



**2016 SUPPLEMENT TO THE NEW YORK STATE
ENERGY CONSERVATION CONSTRUCTION CODE
(REVISED AUGUST 2016)**

Published by the New York State Department of State

Publication Date: August, 2016

© 2016 New York State Department of State

INTRODUCTION

The New York State Energy Conservation Construction Code (hereinafter referred to as the “Energy Code”) is promulgated pursuant to Article 11 of the New York State Energy Law.

The Energy Code is contained in Title 19 of the New York Codes, Rules and Regulations (NYCRR), Part 1240, and in the publications incorporated by reference in 19 NYCRR Part 1240. The publications incorporated by reference in 19 NYCRR Part 1240 include:

- the publication entitled “2015 International Energy Conservation Code” (Second Printing: May 2015) published by International Code Council, Inc. (hereinafter referred to as the “2015 IECC”);¹
- the publication entitled “ANSI / ASHRAE / IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings” (July 2014 Printing), published by American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc., July 2014 printing (hereinafter referred to as “ASHRAE 90.1-2013”);²
- this publication, entitled “2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016)” (Publication Date: August, 2016) published by the New York State Department of State (hereinafter referred to as the “2016 Energy Code Supplement”); and
- the other referenced standards mentioned and/or referred to in 19 NYCRR Part 1240.

The 2015 IECC includes two separate sets of provisions: the “IECC - Commercial Provisions” (hereinafter referred to as the “2015 IECC Commercial Provisions”) and the “IECC - Residential Provisions” (hereinafter referred to as the “2015 IECC Residential Provisions”).

¹ The date of first publication of the “2015 International Energy Conservation Code” was May 30, 2014. In this 2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016), the term “2015 IECC” refers to the “Second Printing” of the “2015 International Energy Conservation Code,” which was issued in May 2015.

² The First Printing of “ANSI / ASHRAE / IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings” was issued in October 2013. In this 2016 Supplement to the New York State Energy Conservation Construction Code (revised August 2016), the term “ASHRAE 90.1-2013” refers to July 2014 Printing of “ANSI / ASHRAE / IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings,” which is denoted by “7/14” on the back cover.

For the purposes of applying the 2015 IECC Commercial Provisions, ASHRAE 90.1-2013, and the 2015 IECC Residential Provisions in New York State:

- the 2015 IECC Commercial Provisions shall be deemed to be amended in the manner provided in Part 1 of this 2016 Energy Code Supplement,
- ASHRAE 90.1-2013 shall be deemed to be amended in the manner provided in Part 2 of this 2016 Energy Code Supplement, and
- the 2015 IECC Residential Provisions shall be deemed to be amended in the manner provided in Part 3 of this 2016 Energy Code Supplement.

The 2015 IECC Commercial Provisions, as amended in the manner provided in Part 1 of this 2016 Energy Code Supplement, are hereinafter referred to as the “2015 IECC Commercial Provisions (as amended).”

ASHRAE 90.1-2013, as amended in the manner provided in Part 2 of this 2016 Energy Code Supplement, is hereinafter referred to as the “ASHRAE 90.1-2013 (as amended).”

The 2015 IECC Residential Provisions, as amended in the manner provided in Part 3 of this 2016 Energy Code Supplement, are hereinafter referred to as the “2015 IECC Residential Provisions (as amended).”

NOTE REGARDING BUILDINGS THAT ARE “SUBJECT TO THE NEW YORK CITY CONSTRUCTION CODES”

In general, the State Uniform Fire Prevention and Building Code (“Uniform Code”) applies to buildings in all parts of New York State except New York City. However, the Uniform Code also applies to buildings that are (1) located in New York City and (2) in the custody of a State agency.

In general, the New York City Construction Codes apply to buildings located in New York City. However, the New York City Building Codes do not apply to buildings that are (1) located in New York City and (2) in the custody of a State agency are subject to the Uniform Code.

This 2016 Energy Code Supplement includes several sections that refer to buildings that are “subject to the New York City Construction Codes.” Such buildings include building that are located in New York City excluding, however, those buildings that are in the custody of a State agency.

NOTE REGARDING 2015 I-CODES

Several provisions in this 2016 Energy Code Supplement refer to the 2015 International Building Code, the 2015 International Fire Code, the 2015 International Fuel Gas Code, the 2015 International Mechanical Code, the 2015 International Plumbing Code, the 2015 International Property Maintenance Code, and the 2015 International Residential Code (collectively, the “2015 I-Codes”). The date of first publication of each I-Code was May 30, 2014. However, references in this 2016 Energy Code Supplement to the I-Codes are references to later printings of the I-Codes. Specifically:

- References to the “2015 International Building Code” are references to the “Third Printing” of that publication, which was issued in October 2015;
- References to the “2015 International Building Code (as amended)” are references to the “Third Printing” of that publication, as amended by the publication entitled “2016 Uniform Code Supplement” (publication date: March 2016) published by the New York State Department of State (hereinafter referred to as the “2016 Uniform Code Supplement”);
- References to the “2015 International Fire Code” are references to the “Third Printing” of that publication, which was issued in June 2015;
- References to the “2015 International Fire Code (as amended)” are references to the “Third Printing” of that publication, as amended by the 2016 Uniform Code Supplement;
- References to the “2015 International Fuel Gas Code” are references to the “Third Printing” of that publication, which was issued in June 2015;
- References to the “2015 International Fuel Gas Code (as amended)” are references to the “Third Printing” of that publication, as amended by the 2016 Uniform Code Supplement;
- References to the “2015 International Mechanical Code” are references to the “Third Printing” of that publication, which was issued in November 2015;
- References to the “2015 International Mechanical Code (as amended)” are references to the “Third Printing” of that publication, as amended by the 2016 Uniform Code Supplement;
- References to the “2015 International Plumbing Code” are references to the “Third Printing” of that publication, which was issued in August 2015;
- References to the “2015 International Plumbing Code (as amended)” are references to the “Third Printing” of that publication, as amended by the 2016 Uniform Code Supplement;
- References to the “2015 International Property Maintenance Code” are references to the “Fourth Printing” of that publication, which was issued in December 2015;
- References to the “2015 International Property Maintenance Code (as amended)” are references to the “Third Printing” of that publication, as amended by the 2016 Uniform Code Supplement;
- References to the “2015 International Residential Code” are references to the “Second Printing” of that publication, which was issued in January 2016; and
- References to the “2015 International Residential Code (as amended)” are references to the “Second Printing” of that publication, as amended by the 2016 Uniform Code Supplement.

TABLE OF CONTENTS

INTRODUCTION	i
TABLE OF CONTENTS.....	iv
PART 1. AMENDMENTS TO 2015 IECC COMMERCIAL PROVISIONS	1
1.1. References in the 2015 IECC Commercial Provisions to “this code.”	1
1.2. References in the 2015 IECC Commercial Provisions to Sections or Tables.	1
1.3. References in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IESNA 90.1,” “ASHRAE 90.1,” or “ANSI/ASHRAE/IESNA.”	1
1.4. References in the 2015 IECC Commercial Provisions to the “ <i>International Mechanical Code</i> .”	2
1.5. Amendment and Restatement of Chapter 1 [CE] of the 2015 IECC Commercial Provisions	2
1.6. Amendments to Section C201.3 (Terms defined in other codes).....	17
1.7. Amendments to Section C202 (General Definitions).	17
1.8. Amendments to Section C303.2 (Installation).	21
1.9. Amendments to Section C401.2 (Application).	21
1.10. Addition of new Section C402.2.7 (Fireplaces).	22
1.11. Amendments to Table C402.4 (Building envelope fenestration maximum U-factor and SHGC requirements).	23
1.12. Amendments to Section C402.4.2 (Minimum skylight fenestration area), Exception 5.....	23
1.13. Amendments to Section C402.5.3 (Rooms containing fuel-burning appliances), Exception 2.....	24
1.14. Amendments to Section C501.4 (Compliance).	24
1.15. Amendments to Section C501.6 (Historic buildings).	24
1.16. Addition of new Section C501.7 (Compliance alternative).	25
1.17. Amendments to the “ICC” section of Chapter 6 (Referenced Standards).	25
1.18. Amendments to the “ASHRAE” section of Chapter 6 (Referenced Standards).	26
1.19. Unaffected Commercial Provisions.	27
PART 2. AMENDMENTS TO ASHRAE 90.1-2013	28
2.1. Amendments to Section 3.2 (Definitions).....	28
2.2. Amendment to Section 4.2.1.1 (New Buildings)	29
2.3. Amendments to Section 4.2.1.3 (Alterations of existing buildings).....	30
2.4. Amendment to Table 6.8.1-9 (Electrically Operated VRF Air Conditioners).....	30
2.5. Amendment to Section 8.4.1 (Voltage drop of feeders and branch circuits).....	31
2.6. Amendment to Appendix G	31
2.7. Unaffected ASHRAE 90.1-2103 Provisions.	31
PART 3. AMENDMENTS TO THE 2015 IECC RESIDENTIAL PROVISIONS	32
3.1. References in the 2015 IECC Residential Provisions to “this code.”	32
3.2. References in the 2015 IECC Residential Provisions to Sections or Tables.....	32

3.3. Amendment and Restatement of Chapter 1 [RE] of the 2015 IECC Residential Provisions.....	33
3.4. Amendments to Section R201.3 (Terms defined in other codes).....	47
3.5. Amendments to Section R202 (General Definitions).	47
3.6. Amendments to Section R303.2 (Installation).	51
3.7. Amendments to Section R402.1 (General (Prescriptive)), Section R402.1.1 (Vapor retarder), and Section R402.1.2 (Insulation and fenestration criteria).....	51
3.8. Amendments to Table R402.1.2 (Insulation and Fenestration Requirements by Component).	52
3.9. Amendments to Section R402.2.11 (Crawl space walls).....	53
3.10. Amendments to Section R402.4 (Air leakage (Mandatory)).....	53
3.11. Amendments to Section R402.4.1.2 (Testing).	53
3.12. Addition of new Section R402.4.1.3 (Optional testing procedure for buildings with two or more dwelling units within the <i>building thermal envelope</i>) and new Section R402.4.1.3.1 (Buildings with seven or more dwelling units).	55
3.13. Amendments to Section R402.4.2 (Fireplaces).	57
3.14. Addition of new Section R402.4.6 (Tenant separation walls (Mandatory)).	57
3.15. Amendments to Section R403.3.2 (Sealing (Mandatory)).	58
3.16. Amendments to Section R403.6 (Mechanical ventilation (Mandatory)).....	59
3.17. Amendments to Section R403.8 (Systems serving multiple dwelling units (Mandatory)).	59
3.18. Amendments to Section R403.10.3 (Covers).	59
3.19. Amendment to Section R403.12 (Residential pools and permanent residential spas)	60
3.20. Amendments to Section R406.2 (Mandatory requirements).	60
3.21. Amendments to Section R501.4 (Compliance).	60
3.22. Amendments to Section R501.6 (Historic buildings).	61
3.23. Addition of a new entry for “ANSI” to Chapter 6 (Referenced Standards).....	61
3.24. Amendments to the entry for “ICC” in Chapter 6 (Referenced Standards).	61
3.25. Unaffected Residential Provisions.	62

PART 1

AMENDMENTS TO 2015 IECC COMMERCIAL PROVISIONS

For the purposes of applying the 2015 IECC commercial Provisions in New York State, the 2015 IECC Commercial Provisions shall be deemed to be amended in the manner provided in this Part 1 of the 2016 Energy Code Supplement.

1.1. References in the 2015 IECC Commercial Provisions to “this code.”

Each reference in the 2015 IECC Commercial Provisions to “this code” shall be deemed to be a reference to the 2015 IECC Commercial Provisions (as amended).³

1.2. References in the 2015 IECC Commercial Provisions to Sections or Tables.

Each reference in the 2015 IECC Commercial Provisions to a Section or Table in the 2015 IECC Commercial Provisions shall be deemed to be a reference to such Section or Table in the 2015 IECC Commercial Provisions (as amended).

