in paragraph 12.35.1 of NEMA MG 1 for 60 hertz and paragraph 12.35.2 of NEMA MG 1 for 50 hertz.
5. It has a slip at rated load of less than 5 percent for motors with fewer than 10 poles.

**NEMA DESIGN B MOTOR.** A squirrel-cage motor that meets all of the following:

1. It is designed to withstand full-voltage starting.
2. It develops locked-rotor, breakdown and pull-up torques adequate for general application as specified in Sections 12.38, 12.39 and 12.40 of NEMA MG1.
3. It draws locked-rotor current not to exceed the values shown in Section 12.35.1 for 60 hertz and Section 12.35.2 for 50 hertz of NEMA MG1.
4. It has a slip at rated load of less than 5 percent for motors with fewer than 10 poles.

**NEMA DESIGN C MOTOR.** A squirrel-cage motor that meets all of the following:

1. Designed to withstand full-voltage starting and develop locked-rotor torque for high-torque applications up to the values shown in paragraph 12.38.2 of NEMA MG1 (incorporated by reference, see A§431.15).
2. It has pull-up torque not less than the values shown in paragraph 12.40.2 of NEMA MG1.
3. It has breakdown torque not less than the values shown in paragraph 12.39.2 of NEMA MG1.
4. It has a locked-rotor current not to exceed the values shown in paragraph 12.35.1 of NEMA MG1 for 60 hertz and paragraph 12.35.2 for 50 hertz.
5. It has a slip at rated load of less than 5 percent.

**NETWORKED GUESTROOM CONTROL SYSTEM.** A control system, with access from the front desk or other central location associated with a *Group R-1 building*, that is capable of identifying the rented and unrented status of each guestroom according to a timed schedule, and is capable of controlling HVAC in each hotel and motel guestroom separately.

**NONSTANDARD 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.

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

**OCCUPIED-STANDBY MODE.** Mode of operation when an HVAC *zone* is scheduled to be occupied and an occupant sensor indicates no occupants are within the zone.

**ON-SITE RENEWABLE ENERGY.** Energy from *renewable energy resources* harvested at the *building site*.

**OPAQUE DOOR.** A door that is not less than 50 percent opaque in surface area.

**OWNER.** Any person, agent, operator, entity, firm or corporation having any legal or equitable interest in the property; or recorded in the official records of the state, county or municipality as holding an interest or title to the property; or otherwise having possession or control of the property, including the guardian of the estate of any such person, and the executor or administrator of the estate of such person if ordered to take possession of real property by a court.

**PARKING AREA, EXTERIOR.** Parking spaces, drive aisles and ramps that are not located within a *building*, or that are located on a roof.

**PARKING AREA, INTERIOR.** Parking spaces, drive aisles and ramps located within a *building*.

**PARKING GARAGE SECTION.** A part of an enclosed parking garage that is separated from all other parts of the garage by full-height solid walls or operable openings that are intended to remain closed during normal operation and where vehicles cannot pass to other parts of the garage. A parking garage can have one or more *parking garage sections*, and *parking garage sections* can include multiple floors.

**PHOTOSYNTHETIC PHOTON EFFICACY (PPE).** Photosynthetic photon flux emitted by a light source divided by its electrical input power in units of micromoles per second per watt, or micromoles per joule ( $\mu\text{mol}/\text{J}$ ) between 400–700nm as defined by ANSI/ASABE S640.

**PHYSICAL RENEWABLE ENERGY POWER PURCHASE AGREEMENT.** A contract for the purchase of renewable electricity from a specific renewable electricity generator to a purchaser of renewable electricity.

**POINT THERMAL BRIDGE.** See “Thermal Bridge”.

**POWERED ROOF/WALL VENTILATORS.** A fan consisting of a centrifugal or axial impeller with an integral driver in a weather-resistant housing and with a base designed to fit, usually by means of a curb, over a wall or roof opening.

**PROCESS APPLICATION.** A manufacturing, industrial or commercial procedure or activity where the primary purpose is other than conditioning spaces and maintaining comfort and amenities for the occupants of a building.

