

CHAPTER 1

ADMINISTRATION AND ENFORCEMENT

There are no margin bars shown in this chapter due to its substantial revision.

SECTION 101 SCOPE AND GENERAL REQUIREMENTS

101.1 Title. These provisions shall be known as the *Energy Conservation Construction Code of New York State* and shall be cited as such. It is referred to herein as “this code.”

101.2 Scope. This code applies to residential and commercial buildings, and to buildings regulated by the *Residential Code of New York State*.

101.2.1 City of New York. When within the jurisdiction of the City of New York, Counties of New York, Kings, Queens, Bronx and Richmond, the following shall apply:

1. For determination of occupancy classification and use within this code, a comparable occupancy classification may be made to the *Building Code of the City of New York*.
2. Where reference is made within this code to codes referenced in the *Uniform Fire Prevention and Building Code*, the reference shall be deemed to be to the respective *Building and Electrical Codes of the City of New York*.

101.3 Intent. This code shall regulate the design and construction of buildings for the effective use of energy. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the effective use of energy. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes, laws or regulations.

101.4 Applicability.

101.4.1 Construction. New construction shall conform to the provisions of this code.

101.4.2 Existing buildings. Except as specified in this chapter, this code shall not be used to require the removal, alteration or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system lawfully in existence at the time of adoption of this code.

101.4.3 Historic buildings. Any building or structure that is listed in the State or National Register of Historic Places; designated as an historic property under local or state designation law or survey; certified as a contributing resource within a National Register listed or locally designated historic district; or with an opinion or certification that the property is eligible to be listed on the National or State Registers of Historic Places, either individually or as a contributing building to a historic district by the State Historic Preservation Officer or the Keeper of the National Register of Historic Places, are exempt from this code.

101.4.4 Additions and Alterations. Additions and alterations shall conform with Sections 101.4.4.1 through 101.4.4.3.

101.4.4.1 Additions. Additions shall conform to the provisions of this code as they relate to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Additions shall not create an unsafe or hazardous condition or overload existing building systems.

101.4.4.2 Substantial alterations. Where 50 percent or more of a building system or subsystem, measured in units appropriate to that system, is replaced within any twelve month period, that portion of the system or subsystem shall conform with the provisions of this code as they relate to new construction. Substantial alterations shall not create an unsafe or hazardous condition or overload existing building systems or subsystems.

Exceptions: The following need not comply, provided the energy use of the building is not increased.

1. Storm windows installed over existing fenestration.
2. Glass only replacements in an existing sash and frame.
3. Existing ceiling, wall or floor cavities exposed during construction, provided that these cavities are filled with insulation.
4. Construction where the existing roof, wall or floor cavity is not exposed.

101.4.4.3 Other alterations. Where less than 50 percent of a building system or subsystem, measured in units appropriate to that system, is replaced or repaired within any twelve month period, alterations to that portion of the system shall not create an unsafe or hazardous condition or overload existing building systems or subsystems.

101.4.5 Mixed occupancy. Where a building includes both residential and commercial occupancies, each occupancy shall be separately considered and meet the applicable provisions of Chapter 4 for residential occupancies and Chapter 8 for commercial occupancies.

101.5 Compliance. Residential buildings shall meet the provisions of Chapter 4. Commercial buildings shall meet the provisions of Chapter 8.

101.5.1 Compliance materials. Compliance can be determined through the use of computer software developed by the United States Department of Energy (DOE) that has an allowance for HVAC tradeoffs, worksheets/compliance material based on this software and other building energy mod-

eling or home energy rating (HERS) software approved by the Secretary of State.

101.5.2 Exempt buildings. The provisions of this code shall not be applicable to buildings and building systems as provided in Sections 101.5.2.1 through 101.5.2.3.

101.5.2.1 Low energy buildings. The following buildings, or portions thereof, separated from the remainder of the building by building thermal envelope assemblies complying with this code shall be exempt from the thermal envelope provisions of this code.

1. Those with a peak design rate of energy usage less than 3.4 Btu/h per square foot (10.7 W/m²) or 1.0 watt per square foot (10.7 W/m²) of floor area for space conditioning purposes.
2. Those that do not contain conditioned space.

101.5.2.2 Renewable energy sources. The provisions of this code shall not be applicable to building systems which are demonstrated to derive energy solely from renewable energy sources.

101.5.2.3 Agricultural buildings. The provisions of this code shall not be applicable to nonresidential farm buildings, including barns, sheds, poultry houses and other buildings and equipment on the premises used directly and solely for agricultural purposes.

101.6 Other laws and regulations. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal laws and regulations.

**SECTION 102
MATERIALS, SYSTEMS AND EQUIPMENT**

102.1 Identification. Materials, systems and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code.

102.1.1 Building thermal envelope insulation. An *R*-value identification mark shall be applied by the manufacturer to each piece of building thermal envelope insulation 12 inches (305 mm) or greater in width. Alternately, the insulation installers shall provide a certification listing the type, manufacturer and *R*-value of insulation installed in each element of the building thermal envelope. For blown or sprayed insulation, the initial installed thickness, settled thickness, settled *R*-value, installed density, coverage area and number of bags installed shall be listed on the certification. The insulation installer shall sign, date and post the certification in a conspicuous location on the job site.

102.1.1.1 Blown or sprayed roof/ceiling insulation. The thickness of blown in or sprayed roof/ceiling insulation shall be written in inches (mm) on markers that are installed at least one for every 300 ft² (28 m²) throughout the attic space. The markers shall be affixed to the trusses or joists and marked with the minimum initial installed thickness with numbers a minimum of 1 inch (25 mm) in height. Each marker shall face the attic access opening.