1.3. References in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IES 90.1,” “ASHRAE 90.1,” or “ANSI/ASHRAE/IESNA.”

Each reference in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IES 90.1,” “ASHRAE 90.1” or “ANSI/ASHRAE/IESNA” shall be deemed to be a reference to ASHRAE 90.1-2013 (as amended).⁴

³ The term “2015 IECC Commercial Provisions (as amended)” means the 2015 IECC Commercial Provisions, as said provisions are deemed to be amended by this Part 1 of the 2016 Energy Code Supplement.

⁴ The term “ASHRAE 90.1-2013 (as amended)” means ASHRAE 90.1-2013, as said publication is deemed to be amended by Part 2 of this 2016 Energy Code Supplement.

1.4. References in the 2015 IECC Commercial Provisions to the “*International Mechanical Code*.”

Each reference in the 2015 IECC Commercial Provisions to the “*International Mechanical Code*” shall be deemed to be a reference to the *2015 International Mechanical Code (as amended)*.⁵

1.5. Amendment and Restatement of Chapter 1 [CE] of the 2015 IECC Commercial Provisions

Chapter 1 [CE] of the 2015 IECC Commercial Provisions shall be deemed to be amended and restated in its entirety to read as follows:

CHAPTER 1 [CE]
SCOPE AND ADMINISTRATION

SECTION C101
SCOPE AND GENERAL REQUIREMENTS

C101.1 General.

C101.1.1 Introduction. The New York State Energy Conservation Construction Code promulgated pursuant to Article 11 of the Energy Law (hereinafter referred to as the “*Energy Code*”) is contained in Title 19 of the New York Codes, Rules and Regulations (NYCRR), Part 1240, and in the publications incorporated by reference in 19 NYCRR Part 1240. The publications incorporated by reference in 19 NYCRR Part 1240 include:

- the publication entitled “2015 International Energy Conservation Code” (Second Printing: May 2015) published by International Code Council, Inc. (hereinafter referred to as the “2015 IECC”);
- the publication entitled “ANSI/ ASHRAE / IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings” (July 2014 Printing), published by American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. (hereinafter referred to as “ASHRAE 90.1-2013”);
- the publication entitled “2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016)” (Publication Date: August, 2016), published by the New York State Department of State (hereinafter referred to as the “2016 Energy Code Supplement”); and

⁵ The term “2015 International Mechanical Code (as amended)” means the 2015 International Mechanical Code (Third Printing: November 2015), as said publication is deemed to be amended by the publication entitled “2016 Uniform Code Supplement.”

- the other referenced codes standards mentioned and/or referred to in 19 NYCRR Part 1240.

The 2015 IECC includes two sets of provisions: the “IECC – Commercial Provisions” and the “IECC – Residential Provisions.” The “IECC – Commercial Provisions,” as they appear in the 2015 IECC, are hereinafter referred to as the “2015 IECC Commercial Provisions.” The “IECC – Residential Provisions,” as they appear in the 2015 IECC, are hereinafter referred to as the “2015 IECC Residential Provisions.”

For the purposes of applying the 2015 IECC Commercial Provisions, ASHRAE 90.1-2013, and the 2015 IECC Residential Provisions in New York State:

- the 2015 IECC Commercial Provisions shall be deemed to be amended in the manner provided in Part 1 of the 2016 Energy Code Supplement;
- ASHRAE 90.1-2013 shall be deemed to be amended in the manner provided in Part 2 of the 2016 Energy Code Supplement; and
- the 2015 IECC Residential Provisions shall be deemed to be amended in the manner provided in Part 3 of the 2015 IECC Energy Code Supplement.

C101.1.2 Titles.

2015 IECC Commercial Provisions. The 2015 IECC Commercial Provisions, as they appear in the 2015 IECC, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Commercial Provisions.”

2015 IECC Commercial Provisions (as amended). The 2015 IECC Commercial Provisions, as amended by Part 1 of the 2016 Energy Code Supplement, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Commercial Provisions (as amended).”

ASHRAE 90.1-2013 (as amended). ASHRAE 90.1-2013, as amended by Part 2 of the 2016 Energy Code Supplement, is referred to in the 2016 Energy Code Supplement as “ASHRAE 90.1-2013 (as amended).”

2015 IECC Residential Provisions. The 2015 IECC Residential Provisions, as they appear in the 2015 IECC, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Residential Provisions.”

2015 IECC Residential Provisions (as amended). The 2015 IECC Residential Provisions, as amended by Part 3 of the 2016 Energy Code Supplement, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Residential Provisions

(as amended).”

References in the 2015 IECC Commercial Provisions to “this code.” Each reference in the 2015 IECC Commercial Provisions to “this code” shall be deemed to be a reference to the 2015 IECC Commercial Provisions (as amended).

References in the 2015 IECC Commercial Provisions to Sections and Tables. Each reference in the 2015 IECC Commercial Provisions to a Section or Table in the 2015 IECC Commercial Provisions shall be deemed to be a reference to such Section or Table in the 2015 IECC Commercial Provisions (as amended).

References in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IES 90.1,” “ASHRAE 90.1,” or “ANSI/ASHRAE/IESNA.” Each reference in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IES 90.1,” “ASHRAE 90.1” or “ANSI/ASHRAE/IESNA” shall be deemed to be a reference to ASHRAE 90.1-2013 (as amended):

C101.1.3 Administration and enforcement. The *Energy Code* shall be administered and enforced in accordance with the strictest of (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question, (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or (iii) the requirements set forth in this Chapter 1 [CE] and, as applicable, in Chapter 1 [RE] of the 2015 IECC Residential Provisions (as amended).

C101.2 Scope. The 2015 IECC Commercial Provisions (as amended) apply to *commercial buildings*, the sites on which *commercial buildings* are located, and building systems and equipment in *commercial buildings*.

C101.3 Intent. The 2015 IECC Commercial Provisions (as amended) shall regulate the design and construction of new *commercial buildings*; additions to, alterations of, and/or renovations of existing *commercial buildings*; and additions to, alterations of, and/or renovations of building systems in existing *commercial buildings* for the use and conservation of energy over the life of each such *commercial building*. The 2015 IECC Commercial Provisions (as amended) are intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the objectives set forth in the preceding sentence. The 2015 IECC Commercial Provisions (as amended) are not intended to abridge safety, health or environmental requirements contained in other applicable statutes, laws, rules, regulations, codes or ordinances.

Nothing in this section C101.3, or in any other provision in this Chapter 1 [CE] of the 2015 IECC Commercial Provisions (as amended), or in any other provision of the 2015 IECC Commercial Provisions (as amended), shall be construed as permitting any *code official*, or any governmental unit or agency charged with the administration and enforcement of the *Energy Code*, to waive, vary, modify or otherwise alter any standard or requirement of the 2015 IECC Commercial Provisions (as amended) or any other standard or requirement of the *Energy Code*. Standards or requirements of the *Energy Code* may be varied or modified only pursuant to Section 11-106 of the New York State Energy Law.

C101.4 Applicability. Where, in any specific case, different sections of the 2015 IECC Commercial Provisions (as amended) specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

C101.4.1 Mixed occupancy. Where a building includes both *residential* and *commercial* occupancies, (1) each occupancy shall be separately considered; (2) each *residential* occupancy shall meet the applicable provisions of the 2015 IECC Residential Provisions (as amended); and (3) each *commercial* occupancy shall meet the applicable provisions of the 2015 IECC Commercial Provisions (as amended), or, to the extent permitted by the 2015 IECC Commercial Provisions (as amended), the applicable provisions of ASHRAE 90.1-2013 (as amended).

C101.5 Compliance. Residential buildings shall meet the 2015 IECC Residential Provisions (as amended). *Commercial buildings* shall meet the 2015 IECC Commercial Provisions (as amended). To the extent permitted by the 2015 IECC Commercial Provisions (as amended), *commercial buildings* may comply with ASHRAE 90.1-2013 (as amended) in lieu of complying with the 2015 IECC Commercial Provisions (as amended).

C101.5.1 Compliance software. Compliance with the 2015 IECC Commercial Provisions (as amended) or, if applicable, with ASHRAE 90.1-2013 (as amended) can be demonstrated through the use of:

- (1) computer software that is developed by the United States Department of Energy (such as COMcheck) specifically for the 2015 IECC Commercial Provisions (as amended) or, if applicable, specifically for ASHRAE 90.1-2013 (as amended), or
- (2) other software that shall have been expressly approved in writing by the New York Secretary of State as acceptable for demonstrating compliance with the 2015 IECC Commercial Provisions (as amended) or, if applicable, for demonstrating compliance with ASHRAE 90.1-2013 (as amended).

Software programs used to demonstrate compliance must indicate compliance with the 2015 IECC Commercial Provisions (as amended) or, if applicable, compliance with ASHRAE 90.1-2013 (as amended), and must reflect the actual requirements of the 2015 IECC Commercial Provisions (as amended) or, if applicable, the actual requirements of ASHRAE 90.1-2013 (as amended).

C101.5.1.1 Mandatory provisions. The use of the software approach to demonstrate compliance does not excuse compliance with any mandatory provision of the 2015 IECC Commercial Provisions (as amended) or ASHRAE 90.1-2013 (as amended), as applicable. When using the software approach to demonstrate compliance with the provisions of the 2015 IECC Commercial Provisions (as amended), compliance with all applicable mandatory provisions of the 2015 IECC Commercial Provisions (as amended) will still be required, and when using the software approach to demonstrate compliance with ASHRAE 90.1-2013 (as amended), compliance with all applicable mandatory provisions of ASHRAE 90.1-2013 (as amended) will still be required.

C101.6 Statutory limitations and exemptions.

C101.6.1. In the event of an addition to or alteration of an existing *building* or *building system*, the *Energy Code* shall not be interpreted to require any unaltered portion of such existing *building* or *building system* to comply with the *Energy Code*.

C101.6.2. The *Energy Code* shall not apply to any of the following, provided that 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; (5) reroofing for roofs where neither the sheathing nor the insulation is exposed; roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing; (6) replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided, however, that an existing vestibule that separates such conditioned space from the exterior shall not be removed; (7) alterations that replace less than fifty percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power; or (8) alterations that replace only the bulb and ballast within the existing luminaires in a space provided that the alteration does not increase the installed interior lighting power.

C101.6.3. *Historic buildings* are exempt from the *Energy Code*.

SECTION C102
ALTERNATE MATERIALS, METHODS OF CONSTRUCTION,
DESIGN OR INSULATING SYSTEMS

C102.1 General. The 2015 IECC Commercial Provisions (as amended) are not intended to prevent the use of any material, method of construction, design or insulating system not specifically prescribed in the 2015 IECC Commercial Provisions (as amended), provided that such method of construction, design or insulating system has been *approved* by the *code official* as (1) meeting the intent of the 2015 IECC Commercial Provisions (as amended) and (2) achieving energy savings that is equivalent or greater than that which would be achieved by the prescribed method of construction, design or insulating system.

Nothing in this section C102.1, or in any other provision in this Chapter 1 [CE] of the 2015 IECC Commercial Provisions (as amended), or in any other provision of the 2015 IECC Commercial Provisions (as amended), shall be construed as permitting any *code official*, or any governmental unit or agency charged with the administration and enforcement of the *Energy Code*, to waive, vary, modify or otherwise alter any standard or requirement of the 2015 IECC Commercial Provisions (as amended) or any other standard or requirement of the *Energy Code*. Standards or requirements of the *Energy Code* may be varied or modified only pursuant to Section 11-106 of the New York State Energy Law.

SECTION C103
CONSTRUCTION DOCUMENTS

NOTE: Requirements relating to the construction documents that must be provided with an application for a building permit or construction permit shall be the strictest of:

- (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question,
- (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or
- (iii) the requirements set forth in this Section C103 and, as applicable, the requirements set forth in Section R103 of the 2015 IECC Residential Provisions (as amended).

C103.1 General. Construction documents and other supporting data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a *registered design professional* as required by the New York State Education Law Articles 145 and 147.