**PRE-ENGINEERED METAL BUILDING.** A pre-engineered metal building (PEMB) is a structure where the steel components—primary framing, secondary framing, and cladding—are designed and manufactured in a factory according to specific project requirements and then shipped to the construction site for assembly.

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

**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 107 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.

**PROPOSED DESIGN.** A description of the proposed building used to estimate annual energy use for determining compliance based on *simulated building performance* and HVAC total system performance ratio.

**PSI-FACTOR ( $\psi$ -FACTOR).** See “Thermal Bridge”.

**PUMP ENERGY INDEX (PEI).** The ratio of a pump’s energy rating divided by the energy rating of a minimally compliant pump. For pumps with the constant load operating mode, the relevant PEI is PEI<sub>CL</sub>. For pumps with the variable load operating mode, the relevant PEI is PEI<sub>VL</sub>.

**PURCHASED ENERGY.** Energy or power purchased for consumption and delivered to the building site.

**RADIANT HEATING SYSTEM.** A heating system that transfers heat to objects and surfaces within a *conditioned space*, primarily by infrared radiation.

**READY ACCESS (TO).** That which enables a device, appliance or equipment to be directly reached without requiring the removal or movement of any panel or similar obstruction.

**REFRIGERANT DEW POINT.** The refrigerant vapor saturation temperature at a specified pressure.

**REFRIGERATED WAREHOUSE COOLER.** An enclosed storage space capable of being refrigerated to temperatures above 32°F (0°C) that can be walked into and has a total chilled storage area of not less than 3,000 square feet (279 m<sup>2</sup>).

**REFRIGERATED WAREHOUSE FREEZER.** An enclosed storage space capable of being refrigerated to temperatures at or below 32°F (0°C) that can be walked into and has a total chilled storage area of not less than 3,000 square feet (279 m<sup>2</sup>).

**REFRIGERATION SYSTEM, LOW TEMPERATURE.** Systems for maintaining food product in a frozen state in refrigeration applications.

**REFRIGERATION SYSTEM, MEDIUM TEMPERATURE.** Systems for maintaining food product above freezing in refrigeration applications.

**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 CERTIFICATE (REC).** A market-based instrument that represents and conveys the environmental, social and other nonpower attributes of 1 megawatt hour of renewable electricity generation and could be sold separately from the underlying physical electricity associated with *renewable energy resources*, also known as energy attribute and energy attribute certificate (EAC).

**RENEWABLE ENERGY INVESTMENT FUND (REIF).** A fund established by a jurisdiction to accept payment from building project owners to construct or acquire interests in qualifying renewable energy systems, together with their associated RECs, on the building project owners' behalf.

**RENEWABLE ENERGY RESOURCES.** Energy derived from solar radiation, wind, waves, tides, *biomass waste* or extracted from hot fluid or steam heated within the earth.

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

**REROOFING.** The process of recovering or replacing an existing roof covering. See "*Roof recover*" and "*Roof replacement*."

**RESIDENTIAL BUILDING.** For this code, includes the following:

1. Detached one- and two-family dwellings and *townhouses* having not more than three stories above grade plane.
2. Buildings that are classified in accordance with Chapter 3 of the *Building Code of New York State* as Group R-2, R-3 or R-4 having not more than three stories above grade plane.
3. Factory manufactured homes [as defined in Section 372(8) of the New York State Executive Law].

**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.

**ROOF, LOW SLOPE.** A roof slope less than 2 units vertical in 12 units horizontal (17 percent slope).

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

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

**ROOF REPLACEMENT.** An *alteration* that includes the removal of any existing layer of roof material and installing new replacement material(s) above the existing roof deck.

**ROOFTOP MONITOR.** A raised section of a roof containing vertical *fenestration* along one or more sides.

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

**SATURATED CONDENSING TEMPERATURE.** The saturation temperature corresponding to the measured refrigerant pressure at the condenser inlet for single component and azeotropic refrigerants, and the arithmetic average of the dew point and *bubble point* temperatures corresponding to the refrigerant pressure at the condenser entrance for zeotropic refrigerants.

**SENSIBLE ENERGY RECOVERY RATIO.** Change in the dry-bulb temperature of the outdoor air supply divided by the difference between the outdoor air and entering exhaust air dry-bulb temperatures, expressed as a percentage.