102.1.2 Insulation mark installation. Insulating materials shall be installed such that the manufacturer's *R*-value mark is readily observable upon inspection.

102.1.3 Fenestration product rating. *U*-factors of fenestration products (windows, doors and skylights) shall be determined in accordance with NFRC 100 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled *U*-factor shall be assigned a default *U*-factor from Table 102.1.3(1) or 102.1.3(2). The solar heat gain coefficient (SHGC) of glazed fenestration products (windows, glazed doors and skylights) shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC shall be assigned a default SHGC from Table 102.1.3(3).

**TABLE 102.1.3(1)
DEFAULT GLAZED FENESTRATION *U*-FACTORS**

FRAME TYPE	SINGLE PANE	DOUBLE PANE	SKYLIGHT	
			Single	Double
Metal	1.20	0.80	2.00	1.30
Metal with Thermal Break	1.10	0.65	1.90	1.10
Nonmetal or Metal Clad	0.95	0.55	1.75	1.05
Glazed Block	0.60			

**TABLE 102.1.3(2)
DEFAULT DOOR U-FACTORS**

DOOR TYPE	U-FACTOR
Uninsulated Metal	1.20
Insulated Metal	0.60
Wood	0.50
Insulated, nonmetal edge, max 45% glazing, any glazing double pane	0.35

**TABLE 102.1.3(3)
DEFAULT GLAZED FENESTRATION SHGC**

SINGLE GLAZED		DOUBLE GLAZED		GLAZED BLOCK
Clear	Tinted	Clear	Tinted	
0.7	0.6	0.6	0.5	0.6

102.2 Installation. All materials, systems and equipment shall be installed in accordance with the manufacturer’s installation instructions and the *Building Code of New York State*.

102.2.1 Protection of exposed foundation insulation. Insulation applied to the exterior of basement walls, crawl-space walls and the perimeter of slab-on-grade floors shall have a rigid, opaque and weather-resistant protective covering to prevent the degradation of the insulation’s thermal performance. The protective covering shall cover the exposed exterior insulation and extend a minimum of 6 inches (153 mm) below grade.

102.3 Maintenance information. Maintenance instructions shall be furnished for equipment and systems that require preventive maintenance. Required regular maintenance actions shall be clearly stated and incorporated on a readily accessible label. The label shall include the title or publication number for the operation and maintenance manual for that particular model and type of product.

102.4 Electrical energy consumption. In all buildings having individual dwelling units, provisions shall be made to determine the electrical energy consumed by each tenant by separately metering individual dwelling units.

102.5 Fireplaces. Fireplaces shall be installed with tight-fitting noncombustible fireplace doors to control infiltration losses in the construction types listed:

1. Masonry fireplaces or fireplace units designed to allow an open burn.
2. Decorative appliances (ANSI Standard Z21.60 gas-log style unit) installed in vented solid fuel fireplaces.
3. Vented decorative gas fireplace appliances (ANSI Standard Z21.50 unit).

Fireplaces shall be provided with a source of combustion air as required by the fireplace construction provisions of the *Building Code of New York State*, the *Residential Code of New York State* or the *Building Code of the City of New York*, as applicable.

102.6 Transformers. Single-phase and three-phase dry-type and liquid-filled distribution transformers shall be selected based on rating prescribed in Sections 805.8.1 and 805.8.2.

**SECTION 103
ALTERNATE MATERIALS—METHOD
OF CONSTRUCTION, DESIGN
OR INSULATING SYSTEMS**

103.1 General. This code is not intended to prevent the use of any material, method of construction, design or insulating system not specifically prescribed herein, provided that such construction, design or insulating system has been approved by the code official as meeting the intent of this code.

An alternative material, design or method of construction shall be approved where the State Fire Prevention and Building Code Council finds that the proposed design complies with the intent of this code.

When within the jurisdiction of the City of New York, such construction, design or insulating system shall meet the intent of the *Building and Electrical Codes of the City of New York*.

103.1.1 Above code programs. The code official shall be permitted to deem a national, state or local energy efficiency program to exceed the energy efficiency required by this code. Buildings approved in writing by such an energy efficiency program shall be considered in compliance with this code.

**SECTION 104
CONSTRUCTION DOCUMENTS**

104.1 General. Construction documents and other supporting data submitted to the code official shall be prepared by a registered design professional as required by Articles 145 and 147 of the Education Law.

104.1.1 City of New York. When within the jurisdiction of the City of New York, refer to the *Building and Electrical Codes of the City of New York* for additional requirements.

104.2 Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documents are permitted to be submitted when approved by the code official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems and equipment as herein governed. Details shall include, but are not limited to, insulation materials and their R-values; fenestration U-factors and SHGCs; system and equipment efficiencies, types, sizes and controls; duct sealing, insulation and location; and air sealing details.

**SECTION 105
ADMINISTRATION AND ENFORCEMENT**

105.1 General. Administration and enforcement of the *Energy Conservation Construction Code of New York State* shall be in

accordance with local law, subject to the minimum requirements set forth in Part 1203 of Title 19 NYCRR.

105.1.1 City of New York. When within the jurisdiction of the City of New York, administration and enforcement shall be in conformance with additional City of New York requirements.

**SECTION 106
VALIDITY**

106.1 General. If a portion of this code is held to be illegal or void, such a decision shall not affect the validity of the remainder of this code.

**SECTION 107
REFERENCED STANDARDS**

107.1 General. The standards, and portions thereof, referred to in this code and listed in Chapter 10 shall be considered part of the requirements of this code to the extent of such reference.

107.2 Conflicting requirements. Where the provisions of this code and the referenced standards conflict, the provisions of this code shall take precedence.

NEW YORK STATE CODE
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