Exception: Where construction documents are not required to be prepared by a *registered design professional* in accordance with New York State Education Law Articles 145 and 147, the *code official* is authorized to waive the requirements for construction documents or other supporting data if the *code official* determines they are not necessary to confirm compliance with the *Energy Code*.

C103.2 Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *code official*. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and shall 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, the following as applicable:

1. Insulation materials and their *R*-values.
2. Fenestration *U*-factor and solar heat gain coefficient (SHGC).
3. Area-weighted *U*-factor and solar heat gain coefficient (SHGC) calculations.
4. Mechanical system design criteria.
5. Mechanical and service water heating system and equipment types, sizes and efficiencies.
6. Economizer description.
7. Equipment and system controls.
8. Fan motor horsepower (hp) and controls.
9. Duct sealing, duct and pipe insulation and location.
10. Lighting fixture schedule with wattage and control narrative.
11. Location of *daylight* zones on floor plans.
12. Air sealing details

C103.2.1 Building thermal envelope depiction. The *building's thermal envelope* shall be represented on the construction drawings.

C103.2.2 Written statement. When plans or specifications bear the seal and signature of a *registered design professional*, such *registered design professional* shall also include a written statement that to the best of his or her knowledge, belief and professional judgment, such plans or specifications are in compliance with the *Energy Code*.

C103.3. Examination of documents. The *code official* shall examine or cause to be examined the accompanying construction documents and shall ascertain whether the construction indicated and

described is in accordance with the requirements of the *Energy Code* and other pertinent laws or ordinances. The *code official* is authorized to utilize a *registered design professional*, or other *approved* entity not affiliated with the design or construction of the *building* in question, in conducting the review of the plans and specifications for compliance with the *Energy Code*.

C103.3.1 Approval of construction documents. When the *code official* issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped “Reviewed for Energy Code Compliance.” Such *approved* construction documents shall not be changed, modified or altered without authorization from the *code official*. Work shall be done in accordance with the *approved* construction documents.

One set of construction documents so reviewed shall be retained by the *code official*. The other set shall be returned to the applicant, kept at the site of work and shall be open to inspection by the *code official* or a duly authorized representative.

C103.3.2 Previous approvals. The 2015 IECC Commercial Provisions (as amended) shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit was issued prior to the effective date of the rule making the 2015 IECC Commercial Provisions (as amended) part of the *Energy Code*, provided that construction pursuant to such permit is commenced in good faith within 180 days after such effective date and is thereafter diligently pursued through completion.

C103.3.3 Phased approval. The *code official* shall have the authority to issue a permit for the construction of part of an energy conservation system before the construction documents for the entire system have been submitted or *approved*, provided adequate information and detailed statements have been filed complying with all pertinent requirements of the Energy Code. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire energy conservation system will be granted.

C103.4 Amended construction documents. Changes made during construction that are not in compliance with the *approved* construction documents shall be resubmitted for approval as an amended set of construction documents.

C103.5 Retention of construction documents. One set of *approved* construction documents shall be retained by the *code official* for a period of not less than seven years from the date of the demolition and removal of the building.

SECTION C104 INSPECTIONS

NOTE: Requirements relating to inspections of work shall be the strictest of:

- (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question,
- (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or
- (iii) the requirements set forth in this Section C104 and, as applicable, the requirements set forth in Section R104 of the 2015 IECC Residential Provisions (as amended).

C104.1 General. Construction or work for which a permit is required shall be subject to inspection by the *code official* or an inspector who is (i) qualified to perform the inspections (such qualifications to include, where required, completion of the training required by 19 NYCRR Part 1208) and (ii) approved by the *code official*.

C104.1.1 Required approvals. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *code official*. The permit holder or the permit holder's agent shall notify the *code official* when work has progressed to the point where the next required inspection described in Section C104.2 can be made. The *code official* (or other qualified inspector *approved* by the *code official* pursuant to Section C104.1), shall make such inspection, and the *code official* shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or the permit holder's agent wherein the same fails to comply with the *Energy Code*. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *code official*. In the case of a building that is subject to the New York City Construction Codes, such required approvals and inspections shall be subject to the provisions of Article 116 of Chapter 1 of Title 28 of the New York City Administrative Code.

C104.2 Required inspections. The *code official* (or other qualified inspector *approved* by the *code official* pursuant to Section C104.1), upon notification, shall make the inspections set forth in Sections C104.2.1 through C104.2.6.

C104.2.1 Footing and foundation inspection. Inspections associated with footings and foundations shall verify compliance with the code as to *R*-value, location, thickness, depth of burial and protection of insulation as required by the *Energy Code* and *approved* plans and specifications.

C104.2.2 Framing and rough-in inspection. Inspections at framing and rough-in shall be made before application of interior finish and shall verify compliance with the *Energy Code* as to types of insulation and corresponding *R*-values and their correct location and proper installation; fenestration properties (*U*-factor, SHGC, and VT) and proper installation and air leakage controls as required by the *Energy Code* and *approved* plans and specifications.

C104.2.3 Plumbing rough-in inspection. Inspections at plumbing rough-in shall verify compliance as required by the *Energy Code* and *approved* plans and specifications as to types of insulation and corresponding *R*-values and protection; required controls; and required heat traps.

C104.2.4 Mechanical rough-in inspection. Inspections at mechanical rough-in shall verify compliance as required by the *Energy Code* and *approved* plans and specifications as to installed HVAC equipment type and size; required controls, system insulation and corresponding *R*-value; system and damper air leakage; and required energy recovery and economizers.

C104.2.5 Electrical rough-in inspection. Inspections at electrical rough-in shall verify compliance as required by the *Energy Code* and *approved* plans and specifications as to installed lighting systems, components and controls; and installation of an electric meter for each dwelling unit.

C104.2.6 Final inspection. The building shall have a final inspection and shall not be occupied until approved. The final inspection shall include verification of the installation and proper operation of all required building controls, and documentation verifying activities associated with required *building commissioning* have been conducted and findings of noncompliance corrected. Buildings, or portions thereof, shall not be considered for a final inspection until the *code official* has received a letter of transmittal from the building owner acknowledging that the building owner has received the Preliminary Commissioning Report as required in Section C408.2.4.

C104.2.6.1 HVAC System certification. A *registered design professional* shall provide to the *code official* a written certification that (1) all required HVAC system inspections, HVAC system calibrations, and overall HVAC equipment functionality tests have been performed and (2) in the professional opinion of the *registered design professional*, the HVAC system is operating as designed. The *registered design professional* shall retain copies of the inspection, calibration, and test reports, and shall provide such reports to the *code official*, if requested. In the case of a building that is subject to the New York City Construction Codes, all required

HVAC system inspections, HVAC system calibrations, and overall HVAC equipment functionality tests shall be special or progress inspections and shall be performed by *approved* agencies.

C104.3 Reinspection. A *building* shall be reinspected when determined necessary by the *code official*.

C104.4 Approved inspection agencies. The *code official* is authorized to accept reports of third-party inspection agencies not affiliated with the design or construction of the *building* in question, provided such agencies are *approved* as to qualifications and reliability relevant to the *building* components and *building systems* they are inspecting.

C104.5 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the *code official* when work is ready for a required inspection. It shall be the duty of the permit holder to provide access to and means for all required inspections of such work.

C104.6 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with the *Energy Code*. The work or installation shall then be resubmitted to the *code official* for inspection and testing.

C104.7 Approval. After the prescribed tests and inspections indicate that the work complies in all respects with the *Energy Code*, a notice of approval shall be issued by the *code official*.

C104.7.1 Revocation. The *code official* is authorized to suspend or revoke a notice of approval wherever the *code official* determines that the notice is issued in error or on the basis of incorrect information supplied, or where it is determined that the *building* or structure, or any portion thereof, or the premises, or portion thereof, is in violation of any provision of the *Energy Code*; any provision of the *Uniform Code* or New York City Construction Codes, as applicable; or any other any applicable law, statute, rule, regulation or ordinance. Any such suspension or revocation shall be in writing, signed by the *code official* or by his or her designated agent.

SECTION C105 VALIDITY

C105.1 General. If any portion of the 2015 IECC Commercial Provisions (as amended) is held by a court of competent jurisdiction to be illegal or void, such holding shall not affect the validity of the remainder of the 2015 IECC Commercial Provisions (as amended) or of any other portion of the *Energy Code*.

SECTION C106 REFERENCED CODES AND STANDARDS

C106.1 General. The codes and standards referenced in the 2015 IECC Commercial Provisions (as amended) shall be those listed in Chapter 6 of the 2015 IECC Commercial Provisions (as amended), and such codes and standards shall be considered as part of the requirements of the 2015 IECC Commercial Provisions (as amended) to the prescribed extent of each such reference and subject to the provisions and limitations set forth in Sections C106.1.1 and C106.1.2.

C106.1.1 Conflicts. Where conflicts occur between provisions of the 2015 IECC Commercial Provisions (as amended) and referenced codes and standards listed in Chapter 6 of the 2015 IECC Commercial Provisions (as amended), the provisions of the 2015 IECC Commercial Provisions (as amended) shall control.

C106.1.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard listed in Chapter 6 of the 2015 IECC Commercial Provisions (as amended) includes subject matter that is within the scope of the 2015 IECC Commercial Provisions (as amended), the provisions of the 2015 IECC Commercial Provisions (as amended), as applicable, shall take precedence over the provisions in the referenced code or standard.

SECTION C107 OTHER LAWS AND REGULATIONS

C107.1 General. The *Energy Code* shall not be deemed to nullify any federal, state or local law, statute, rule, regulation or ordinance relating to any matter as to which the *Energy Code* does not provide.

C107.1.1 Other agencies' regulations. Pursuant to Section 11-103(3) of the New York State Energy Law, any other code, rule or regulation heretofore promulgated or enacted by any state agency other than the State Fire Prevention and Building Code Council, incorporating specific energy conservation requirements applicable to the construction of any *building*, shall be superseded by the *Energy Code*.

C107.1.2 More stringent local energy codes. Pursuant to section 11-109 of the New York State Energy Law, and subject to the provisions and requirements of that section, any

municipality has the power to promulgate a local energy conservation construction code that is more stringent than the *Energy Code*.

SECTION C108

INTERPRETATION OF ENERGY CODE REQUIREMENTS

NOTE: Except as may be otherwise provided by procedures established by the Secretary of State, as currently in effect or as hereafter established or amended for time to time, the procedures for requesting and issuing written interpretations of the *Energy Code* shall be as set forth in this Section C108.

C108.1 General. The Secretary of State is authorized by section 11-103(4) of the New York State Energy Law to issue written interpretations of the *Energy Code* upon written request of a permit applicant or the *code official* responsible for the administration and enforcement of the provisions of the *Energy Code*.

C108.2 Procedure. A request for an interpretation shall be signed by the building permit applicant and the *code official*, or by one or the other, individually, and shall include the following information in order to be considered complete:

1. Name, address, and telephone number of the building permit applicant and the *code official*;
2. A detailed description of the proposed construction, including a copy of the building permit application and plans and specifications that have been filed by the building permit applicant with the *code official*, as well as any other floor plans, elevations, cross-sections, details specifications, or construction documents necessary to describe adequately the proposed construction;
3. Identification of each requirement of this code for which an interpretation is requested;
4. A concise summary of the disagreement concerning the application of each such requirement for which an interpretation is requested; and
5. A copy of the building permit application denial if one was issued by the *code official*.

C108.3 Incomplete information. If the request is incomplete or does not otherwise contain sufficient information necessary to issue an interpretation, the Secretary of State may request clarification of the information provided or additional information necessary to issue the requested interpretation.

C108.4 Notification. Upon receipt of a complete request for an interpretation signed by only the building permit applicant or the *code official*, the Secretary of State shall provide written notification to the party who has not signed the request for an interpretation that such request for an interpretation has been filed with the Department of State. The party receiving such notification shall have 20 days from the date of such notification in which to provide, in writing, any comments or additional information pertaining to the request for an interpretation, provided that the Commissioner may waive this deadline when warranted by extenuating circumstances.