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

**SIMULATED BUILDING PERFORMANCE.** A process in which the proposed building design is compared to a *standard reference design* for the purposes of estimating relative energy use against a baseline to determine code compliance.

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

**SLEEPING UNIT.** A single unit that provides rooms or spaces for one or more persons, includes permanent provisions for sleeping and can include provisions for living, eating, and either sanitation or kitchen facilities but not both. Such rooms and spaces that are part of a *dwelling unit* are not *sleeping units*.

**SMALL ELECTRIC MOTOR.** A general purpose alternating-current single-speed induction motor.

**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 that is then reradiated, conducted or convected into the space.

**SPANDREL PANEL.** An opaque assembly within a fenestration framing system in a wall that is part of the building thermal envelope. Such panels are considered to be a portion of the opaque thermal envelope assembly.

**STOREFRONT.** A 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*, with or without mullied windows and doors.

**STORY.** The portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. See the definitions of “Basement or Cellar, Energy Code and “Grade plane, Energy Code.” A story 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.

**STORY ABOVE GRADE PLANE.** Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is:

1. More than 6 feet (1829 mm) above average grade plane; or
2. More than 12 feet (3658 mm) above the finished ground level at any point.

**SUBSTANTIAL IMPROVEMENT.** Any *repair*, rehabilitation, *alteration*, *addition* or other improvement of a *building* or structure, the cost of which equals or is more than 50 percent of the *market value* of the *building* or structure before the improvement. The cost of improvements to a *building* to correct health, sanitary or safety code violations issued by the *building official* does not need to be included in the calculation of *market value*.

**SUBSTANTIALLY COMPLETE BUILDING PERMIT APPLICATION.** A building permit application that, in the opinion of the authority having jurisdiction, includes sufficient information and documentation required by the stricter of either the authority having jurisdiction's Code Enforcement Program or the requirements set forth in 19 NYCRR Part 1203, such that the authority having jurisdiction can examine the application and make a determination as to whether the proposed work is in conformance with the requirements of the Uniform Code and Energy Code.

**TESTING UNIT ENCLOSURE AREA.** The sum of the area of all the boundary surfaces that define the *dwelling unit*, *sleeping unit* or enclosed *conditioned space*, including ceiling, floor and all side walls. This does not include interior partition walls within the *dwelling unit*, *sleeping unit* or enclosed *conditioned space*. Wall height shall be measured from the finished floor of the *conditioned space* to the finished floor or roof/ceiling *air barrier* above.

**THERMAL BLOCK.** A generic concept used in energy simulation. It can include one or more thermal zones. It represents a whole *building* or portion of a *building* with the same use type served by the same HVAC system type.

**THERMAL BREAK DEVICE.** A pre-manufactured, load-bearing building component composed of multiple materials of differing thermal conductivities (e.g., steel, insulation, fiber-reinforced polymers) designed to structurally connect building elements while reducing thermal bridging. The thermal transmittance (U-value) or equivalent thermal conductivity ( $\lambda_{eq}$ ) of such elements shall be determined using physical testing in accordance with ASTM C1363 or an approved equivalent calculation method. The calculated performance (U-value or equivalent thermal conductivity) shall include the effects of all embedded components through psi- or chi-value calculation methods.

**THERMAL BRIDGE.** An element or interface of elements that has higher thermal conductivity than the surrounding building thermal envelope, which creates a path of least resistance for heat transfer.

**CHI-FACTOR ( $\chi$ -FACTOR).** The heat loss factor for a single thermal bridge characterized as a point element of a building thermal envelope (Btu/h x °F) [W/K].

**CLEAR FIELD THERMAL BRIDGE.** Elements of a building envelope assembly creating paths of decreased resistance for heat transfer which repeat at regular intervals, such as metal or wood studs, girts, and purlins.

**CLEAR FIELD U-FACTOR.** Thermal performance factor that accounts for clear field thermal bridge.

**LINEAR THERMAL BRIDGE.** a length-based element associated with horizontal, vertical, or diagonal elements that penetrates the insulation in the building thermal envelope and with a length measured along an exterior surface of the building thermal envelope, such as balconies, parapet, roof, floor, or fenestration intersections, and shelf angles.

**POINT THERMAL BRIDGE.** An element that penetrates the insulation in the building thermal envelope, such as columns or beams passing through envelope assemblies, attachments, anchors, and connections not defined as clear field- or linear thermal bridges. The cross-sectional area is measured at the external surface of the outermost penetrated insulation layer.

**PSI-FACTOR ( $\psi$ -FACTOR).** The heat loss factor per unit length of a thermal bridge characterized as a linear element of a building thermal envelope (Btu/h x ft x °F) [W/(m x K)].

**THERMAL DISTRIBUTION EFFICIENCY (TDE).** The resistance to changes in air heat as air is conveyed through a distance of air *duct*. TDE is a heat loss calculation evaluating the difference in the heat of the air between the air duct inlet and outlet caused by differences in temperatures between the air in the *duct* and the duct material. TDE is expressed as a percent difference between the inlet and outlet heat in the *duct*.

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

**TIME-SWITCH CONTROL.** An *automatic* control device or system that controls lighting or other loads, including switching off, based on time schedules.

**TOWNHOUSE, OR TOWNHOUSE UNIT.** A single-family *dwelling unit* constructed in a group of three or more attached units in which each unit:

1. Extends from the foundation to roof.
2. Has open space on at least two sides.
3. Has a separate means of egress.

**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 $\times$  ft<sup>2</sup>  $\times$  °F) [W/(m<sup>2</sup>  $\times$  K)].

**VARIABLE REFRIGERANT FLOW SYSTEM.** An engineered direct-expansion (DX) refrigerant system that incorporates a common *condensing unit*, at least one variable-capacity compressor, a distributed refrigerant piping network to multiple indoor fan heating and cooling units each capable of individual zone temperature control, through integral zone temperature control devices and a common communications network. Variable refrigerant flow utilizes three or more steps of control on common interconnecting piping.

**VEGETATIVE ROOF.** An assembly of interacting components designed to waterproof a building's top surface that includes, by design, vegetation and related landscape elements.

**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).** The ratio of visible light entering the space through the fenestration product assembly to the incident visible light. Visible transmittance includes the effects of glazing material and frame and is expressed as a number between 0 and 1.

**VISIBLE TRANSMITTANCE, ANNUAL (VT<sub>annual</sub>).** The ratio of visible light entering the space through the fenestration product assembly to the incident visible light during the course of a year, which includes the effects of glazing material, frame, and light well or tubular conduit, and is expressed as a number between 0 and 1.

**VOLTAGE DROP.** A decrease in voltage caused by losses in the wiring systems that connect the power source to the load.

**WALK-IN COOLER.** An enclosed storage space capable of being refrigerated to temperatures above 32°F (0°C) and less than 55°F (12.8°C) that can be walked into, has a ceiling height of not less than 7 feet (2134 mm) and has a total chilled storage area of less than 3,000 square feet (279 m<sup>2</sup>).

**WALK-IN FREEZER.** An enclosed storage space capable of being refrigerated to temperatures at or below 32°F (0°C) that can be walked into, has a ceiling height of not less than 7 feet (2134 mm) and has a total chilled storage area of less than 3,000 square feet (279 m<sup>2</sup>).

**WALL, ABOVE-GRADE.** A wall associated with the building thermal envelope that is more than 15 percent of the total surface area above adjoining grade plane and is on the exterior of the building or any wall that is associated with the building thermal envelope that is not on the exterior of the building. This includes, but is not limited to, areaways below grade, between-floor spandrels, peripheral edges of floors, roof knee walls, dormer walls, gable end walls, walls enclosing a mansard roof, mechanical equipment penetrations and skylight shafts.

**WALL, BELOW-GRADE.** A wall associated with the basement or first story of the building that is part of the building thermal envelope, has not less than 85 percent of the total surface area below adjoining grade and is on the exterior of the building.

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

**WORK AREA.** That portion or portions of a *building* consisting of all reconfigured spaces as indicated on the *construction documents*. *Work area* excludes other portions of the *building* where incidental work entailed by the intended work must be performed and portions of the building where work not initially intended by the *owner* is specifically required by this code.

**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.