C108.5 Issuing interpretation. The Secretary of State shall either issue the interpretation or provide notification of the intent not to issue an interpretation to the building permit applicant and the *code official* within 45 days of any of the following:

1. Receipt of a complete request for an interpretation signed by both the building permit applicant and the *code official*,
2. Receipt of comments when the request for an interpretation is signed by only one party, or
3. The expiration of the 20-day comment period when the request for an interpretation is signed by only one party.

C108.6 Enforcement. Subsequent enforcement of the *Energy Code* shall be consistent with the interpretations issued by the Secretary of State pursuant to section 11-103(4) of the New York State Energy Law.

C108.7 Interpretation of more stringent local energy code provisions. If a municipality has adopted a local energy code in accordance with the provisions of section 11-109 of the New York State Energy Law, and if such local energy code shall have become effective in such municipality in accordance with the provisions of section 11-109 of the New York State Energy Law, the local *code official* in such municipality is permitted to interpret those provisions of such local energy code that are (1) in addition to the provisions of *Energy Code* or (2) more stringent than the provisions of the *Energy Code*. However, no such interpretation shall be deemed to be an interpretation of the *Energy Code* by the Secretary of State pursuant to section 11-103(4) of the New York State Energy Law. In addition, if a local *code official* interprets a provision of a local energy code in a manner that makes such provision less stringent than the corresponding provision of the *Energy Code*, the corresponding provision of the *Energy Code* shall supersede such provision of the local energy code.

SECTION C109
REFERENCES TO CHAPTERS, SECTIONS, TABLES OR PROVISIONS

C109.1 General. Each reference in the 2015 IECC Commercial Provisions (as amended) to a chapter, section or table by number only, or to a provision not specifically identified by number, without specification of the publication in which such chapter, section, table or provision is contained, shall be deemed to be a reference to such chapter, section, table or provision in the 2015 IECC Commercial Provisions (as amended).

Example: Section C403.1.3 of the 2015 IECC Commercial Provisions (as amended) includes references to “the requirements of Sections C402.3 and C402.4” and “the *climate zone* specified in Chapter 3.” Such references shall be deemed to be references to Sections C402.3 and C402.4 of the 2015 IECC Commercial Provisions (as amended) and Chapter 3 of the 2015 IECC Commercial Provisions (as amended), respectively.

1.6. Amendments to Section C201.3 (Terms defined in other codes).

Section C201.3 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

C201.3 (Terms defined in other codes). Terms that are not defined in the 2015 IECC Commercial Provisions (as amended) but are defined in the *2015 International Building Code (as amended)*, *International Fire Code (as amended)*, *International Fuel Gas Code (as amended)*, *International Mechanical Code (as amended)*, *International Plumbing Code (as amended)* or *International Residential Code (as amended)* shall have the meanings ascribed to such terms in such other codes.

1.7. Amendments to Section C202 (General Definitions).

The definitions of the terms *building*, *building thermal envelope*, *commercial building*, *conditioned space*, *historic building*, and *residential building* in section C202 of the 2015 IECC Commercial Provisions shall be deemed to be amended, and new definitions of the terms *2016 Energy Code Supplement*, *2016 Uniform Code Supplement*, *2015 International Building Code (as amended)*, *2015 International Fire Code (as amended)*, *2015 International Fuel Gas Code (as amended)*, *2015 International Mechanical Code (as amended)*, *2015 International Plumbing Code (as amended)*, *2015 International Property Maintenance Code (as amended)*, *2015 International Residential Code (as amended)*, *air-impermeable insulation*, *area weighted average*, *ASHRAE 90.1-2013*, *ASHRAE 90.1-2013 (as amended)*, *building system*, *Energy Code*, *registered design professional*, and *Uniform Code* shall be deemed to be added to section C202 of the 2015 IECC Commercial Provisions, said amended definitions and said new definitions to read as follows:

2016 ENERGY CODE SUPPLEMENT. The publication entitled “2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016)” (Publication Date: August, 2016) published by the New York State Department of State.

2016 UNIFORM CODE SUPPLEMENT. The publication entitled “2016 Uniform Code Supplement” (Publication Date: March 2016) published by the New York State Department of State.

2015 INTERNATIONAL BUILDING CODE (AS AMENDED). The publication entitled “2015 International Building Code” (Third Printing: October 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL FIRE CODE (AS AMENDED). The publication entitled “2015 International Fire Code” (Third Printing: June 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL FUEL GAS CODE (AS AMENDED). The publication entitled “2015 International Fuel Gas Code” (Third Printing: June 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL MECHANICAL CODE (AS AMENDED). The publication entitled “2015 International Mechanical Code” (Third Printing: November 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL PLUMBING CODE (AS AMENDED). The publication entitled “2015 International Plumbing Code” (Third Printing: August 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL PROPERTY MAINTENANCE CODE (AS AMENDED). The publication entitled “2015 International Property Maintenance Code” (Fourth Printing: December 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL RESIDENTIAL CODE (AS AMENDED). The publication entitled “2015 International Residential Code” (Second Printing: January 2016) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

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.

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 (Area 1 x *U*-factor 1) + (Area 2 x *U*-factor 2) + .../ Total Area = maximum allowable fenestration *U*-factor.

ASHRAE 90.1-2013. The publication entitled “ANSI / ASHRAE / IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-rise Residential Buildings*” (July 2014 Printing) published by the American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. (ASHRAE 90.1-2013 is published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., is jointly sponsored by the Illuminating Engineering Society of North America and the American National Standards Institute, and is also known as “ANSI/ASHRAE/IES 90.1-2013” or “ANSI/ASHRAE/IESNA 90.1-2013.”)

ASHRAE 90.1-2013 (AS AMENDED). ASHRAE 90.1-2013, as said publication is deemed to be amended by Part 2 of the 2016 Energy Code Supplement.

BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy or for affording shelter to persons, animals or property, together with (A) any equipment, mechanical systems, service water heating systems, and electric power and lighting systems located in such structure, and (B) any mechanical systems, service water heating systems, and electric power and lighting systems located on the site where such structure is located and supporting such structure. 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 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 (above and below grade) , floor, roof, and any other building elements that enclose *conditioned space* or provides a boundary between *conditioned space* and exempt or unconditioned space.

COMMERCIAL BUILDING. The term “commercial building” includes all buildings that are not included in the definition of “residential building.”

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

ENERGY CODE. The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the New York State Energy Law.

HISTORIC BUILDING. Any building that is (a) listed on the national register of historic places or on the state register of historic places, (b) determined by the commissioner of parks, recreation and historic preservation to be eligible for listing on the state register of historic places, (c) determined by the commissioner of parks, recreation and historic preservation to be a contributing building to an historic district that is listed or eligible for listing on the state or national registers of historic places, or (d) otherwise defined as an historic building in regulations adopted by the state fire prevention and building code council.

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.

RESIDENTIAL BUILDING. The term “residential building” includes:

- (1) detached one-family dwellings having not more than three stories above grade plane;
- (2) detached two-family dwellings having not more than three stories above grade plane;
- (3) buildings that (i) consist of three or more attached townhouse units and (ii) have not more than three stories above grade plane;
- (4) buildings that (i) are classified in accordance with Chapter 3 of the *2015 International Building Code (as amended)* in Group R-2, R-3 or R-4 and (ii) have not more than three stories above grade plane;
- (5) factory manufactured homes (as defined in section 372(8) of the New York State Executive Law); and
- (6) mobile homes (as defined in section 372(13) of the New York State Executive Law).

For the purposes of this definition of the term “residential building,” the term “townhouse unit” means a single-family dwelling unit constructed in a group of three or more attached units in which each unit (i) extends from the foundation to roof and (ii) has open space on at least two sides.

UNIFORM CODE. The New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the New York State Executive Law, as currently in effect and as hereafter amended from time to time.

1.8. Amendments to Section C303.2 (Installation).

Section C303.2 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

C303.2 Installation. Materials, systems and equipment shall be installed in accordance with (i) the manufacturer's installation instructions and (ii) the applicable provisions of the *Uniform Code* or the New York City Construction Codes, as applicable.

NOTE: Subsequent section C303.2.1 of the 2015 IECC Commercial Provisions continues in full force and effect without amendment.

1.9. Amendments to Section C401.2 (Application).

Section C401.2 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

C401.2 Application. *Commercial buildings* shall comply with one of the following compliance paths:

1. ASHRAE Compliance Path: The requirements of *ASHRAE 90.1-2013 (as amended)*.
2. Prescriptive Compliance Path: The requirements of Sections C402 through C405. In addition, *commercial buildings* shall comply with Section C406 and tenant spaces shall comply with Section C406.1.1.
3. Performance Compliance Path: The requirements of Sections C402.5, C403.2, C404, C405.2, C405.3, C405.5, C405.6, and C407. The building energy cost shall be equal to or less than 85 percent of the standard reference design building.

NOTE: Subsequent section C401.2.1 of the 2015 IECC Commercial Provisions continues in full force and effect without amendment.

1.10. Addition of new Section C402.2.7 (Fireplaces).

Section C402.2 of the 2015 IECC Commercial Provisions shall be deemed to be amended by the addition of a new section C402.2.7, to read as follows:

C402.2.7 Fireplaces. New wood-burning fireplaces that are designed to allow an open burn and new wood-burning fireplace units that are designed to allow an open burn shall have tight-fitting flue dampers or tight-fitting doors. Tight-fitting doors used on a factory-built fireplace listed and labeled in accordance with UL 127 or on a factory-built fireplace unit listed and labeled in accordance with UL 127 shall be tested and listed for such fireplace or fireplace unit. Tight-fitting doors used on a masonry fireplace shall be listed and labeled in accordance with UL 907.

New wood-burning fireplaces that are designed to allow an open burn and new wood-burning fireplace units that are designed to allow an open burn shall be provided with a source of outdoor combustion air as required by the fireplace construction provisions of the *2015 International Building Code (as amended)*, the *2015 International Residential Code (as amended)* or the New York City Construction Codes, as applicable.

1.11. Amendments to Table C402.4 (Building envelope fenestration maximum U-factor and SHGC requirements).

Table C402.4 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

**TABLE C402.4
BUILDING ENVELOPE FENESTRATION MAXIMUM U-FACTOR
AND SHGC REQUIREMENTS**

CLIMATE ZONE	4	5	6
Vertical fenestration			
<i>U-factor</i>			
Fixed fenestration	0.38	0.38	0.36
Operable fenestration	0.45	0.45	0.43
Entrance doors	0.77	0.77	0.77
SHGC			
PF < 0.2	0.40		
0.2 ≤ PF < 0.5	0.48		
PF ≥ 0.5	0.64		
Skylights			
<i>U-factor</i>	0.50	0.50	0.50
SHGC	0.40	0.40	0.40

1.12. Amendments to Section C402.4.2 (Minimum skylight fenestration area), Exception 5.

Exception 5 to Section C402.4.2 of the 2015 IECC shall be deemed to be amended to read as follows:

5. Spaces where the total area minus the area of *daylight zones* adjacent to vertical fenestration is less than 2, 500 square feet (232 m²), and where the lighting is controlled according to Section 405.2.3.

1.13. Amendments to Section C402.5.3 (Rooms containing fuel-burning appliances), Exception 2.

Exception 2 to Section C402.5.3 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

2. Fireplaces and stoves complying with Sections 901 through 905 of the *2015 International Mechanical Code (as amended)*, and Section 2111.13 of the *2015 International Building Code (as amended)* (or, in the case of a fireplace or stove located in a building that is subject to the New York City Construction Codes, complying with the corresponding provisions of the New York City Construction Codes).

1.14. Amendments to Section C501.4 (Compliance).

Section C501.4 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

C501.4 Compliance. *Alterations, repairs, additions* and changes of occupancy to, or relocation of, existing buildings and structures shall comply with (i) all applicable provisions of the 2015 IECC Commercial Provisions (as amended), (ii) the provisions for *alterations, repairs, additions* and changes of occupancy or relocation, respectively, in the *Uniform Code*, and (iii) NFPA 70.

Exception: In the case of a building that is subject to the New York City Construction Codes, *alterations, repairs, additions* and changes of occupancy to, or relocation of, existing buildings and structures shall comply with (i) all applicable provisions of the 2015 IECC Commercial Provisions (as amended), (ii) the provisions for *alterations, repairs, additions* and changes of occupancy or relocation, respectively, in the New York City Construction Codes, and (iii) the New York City Electrical Code.

1.15. Amendments to Section C501.6 (Historic buildings).

Section C501.6 of the 2015 IECC Commercial Provisions shall be deemed to be amended to read as follows:

C501.6 Historic buildings. No provisions of the 2015 IECC Commercial Provisions (as amended) relating to the construction, *repair, alteration*, restoration, and change of occupancy shall be mandatory for *historic buildings*.

1.16. Addition of new Section C501.7 (Compliance alternative).

Section C501 of the 2015 IECC Commercial Provisions shall be deemed to be amended by the addition of a new section C501.7, to read as follows:

C501.7 Compliance alternative. *Additions, alterations, repairs, and changes of occupancy are permitted to comply with the requirements of ASHRAE 90.1-2013 (as amended) in lieu of compliance with the requirements of Sections C502, C503, C504 and C505, as applicable.*

1.17. Amendments to the “ICC” section of Chapter 6 (Referenced Standards).

The “ICC” portion of Chapter 6 of the 2015 IECC Commercial Provisions shall be deemed to be amended by the addition of (1) an entry for “IRC-15” and (2) two explanatory notes, such new entry and such explanatory notes to read as follows:

Standard reference number	Title	Referenced in the following sections of the 2015 IECC Commercial Provisions (as amended)
IRC-15	International Residential Code	C201.3

NOTES:

1. In the 2015 IECC Commercial Provisions, IBC-15 is referred to as the “*International Building Code*,” IFC-15 is referred to as the “*International Fire Code*,” IFGC-15 is referred to as the “*International Fuel Gas Code*,” IMC-15 is referred to as the “*International Mechanical Code*,” IPC-15 is the “*International Plumbing Code*,” IPMC-15 is referred to as the “*International Property Maintenance Code*,” and IRC-15 is referred to as the “*International Residential Code*.”
2. For the purposes of applying IBC-15, IFC-15, IFGC-15, IMC-15, IPC-15, IPMC-15, and IRC-15 in New York State, said publications are deemed to be amended in the manner specified in the *2016 Uniform Code Supplement*. References in the 2015 IECC Commercial Provisions to the “*International Building Code*,” the “*International Fire Code*,” the “*International Fuel Gas Code*,” the “*International Mechanical Code*,” the “*International Plumbing Code*,” the “*International Property Maintenance Code*,” and the “*International Residential Code*” shall be deemed to be references to *2015 International Building Code (as amended)*, the *2015 International Fire Code (as amended)*, the *2015 International Fuel Gas Code (as amended)*, the *2015 International Mechanical Code (as amended)*, the *2015 International Plumbing Code (as amended)*, the *2015 International Property Maintenance Code (as amended)*, and the *2015 International Residential Code (as amended)*, respectively.

1.18. Amendments to the “ASHRAE” section of Chapter 6 (Referenced Standards).

In the “ASHRAE” section of Chapter 6 of the 2015 IECC Commercial Provisions, the entry for “90.1-2013” shall be deemed to be amended and a new entry for the “ASHRAE Appendix G Excerpt” shall be deemed to be added, such amended entry and new entry to read as follows:

Standard reference number	Title	Referenced in the following sections of the 2015 IECC Commercial Provisions (as amended)
90.1-2013	<p>Energy Standard for Buildings Except Low-rise Residential Buildings</p> <p>NOTES:</p> <p>1. 90.1-2013 is published by the American Society of Heating, Refrigerating and Air- Conditioning Engineers, Inc., and is jointly sponsored by the Illuminating Engineering Society of North America and the American National Standards Institute.</p> <p>2. 90.1-2013 is referred to in the 2015 IECC Commercial Provisions as “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IESNA,” “ANSI/ASHRAE/IES 90.1,” or “ASHRAE 90.1.”</p> <p>3. For the purposes of applying 90.1-2013 in New York State, 90.1-2013 is deemed to be amended in the manner specified in Part 2 of the 2016 Energy Code Supplement. References in the 2015 IECC Commercial Provisions to “ANSI/ASHRAE/IESNA 90.1,” “ANSI/ASHRAE/IESNA,” “ANSI/ASHRAE/IES 90.1,” or “ASHRAE 90.1” shall be deemed to be references to ASHRAE 90.1-2013 (as amended).</p>	<p>C401.2 Table C402.1.3 Table C402.1.4 C406.2 C502.1 C503.1 C504.1</p>

<p>ASHRAE Appendix G Excerpt - 2015</p>	<p>Standard 90.1 Appendix G 2013 Performance Rating Method Excerpt from ANSI/ASHRAE/IES Standard 90.1-2013 (I-P), publication date 2015.</p> <p>NOTE: As stated above in the entry for 90.1-2013, references in the 2015 IECC Commercial Provisions to ASHRAE 90.1-2013 shall be deemed to be references to ASHRAE 90.1-2013 (as amended). Appendix G of ASHRAE 90.1-2013 is deemed to be deleted and replaced by the revised version of Appendix G set forth in the “ASHRAE Appendix G Excerpt – 2015.” See Item 2.6 of the 2016 Energy Code Supplement. To the extent that any reference in the 2015 IECC Commercial Provisions (as amended) to ASHRAE 90.1-2013 includes a reference to Appendix G of ASHRAE 90.1-2013, such reference to Appendix G shall be deemed to be a reference to the revised version of Appendix G set forth in the “ASHRAE Appendix G Excerpt – 2015.”</p>	<p>C401.2 Table C402.1.3 Table C402.1.4 C406.2 C502.1 C503.1 C504.1</p> <p>(see Note in the “Title” column)</p>
---	---	---

1.19. Unaffected Commercial Provisions.

The chapters, sections, tables, and other provisions in the 2015 IECC Commercial Provisions that are not deemed to be amended by any one or more of the foregoing Items in this Part 1 of the 2016 Energy Code Supplement are hereafter referred to as the “Unaffected Commercial Provisions.” Nothing in this 2016 Energy Code Supplement shall be construed as deleting all or any part of any Unaffected Commercial Provision. Each Unaffected Commercial Provision shall continue in full force and effect, and shall be deemed to be part of the “2015 IECC Commercial Provisions (as amended).”

PART 2

AMENDMENTS TO ASHRAE 90.1-2013

For the purposes of applying ASHRAE 90.1-2013 in New York State, ASHRAE 90.1-2013 shall be deemed to be amended in the manner specified in this Part 2 of the 2016 Energy Code Supplement.

2.1. Amendments to Section 3.2 (Definitions).

Definitions of the terms “baseline building design”, “baseline building performance”, “building”, “historic,” “performance rating method”, “rating authority”, “regulated energy use” and “unregulated energy use” in section 3.2 of ASHRAE 90.1-2013 shall be deemed to read as follows:

baseline building design: a computer representation of a hypothetical design based on the proposed building project. This representation is used as the basis for calculating the baseline building performance for rating above-standard design or when using the performance rating method as an alternative path for minimum standard compliance in accordance with Section 4.2.1.1.

baseline building performance: the annual energy cost for a building design intended for use as a baseline for rating above- standard design or when using the performance rating method as an alternative path for minimum standard compliance in accordance with Section 4.2.1.1.

building: any structure used or intended for supporting or sheltering any use or occupancy or for affording shelter to persons, animals or property, together with (A) any equipment, mechanical systems, service water heating systems, and electric power and lighting systems located in such structure, and (B) any mechanical systems, service water heating systems, and electric power and lighting systems located on the site where such structure is located and supporting such structure. 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).

historic (or historic building): any building that is (a) listed on the national register of historic places or on the state register of historic places, (b) determined by the commissioner of parks, recreation and historic preservation to be eligible for listing on the state register of historic places, (c) determined by the commissioner of parks, recreation and historic preservation to be a contributing building to an historic district that is listed or eligible for

listing on the state or national register of historic places, or (d) otherwise defined as an historic building in regulations adopted by the state fire prevention and building code council.

performance rating method: a calculation procedure that generates an index of merit for the performance of building designs that substantially exceeds the energy efficiency levels required by this standard or when using the performance rating method as an alternative path for minimum standard compliance in accordance with Section 4.2.1.1.

rating authority: the organization or agency that adopts, enforces, or sanctions use of this rating methodology

regulated energy use: energy used by building systems and components with requirements prescribed in Sections 5 through 10. This includes energy used for HVAC, lighting, service water heating, motors, transformers, vertical transportation, refrigeration equipment, computer-room cooling equipment, and other building systems, components, and processes with requirements prescribed in Sections 5 through 10.

unregulated energy use: energy used by building systems and components that is not regulated energy use.

2.2. Amendment to Section 4.2.1.1 (New Buildings)

Section 4.2.1.1 of ASHRAE 90.1-2013 shall be deemed to be amended to read as follows:

4.2.1.1 New Buildings. New buildings shall comply with the provisions of:

- a. Section 5 (“Building Envelope”), Section 6 (“Heating, Ventilating, and Air Conditioning”), Section 7 (“Service Water Heating”), Section 8 (“Power”), Section 9 (“Lighting”), and Section 10 (“Other Equipment”), or
- b. Section 11 (“Energy Cost Budget Method”), or
- c. Appendix G (“Performance rating method”).

When using Appendix G, the Performance Cost Index (PCI) shall be less than or equal to the Performance Cost Index Target (PCIt) when calculated in accordance with the following:

$$PCIt = (BBUEC + (BPF \times BBREC)) / BBP$$

Where BBUEC = baseline building unregulated energy cost
 BBREC = baseline building regulated energy cost
 BPF = building performance factor from Table 4.2.1.1
 BBP = baseline building performance.

Regulated energy cost shall be calculated by multiplying the total energy cost by the ratio of regulated energy use to total energy use for each fuel type. Unregulated energy cost shall be calculated by subtracting regulated energy cost from total energy cost.

2.3. Amendments to Section 4.2.1.3 (Alterations of existing buildings).

Section 4.2.1.3 of ASHRAE 90.1-2013 shall be deemed to be amended to read as follows:

4.2.1.3 Alterations of Existing Buildings. Alterations of existing buildings shall comply with the provisions of Sections 5, 6, 7, 8, 9, and 10, provided, however, that nothing in this standard shall require compliance with any provision of this standard if such compliance will result in the increase of energy consumption of the building.

Exceptions:

1. Historic buildings need not comply with these requirements.
2. Where one or more components of an existing building or portions thereof are being replaced, the annual energy consumption of the comprehensive design shall not be greater than the annual energy consumption of a substantially identical design, using the same energy types, in which compliance with the applicable requirements of Sections 5, 6, 7, 8, 9, and 10, as provided in Section 4.2.1.2,1, is verified by a *registered design professional* by the use of any calculation methods acceptable to the *code official*. Historic buildings need not comply with these requirements.

2.4. Amendment to Table 6.8.1-9 (Electrically Operated VRF Air Conditioners)

Table 6.8.1-9 in ASHRAE 90.1-2013 shall be deemed to be amended to read as follows:

Table 6.8.1-9 Electrically Operated Variable-Refrigerant-Flow air Conditioners – Minimum Efficiency Requirements

Equipment Type	Size Category	Heating Section Type	Subcategory or Rating Condition	Minimum Efficiency	Test Procedure
----------------	---------------	----------------------	---------------------------------	--------------------	----------------

VRF air conditioners, air cooled	<65,000 Btu/h	All	VRF multisplit system	13 SEER	AHRI 1230
	≥65,000 Btu/h and <135,000 Btu/h	Electric resistance (or none)	VRF multisplit system	11.2 EER, 12.5 IEER	
	≥135,000 Btu/h and <240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	11.0 EER, 12.3 IEER	
	≥240,000 Btu/h	Electric resistance (or none)	VRF multisplit system	10.0 EER, 11.1 IEER	

2.5. Amendment to Section 8.4.1 (Voltage drop of feeders and branch circuits)

Sections 8.4.1.1 and 8.4.1.2 of ASHRAE 90.1-2013 shall be deemed to be deleted, and Section 8.4.1 of ASHRAE 90.1-2013 shall be amended to read as follows:

8.4.1 Voltage Drop. The conductors for feeders and branch circuits combined shall be sized for a maximum of 5% voltage drop total.

Exception: Feeder conductors and branch circuits that are dedicated to emergency services.

2.6. Amendment to Appendix G

Appendix G in ASHRAE 90.1-2013 shall be deemed to be deleted and replaced by the revised version of Appendix G set forth in the publication entitled “Standard 90.1 Appendix G 2013 Performance Rating Method Excerpt from ANSI/ASHRAE/IES Standard 90.1-2013 (I-P)” published by American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., publication date 2015 (the “ASHRAE Appendix G Excerpt”).

2.7. Unaffected ASHRAE 90.1-2103 Provisions.

The chapters, sections, tables, and other provisions in ASHRAE 90.1-2013 that are not deemed to be amended by any one or more of the foregoing Items in this Part 2 of the 2016 Energy Code Supplement are hereafter referred to as the “Unaffected ASHRAE 90.1-2013 Provisions.” Nothing in this 2016 Energy Code Supplement shall be construed as deleting all or any part of any Unaffected ASHRAE-90.1-2013 Provision. Each Unaffected ASHRAE 90.1-2013 Provision shall continue in full force and effect, and shall be deemed to be part of “ASHRAE 90.1-2013 (as amended).”

PART 3

AMENDMENTS TO THE 2015 IECC RESIDENTIAL PROVISIONS

For the purposes of applying the 2015 IECC Residential Provisions in New York State, the 2015 IECC Residential Provisions shall be deemed to be amended in the manner specified in this Part 3 of the 2016 Energy Code Supplement.

3.1. References in the 2015 IECC Residential Provisions to “this code.”

Each reference in the 2015 IECC Residential Provisions to “this code” shall be deemed to be a reference to the 2015 IECC Residential Provisions (as amended).⁶

3.2. References in the 2015 IECC Residential Provisions to Sections or Tables.

Each reference in the 2015 IECC Residential Provisions to a Section or Table in the 2015 IECC Residential Provisions shall be deemed to be a reference to such Section or Table in the 2015 IECC Residential Provisions (as amended).

⁶ The term “2015 IECC Residential Provisions (as amended)” means the 2015 IECC Residential Provisions, as said provisions are deemed to be amended by this Part 3 of the 2016 Energy Code Supplement.

3.3. Amendment and Restatement of Chapter 1 [RE] of the 2015 IECC Residential Provisions

Chapter 1 [RE] of the 2015 IECC Residential Provisions shall be deemed to be amended and restated in its entirety to read as follows:

CHAPTER 1 [RE] SCOPE AND ADMINISTRATION

SECTION R101 SCOPE AND GENERAL REQUIREMENTS

R101.1 General.

R101.1.1 Introduction. The New York State Energy Conservation Construction Code promulgated pursuant to Article 11 of the Energy Law (hereinafter referred to as the “Energy Code”) is contained in Title 19 of the New York Codes, Rules and Regulations (NYCRR), Part 1240, and in the publications incorporated by reference in 19 NYCRR Part 1240. The publications incorporated by reference in 19 NYCRR Part 1240 include:

- the publication entitled “2015 International Energy Conservation Code” (Second Printing: May 2015) published by International Code Council, Inc. (hereinafter referred to as the “2015 IECC”);
- the publication entitled “ANSI/ ASHRAE / IES Standard 90.1-2013, Energy Standard for Buildings Except Low-Rise Residential Buildings” (July 2014 Printing), published by American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. (hereinafter referred to as “ASHRAE 90.1-2013”);
- the publication entitled “2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016)” (Publication Date: August, 2016) published by the New York State Department of State (hereinafter referred to as the “2016 Energy Code Supplement”); and
- the other referenced codes standards mentioned and/or referred to in 19 NYCRR Part 1240.

The 2015 IECC includes two sets of provisions: the “IECC – Commercial Provisions” and the “IECC – Residential Provisions.” The “IECC – Commercial Provisions,” as they appear in the 2015 IECC, are hereinafter referred to as the “2015 IECC Commercial Provisions.” The “IECC – Residential Provisions,” as they appear in the 2015 IECC, are hereinafter referred to as the “2015 IECC Residential Provisions.”

For the purposes of applying the 2015 IECC Commercial Provisions, ASHRAE 90.1-2013,

and the 2015 IECC Residential Provisions in New York State:

- the 2015 IECC Commercial Provisions shall be deemed to be amended in the manner provided in Part 1 of the 2016 Energy Code Supplement;
- ASHRAE 90.1-2013 shall be deemed to be amended in the manner provided in Part 2 of the 2016 Energy Code Supplement; and
- the 2015 IECC Residential Provisions shall be deemed to be amended in the manner provided in Part 3 of the 2016 Energy Code Supplement.

R101.1.2 Titles.

2015 IECC Commercial Provisions. The 2015 IECC Commercial Provisions, as they appear in the 2015 IECC, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Commercial Provisions.”

2015 IECC Commercial Provisions (as amended). The 2015 IECC Commercial Provisions, as amended by Part 1 of the 2016 Energy Code Supplement, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Commercial Provisions (as amended).”

ASHRAE 90.1-2013 (as amended). ASHRAE 90.1-2013, as amended by Part 2 of the 2016 Energy Code Supplement, is referred to in the 2016 Energy Code Supplement as “ASHRAE 90.1-2013 (as amended).”

2015 IECC Residential Provisions. The 2015 IECC Residential Provisions, as they appear in the 2015 IECC, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Residential Provisions.”

2015 IECC Residential Provisions (as amended). The 2015 IECC Residential Provisions, as amended by Part 3 of the 2016 Energy Code Supplement, are referred to in the 2016 Energy Code Supplement as the “2015 IECC Residential Provisions (as amended).”

References in the 2015 IECC Residential Provisions to “this code.” Each reference in the 2015 IECC Residential Provisions to “this code” shall be deemed to be a reference to the 2015 IECC Residential Provisions (as amended).

References in the 2015 IECC Residential Provisions to Sections and Tables. Each reference in the 2015 IECC Residential Provisions to a Section or Table in the 2015 IECC Residential Provisions shall be deemed to be a reference to such Section or Table in the 2015 IECC Residential Provisions (as amended).

R101.1.3 Administration and enforcement. The *Energy Code* shall be administered and enforced in accordance with the strictest of:

- (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question,
- (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or
- (iii) the requirements set forth in this Chapter 1 [RE] and, as applicable, in Chapter 1 [CE] of the 2015 IECC Commercial Provisions (as amended).

R101.2 Scope. The 2015 IECC Residential Provisions (as amended) apply to *residential buildings*, the sites on which *residential buildings* are located, and building systems and equipment in *residential buildings*.

R101.3 Intent. The 2015 IECC Residential Provisions (as amended) shall regulate the design and construction of new *residential buildings*; additions to, alterations of, and/or renovations of existing *residential buildings*; and additions to, alterations of, and/or renovations of building systems in existing *residential buildings* for the use and conservation of energy over the life of each such *residential building*. The 2015 IECC Residential Provisions (as amended) are intended to provide flexibility to permit the use of innovative approaches and techniques to achieve the objectives set forth in the preceding sentence. The 2015 IECC Residential Provisions (as amended) are not intended to abridge safety, health or environmental requirements contained in other applicable statutes, laws, rules, regulations, codes or ordinances.

Nothing in this section R101.3, or in any other provision in this Chapter 1 [RE] of the 2015 IECC Residential Provisions (as amended), or in any other provision of the 2015 IECC Residential Provisions (as amended), shall be construed as permitting any *code official*, or any governmental unit or agency charged with the administration and enforcement of the *Energy Code*, to waive, vary, modify or otherwise alter any standard or requirement of the 2015 IECC Residential Provisions (as amended) or any other standard or requirement of the *Energy Code*. Standards or requirements of the *Energy Code* may be varied or modified only pursuant to Section 11-106 of the New York State Energy Law.

R101.4 Applicability. Where, in any specific case, different sections of the 2015 IECC Residential Provisions (as amended) specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

R101.4.1 Mixed occupancy. Where a building includes both *residential* and *commercial* occupancies, (1) each occupancy shall be separately considered; (2) each *residential* occupancy shall meet the applicable provisions of the 2015 IECC Residential Provisions (as amended); and (3) each *commercial* occupancy shall meet the applicable provisions of the 2015 IECC Commercial Provisions (as amended), or, to the extent permitted by the 2015 IECC Commercial Provisions (as amended), the applicable provisions of ASHRAE 90.1-2013 (as amended).

R101.5 Compliance. *Residential buildings* shall meet the 2015 IECC Residential Provisions (as amended). *Commercial buildings* shall meet the 2015 IECC Commercial Provisions (as amended). To the extent permitted by the 2015 IECC Commercial Provisions (as amended), *commercial buildings* may comply with ASHRAE 90.1-2013 (as amended) in lieu of complying with the 2015 IECC Commercial Provisions (as amended).

R101.5.1 Compliance software. Compliance with the 2015 IECC Residential Provisions (as amended) can be demonstrated through the use of:

- (1) computer software that is developed by the United States Department of Energy (such as REScheck) specifically for the 2015 IECC Residential Provisions (as amended), or
- (2) other software that shall have been expressly approved in writing by the New York Secretary of State as acceptable for demonstrating compliance with the 2015 IECC Residential Provisions (as amended).

Software programs used to demonstrate compliance must indicate compliance with the 2015 IECC Residential Provisions (as amended), and must reflect the actual requirements of the 2015 IECC Residential Provisions (as amended).

R101.5.1.1 Mandatory provisions. The use of the software approach to demonstrate compliance does not excuse compliance with any mandatory provision of the 2015 IECC Residential Provisions (as amended). When using the software approach to demonstrate compliance with the provisions of the 2015 IECC Residential Provisions (as amended), compliance with all applicable mandatory provisions of the 2015 IECC Residential Provisions (as amended) will still be required.

R101.6 Statutory limitations and exemptions.

R101.6.1. In the event of an addition to or alteration of an existing *building* or *building system*, the *Energy Code* shall not be interpreted to require any unaltered portion of such existing *building* or *building system* to comply with the *Energy Code*.

R101.6.2. The *Energy Code* shall not apply to any of the following, provided that 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; (5) reroofing for roofs where neither the sheathing nor the insulation is exposed; roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be insulated either above or below the sheathing; (6) replacement of existing doors that separate conditioned space from the exterior shall not require the installation of a vestibule or revolving door, provided, however, that an existing vestibule that separates such conditioned space from the exterior shall not be removed; (7) alterations that replace less than fifty percent of the luminaires in a space, provided that such alterations do not increase the installed interior lighting power; or (8) alterations that replace only the bulb and ballast within the existing luminaires in a space provided that the alteration does not increase the installed interior lighting power.

R101.6.3. *Historic buildings* are exempt from the *Energy Code*.

SECTION R102 ALTERNATE MATERIALS, METHODS OF CONSTRUCTION, DESIGN OR INSULATING SYSTEMS

R102.1 General. The 2015 IECC Residential Provisions (as amended) are not intended to prevent the use of any material, method of construction, design or insulating system not specifically prescribed in the 2015 IECC Residential Provisions (as amended), provided that such method of construction, design or insulating system has been *approved* by the *code official* as (1) meeting the intent of the 2015 IECC Residential Provisions (as amended) and (2) achieving energy savings that is equivalent or greater than that which would be achieved by the prescribed method of construction, design or insulating system.

Nothing in this section R102.1, or in any other provision in this Chapter 1 [RE] of the 2015 IECC Residential Provisions (as amended), or in any other provision of the 2015 IECC Residential Provisions (as amended), shall be construed shall be construed as permitting any *code official*, or any governmental unit or agency charged with the administration and enforcement of the *Energy Code*, to waive, vary, modify or otherwise alter any standard or requirement of the 2015 IECC Residential Provisions (as amended) or any other standard or requirement of the *Energy Code*. Standards or requirements of the *Energy Code* may be varied or modified only pursuant to Section 11-106 of the New York State Energy Law.

SECTION R103 CONSTRUCTION DOCUMENTS

NOTE: Requirements relating to the construction documents that must be provided with an application for a building permit or construction permit shall be the strictest of:

- (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question,
- (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or
- (iii) the requirements set forth in this Section R103 and, as applicable, the requirements set forth in Section C103 of the 2015 IECC Commercial Provisions (as amended).

R103.1 General. Construction documents and other supporting data shall be submitted in one or more sets with each application for a permit. The construction documents shall be prepared by a *registered design professional* as required by the New York State Education Law Articles 145 and 147.

Exception: Where construction documents are not required to be prepared by a *registered design professional* in accordance with New York State Education Law Articles 145 and 147, the *code official* is authorized to waive the requirements for construction documents or other supporting data if the *code official* determines they are not necessary to confirm compliance with this code.

R103.2 Information on construction documents. Construction documents shall be drawn to scale upon suitable material. Electronic media documents are permitted to be submitted where *approved* by the *code official*. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and shall 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, the following as applicable:

1. Insulation materials and their *R*-values.
2. Fenestration *U*-factor and solar heat gain coefficient (SHGC).
3. Area-weighted *U*-factor and solar heat gain coefficient (SHGC) calculations.
4. Mechanical system design criteria.
5. Mechanical and service water heating system and equipment types, sizes and efficiencies.
6. Equipment and system controls.

7. Duct sealing, duct and pipe insulation and location.
8. Air sealing details

R103.2.1 Building thermal envelope depiction. The *building's thermal envelope* shall be represented on the construction drawings.

R103.2.2 Written statement. When plans or specifications bear the seal and signature of a *registered design professional*, such *registered design professional* shall also include a written statement that to the best of his or her knowledge, belief and professional judgment, such plans or specifications are in compliance with the *Energy Code*.

R103.3. Examination of documents. The *code official* shall examine or cause to be examined the accompanying construction documents and shall ascertain whether the construction indicated and described is in accordance with the requirements of the *Energy Code* and other pertinent laws or ordinances. The *code official* is authorized to utilize a *registered design professional*, or other *approved* entity not affiliated with the design or construction of the *building* in question, in conducting the review of the plans and specifications for compliance with the *Energy Code*.

R103.3.1 Approval of construction documents. When the *code official* issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "Reviewed for Energy Code Compliance." Such *approved* construction documents shall not be changed, modified or altered without authorization from the *code official*. Work shall be done in accordance with the *approved* construction documents.

One set of construction documents so reviewed shall be retained by the *code official*. The other set shall be returned to the applicant, kept at the site of work and shall be open to inspection by the *code official* or a duly authorized representative.

R103.3.2 Previous approvals. The 2015 IECC Residential Provisions (as amended) shall not require changes in the construction documents, construction or designated occupancy of a structure for which a lawful permit was issued prior to the effective date of the rule making the 2015 IECC Residential Provisions (as amended) part of the *Energy Code*, provided that construction pursuant to such permit is commenced in good faith within 180 days after such effective date and is thereafter diligently pursued through completion.

R103.3.3 Phased approval. The *code official* shall have the authority to issue a permit for the construction of part of an energy conservation system before the construction documents for the entire system have been submitted or *approved*, provided adequate information and detailed statements have been filed complying with all pertinent

requirements of the *Energy Code*. The holders of such permit shall proceed at their own risk without assurance that the permit for the entire energy conservation system will be granted.

R103.4 Amended construction documents. Changes made during construction that are not in compliance with the *approved* construction documents shall be resubmitted for approval as an amended set of construction documents.

R103.5 Retention of construction documents. One set of *approved* construction documents shall be retained by the *code official* for a period of not less than seven years from the date of the demolition and removal of the building.

SECTION R104 INSPECTIONS

NOTE: Requirements relating to inspections of work shall be the strictest of:

- (i) the requirements of the code enforcement program established by the governmental unit or agency responsible for administration and enforcement of the *Energy Code* with respect to the building in question,
- (ii) the minimum requirements established by the regulations adopted by the Department of State pursuant to section 381(1) of the New York State Executive Law, or
- (iii) the requirements set forth in Section R104 and, as applicable, the requirements set forth in Section C104 of the 2015 IECC Commercial Provisions (as amended).

R104.1 General. Construction or work for which a permit is required shall be subject to inspection by the *code official* or an inspector who is (i) qualified to perform the inspections (such qualifications to include, where required, completion of the training required by 19 NYCRR Part 1208) and (ii) approved by the *code official*.

R104.1.1 Required approvals. Work shall not be done beyond the point indicated in each successive inspection without first obtaining the approval of the *code official*. The permit holder or the permit holder's agent shall notify the *code official* when work has progressed to the point where the next required inspection described in Section R104.2 can be made. The *code official* (or other qualified inspector *approved* by the *code official* pursuant to Section R104.1), shall make such inspection, and the *code official* shall either indicate the portion of the construction that is satisfactory as completed, or notify the permit holder or the permit holder's agent wherein the same fails to comply with the *Energy Code*. Any portions that do not comply shall be corrected and such portion shall not be covered or concealed until authorized by the *code official*. In the case of a building that is subject to

the New York City Construction Codes, such required approvals and inspections shall be subject to the provisions of Article 116 of Chapter 1 of Title 28 of the New York City Administrative Code.

R104.2 Required inspections. The *code official* (or other qualified inspector *approved* by the *code official* pursuant to Section R104.1), upon notification, shall make the inspections set forth in Sections R104.2.1 through R104.2.5.

R104.2.1 Footing and foundation inspection. Inspections associated with footings and foundations shall verify compliance with the code as to *R*-value, location, thickness, depth of burial and protection of insulation as required by the 2015 IECC Residential Provisions (as amended) and *approved* plans and specifications.

R104.2.2 Framing and rough-in inspection. Inspections at framing and rough-in shall be made before application of interior finish and shall verify compliance with the code as to types of insulation and corresponding *R*-values and their correct location and proper installation; fenestration properties (*U*-factor and SHGC) and proper installation; and air leakage controls as required by the 2015 IECC Residential Provisions (as amended) and *approved* plans and specifications.

R104.2.3 Plumbing rough-in inspection. Inspections at plumbing rough-in shall verify compliance as required by the code and *approved* plans and specifications as to types of insulation and corresponding *R*-values and protection; required controls; and required heat traps.

R104.2.4 Mechanical rough-in inspection. Inspections at mechanical rough-in shall verify compliance as required by the 2015 IECC Residential Provisions (as amended) and *approved* plans and specifications as to installed HVAC equipment type and size, required controls, system insulation and corresponding *R*-value, system air leakage control, programmable thermostats, dampers, whole-house ventilation, and minimum fan efficiency.

Exception: Systems serving multiple dwelling units shall be inspected in accordance with Section C104.2.4 in the 2015 IECC Commercial Provisions (as amended).

R104.2.5 Final inspection. The *building* shall have a final inspection and shall not be occupied until *approved*. The final inspection shall include verification of the installation of all required *building* systems, equipment and controls and their proper operation and the required number of high-efficacy lamps and fixtures.

R104.3 Reinspection. A building shall be reinspected when determined necessary by the *code official*.

R104.4 Approved inspection agencies. The *code official* is authorized to accept reports of third-party inspection agencies not affiliated with the design or construction of the *building* in question, provided such agencies are *approved* as to qualifications and reliability relevant to the *building* components and *building systems* they are inspecting.

R104.5 Inspection requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the *code official* when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

R104.6 Reinspection and testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with the *Energy Code*. The work or installation shall then be resubmitted to the *code official* for inspection and testing.

R104.7 Approval. After the prescribed tests and inspections indicate that the work complies in all respects with the *Energy Code*, a notice of approval shall be issued by the *code official*.

R104.7.1 Revocation. The *code official* is authorized to suspend or revoke a notice of approval wherever the *code official* determines that the notice is issued in error or on the basis of incorrect information supplied, or where it is determined that the *building* or structure, or any portion thereof, or the premises, or portion thereof, is in violation of any provision of the *Energy Code*; any provision of the *Uniform Code* or New York City Construction Codes, as applicable; or any other any applicable law, statute, rule, regulation or ordinance. Any such suspension or revocation shall be in writing, signed by the *code official* or by his or her designated agent.

SECTION R105 VALIDITY

R105.1 General. If any portion of the 2015 IECC Residential Provisions (as amended) is held by a court of competent jurisdiction to be illegal or void, such holding shall not affect the validity of the remainder of the 2015 IECC Residential Provisions (as amended) or of any other portion of the *Energy Code*.

SECTION R106 REFERENCED CODES AND STANDARDS

R106.1 General. The codes and standards referenced in the 2015 IECC Residential Provisions (as amended) shall be those listed in Chapter 6 of the 2015 IECC Residential Provisions (as amended),

and such codes and standards shall be considered as part of the requirements of the 2015 IECC Residential Provisions (as amended) to the prescribed extent of each such reference and subject to the provisions and limitations set forth in Sections R106.1.1 and R106.1.2.

R106.1.1 Conflicts. Where conflicts occur between provisions of the 2015 IECC Residential Provisions (as amended) and referenced codes and standards listed in Chapter 6 of the 2015 IECC Residential Provisions (as amended), the provisions of the 2015 IECC Residential Provisions (as amended) shall control.

R106.1.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard listed in Chapter 6 of the 2015 IECC Residential Provisions (as amended) includes subject matter that is within the scope of the 2015 IECC Residential Provisions (as amended), the provisions of the 2015 IECC Residential Provisions (as amended), as applicable, shall take precedence over the provisions in the referenced code or standard.

SECTION R107 OTHER LAWS AND REGULATIONS

R107.1 General. The *Energy Code* shall not be deemed to nullify any federal, state or local statute, law, rule, regulation, or ordinance relating to any matter as to which the *Energy Code* does not provide.

R107.1.1 Other agencies' regulations. Pursuant to Section 11-103(3) of the New York State Energy Law, any other code, rule or regulation heretofore promulgated or enacted by any state agency other than the State Fire Prevention and Building Code Council, incorporating specific energy conservation requirements applicable to the construction of any *building*, shall be superseded by the *Energy Code*.

R107.1.2 More stringent local energy codes. Pursuant to section 11-109 of the New York State Energy Law, and subject to the provisions and requirements of that section, any municipality has the power to promulgate a local energy conservation construction code that is more stringent than the *Energy Code*.

SECTION R108 INTERPRETATION OF ENERGY CODE REQUIREMENTS

NOTE: Except as may be otherwise provided by procedures established by the Secretary of State, as currently in effect or as hereafter established or amended for time to time, the procedures for requesting and issuing written interpretations of the *Energy Code* shall be as set forth in this Section R108.

R108.1 General. The Secretary of State is authorized by section 11-103(4) of the New York State Energy Law to issue written interpretations of the *Energy Code* upon written request of a permit applicant or the *code official* responsible for the administration and enforcement of the provisions of the *Energy Code*.

R108.2 Procedure. A request for an interpretation shall be signed by the building permit applicant and the *code official*, or by one or the other, individually, and shall include the following information in order to be considered complete:

1. Name, address, and telephone number of the building permit applicant and the *code official*;
2. A detailed description of the proposed construction, including a copy of the building permit application and plans and specifications that have been filed by the building permit applicant with the *code official*, as well as any other floor plans, elevations, cross-sections, details specifications, or construction documents necessary to describe adequately the proposed construction;
3. Identification of each requirement of this code for which an interpretation is requested;
4. A concise summary of the disagreement concerning the application of each such requirement for which an interpretation is requested; and
5. A copy of the building permit application denial if one was issued by the *code official*.

R108.3 Incomplete information. If the request is incomplete or does not otherwise contain sufficient information necessary to issue an interpretation, the Secretary of State may request clarification of the information provided or additional information necessary to issue the requested interpretation.

R108.4 Notification. Upon receipt of a complete request for an interpretation signed by only the building permit applicant or the *code official*, the Secretary of State shall provide written notification to the party who has not signed the request for an interpretation that such request for an interpretation has been filed with the Department of State. The party receiving such notification shall have 20 days from the date of such notification in which to provide, in writing, any comments

or additional information pertaining to the request for an interpretation, provided that the Commissioner may waive this deadline when warranted by extenuating circumstances.

R108.5 Issuing interpretation. The Secretary of State shall either issue the interpretation or provide notification of the intent not to issue an interpretation to the building permit applicant and the *code official* within 45 days of any of the following:

1. Receipt of a complete request for an interpretation signed by both the building permit applicant and the *code official*,
2. Receipt of comments when the request for an interpretation is signed by only one party, or
3. The expiration of the 20-day comment period when the request for an interpretation is signed by only one party.

R108.6 Enforcement. Subsequent enforcement of the *Energy Code* shall be consistent with the interpretations issued by the Secretary of State pursuant to section 11-103(4) of the New York State Energy Law.

R108.7 Interpretation of more stringent local energy code provisions. If a municipality has adopted a local energy code in accordance with the provisions of section 11-109 of the New York State Energy Law, and if such local energy code shall have become effective in such municipality in accordance with the provisions of section 11-109 of the New York State Energy Law, the local *code official* in such municipality is permitted to interpret those provisions of such local energy code that are (1) in addition to the provisions of *Energy Code* or (2) more stringent than the provisions of the *Energy Code*. However, no such interpretation shall be deemed to be an interpretation of the *Energy Code* by the Secretary of State pursuant to section 11-103(4) of the New York State Energy Law. In addition, if a local *code official* interprets a provision of a local energy code in a manner that makes such provision less stringent than the corresponding provision of the *Energy Code*, the corresponding provision of the *Energy Code* shall supersede such provision of the local energy code.

SECTION R109

REFERENCES TO CHAPTERS, SECTIONS, TABLES OR PROVISIONS

R109.1 General. Each reference in the 2015 IECC Residential Provisions (as amended) to a chapter, section or table by number only, or to a provision not specifically identified by number, without specification of the publication in which such chapter, section, table or provision is contained, shall be deemed to be a reference to such chapter, section, table or provision in the 2015 IECC Residential Provisions (as amended).

Example: Section R402.5 of the 2015 IECC Residential Provisions (as amended) includes a reference to “Section R402.1.5 or R405” and “Climate Zones 4 through 8.” Such references shall be deemed to be references to Sections R402.1.5 and R405 of the 2015 IECC Residential Provisions (as amended) and to Climate Zones 4 through 8 as determined in accordance with Chapter 3 of the 2015 IECC Residential Provisions (as amended), respectively.

3.4. Amendments to Section R201.3 (Terms defined in other codes).

Section R203.1 4 of the 2015 ICEE Residential Provisions shall be deemed to be amended to read as follows:

R201.3 (Terms defined in other codes). Terms that are not defined in the 2015 IECC Residential Provisions (as amended) but are defined in the *2015 International Building Code (as amended)*, *International Fire Code (as amended)*, *International Fuel Gas Code (as amended)*, *International Mechanical Code (as amended)*, *International Plumbing Code (as amended)* or *International Residential Code (as amended)* shall have the meanings ascribed to such terms in such other codes.

3.5. Amendments to Section R202 (General Definitions).

The definitions of the terms *building*, *building thermal envelope*, *conditioned space*, *ERI Reference Design*, *historic building*, and *residential building* in section R202 of the 2015 IECC Residential Provisions shall be deemed to be amended, and new definitions of the terms *2016 Energy Code Supplement*, *2016 Uniform Code Supplement*, *2015 International Building Code (as amended)*, *2015 International Fire Code (as amended)*, *2015 International Fuel Gas Code (as amended)*, *2015 International Mechanical Code (as amended)*, *2015 International Plumbing Code (as amended)*, *2015 International Property Maintenance Code (as amended)*, *2015 International Residential Code (as amended)*, *air impermeable insulation*, *area weighted average*, *ASHRAE 90.1-2013*, *ASHRAE 90.1-2013 (as amended)*, *building system*, *Energy Code*, *registered design professional*, and *Uniform Code* shall be deemed to be added to section R202 of the 2015 IECC Residential Provisions, said amended definitions and said new definitions to read as follows:

2016 ENERGY CODE SUPPLEMENT. The publication entitled “2016 Supplement to the New York State Energy Conservation Construction Code (Revised August 2016)” (Publication Date: August, 2016) published by the New York State Department of State.

2016 UNIFORM CODE SUPPLEMENT. The publication entitled “2016 Uniform Code Supplement” (Publication Date: March, 2016) published by the New York State Department of State.

2015 INTERNATIONAL BUILDING CODE (AS AMENDED). The publication entitled “2015 International Building Code” (Third Printing: October 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL FIRE CODE (AS AMENDED). The publication entitled “2015 International Fire Code” (Third Printing: June 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL FUEL GAS CODE (AS AMENDED). The publication entitled “2015 International Fuel Gas Code” (Third Printing: June 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL MECHANICAL CODE (AS AMENDED). The publication entitled “2015 International Mechanical Code” (Third Printing: November 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL PLUMBING CODE (AS AMENDED). The publication entitled “2015 International Plumbing Code” (Third Printing: August 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL PROPERTY MAINTENANCE CODE (AS AMENDED). The publication entitled “2015 International Property Maintenance Code” (Fourth Printing: December 2015) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

2015 INTERNATIONAL RESIDENTIAL CODE (AS AMENDED). The publication entitled “2015 International Residential Code” (Second Printing: January 2016) published by International Code Council, Inc., as said publication is deemed to be amended by the *2016 Uniform Code Supplement*.

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.

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 (Area 1 x *U*-factor 1) +

$(\text{Area 2} \times U\text{-factor 2}) + \dots / \text{Total Area} = \text{maximum allowable fenestration } U\text{-factor.}$

ASHRAE 90.1-2013. The publication entitled “ANSI/ ASHRAE / IES Standard 90.1-2013, *Energy Standard for Buildings Except Low-rise Residential Buildings*” (July 2014 Printing) published by the American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc. (ASHRAE 90.1-2013 is published by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., is jointly sponsored by the Illuminating Engineering Society of North America and the American National Standards Institute, and is also known as “ANSI/ASHRAE/IES 90.1-2013” or “ANSI/ASHRAE/IESNA 90.1-2013.”)

ASHRAE 90.1-2013 (AS AMENDED). ASHRAE 90.1-2013, as said publication is deemed to be amended by Part 2 of the 2016 Energy Code Supplement.

BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy or for affording shelter to persons, animals or property, together with (A) any equipment, mechanical systems, service water heating systems, and electric power and lighting systems located in such structure, and (B) any mechanical systems, service water heating systems, and electric power and lighting systems located on the site where such structure is located and supporting such structure. 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 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 (above and below grade) , floor, roof, and any other building elements that enclose *conditioned space* or provides a boundary between *conditioned space* and exempt or unconditioned space.

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

ENERGY CODE. The New York State Energy Conservation Construction Code adopted pursuant to Article 11 of the New York State Energy Law.

ERI REFERENCE DESIGN. A version of the rated design that meets the minimum requirements of the 2006 *International Energy Conservation Code*, and which establishes the index value of 100 on the Energy Rating Index scale.

HISTORIC BUILDING. Any building that is (a) listed on the national register of historic places or on the state register of historic places, (b) determined by the commissioner of parks, recreation and historic preservation to be eligible for listing on the state register of historic places, (c) determined by the commissioner of parks, recreation and historic preservation to be a contributing building to an historic district that is listed or eligible for listing on the state or national registers of historic places, or (d) otherwise defined as an historic building in regulations adopted by the state fire prevention and building code council.

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.

RESIDENTIAL BUILDING. The term “residential building” includes:

- (1) detached one-family dwellings having not more than three stories above grade plane;
- (2) detached two-family dwellings having not more than three stories above grade plane;
- (3) buildings that (i) consist of three or more attached townhouse units and (ii) have not more than three stories above grade plane;
- (4) buildings that (i) are classified in accordance with Chapter 3 of the 2015 *International Building Code (as amended)* in Group R-2, R-3 or R-4 and (ii) have not more than three stories above grade plane;
- (5) factory manufactured homes (as defined in section 372(8) of the Executive Law); and
- (6) mobile homes (as defined in section 372(13) of the Executive Law).

For the purposes of this definition of the term “residential building,” the term “townhouse unit” means a single-family dwelling unit constructed in a group of three or more attached units in which each unit (i) extends from the foundation to roof and (ii) has open space on at least two sides.

UNIFORM CODE. The New York State Uniform Fire Prevention and Building Code adopted pursuant to Article 18 of the New York State Executive Law, as currently in effect and as hereafter amended from time to time.

3.6. Amendments to Section R303.2 (Installation).

Section R303.2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R303.2 Installation. Materials, systems and equipment shall be installed in accordance with the manufacturer's installation instructions and the applicable provisions of the *Uniform Code*.

Exception. In the case of a building that is subject to the New York City Construction Codes, materials, systems and equipment shall be installed in accordance with the manufacturer's installation instructions and the applicable provisions of the New York City Construction Codes.

NOTE: Subsequent section R303.2.1 of the 2015 IECC Residential Provisions continues in full force and effect without amendment.

3.7. Amendments to Section R402.1 (General (Prescriptive)), Section R402.1.1 (Vapor retarder), and Section R402.1.2 (Insulation and fenestration criteria).

Section R402.1, Section R402.1.1, and Section R402.1.2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R402.1 General (Prescriptive). The *building thermal envelope* shall meet the requirements of Sections R402.1.1 through R402.1.5.

Exception: The following low-energy buildings, or portions thereof, separated from the remainder of the building by *building thermal envelope* assemblies complying with this section shall be exempt from the *building thermal envelope* provisions of Sections R402.1.1 through R402.1.5:

1. Those with a peak design rate of energy usage less than 3.4 Btu/h · ft² (10.7 W/m²) or 1.0 watt / ft² of floor area for space-conditioning purposes.
2. Those that do not contain *conditioned space*.

R402.1.1 Vapor retarder. Wall assemblies in the *building thermal envelope* shall comply with the vapor retarder requirements of Section R702.7 of the *2015 International Residential Code (as amended)*, Section 1405.3 of the *2015 International Building Code (as amended)*, or the New York City Construction Codes, as applicable.

R402.1.2 Insulation and fenestration criteria. The *building thermal envelope* shall meet the requirements of Table R402.1.2, based on the climate zone specified in Chapter 3. In climate zone 6, the *building thermal envelope* shall meet either the requirements of the climate zone 6 “option 1” row in Table R402.1.2 or the requirements of the climate zone 6 “option 2” row in Table R402.1.2.

NOTE: Subsequent sections R402.1.3, R402.1.4, and R402.1.5 of the 2015 IECC Residential Provisions continue in full force and effect without amendment.

3.8. Amendments to Table R402.1.2 (Insulation and Fenestration Requirements by Component).

Table R402.1.2 of the 2015 IECC Residential Provisions shall be deemed to be amended by (1) designating the existing row for climate zone 6 as “option 1” and (2) adding a new row, to be designated as “option 2,” for climate zone 6, such “option 1” and “option 2” rows for climate zone 6 to read as follows:

Climate Zone	Fenestration U-value ^b	Skylight ^b U-Factor	Glazed Fenestration SHGC ^{b, e}	Ceiling R-value	Wood Frame Wall R-Value	Mass Wall R-Value ⁱ	Floor R-Value	Basement ^c Wall R-Value	Slab ^d R-Value & depth	Crawl space ^c wall R-Value
6 option 1	0.32	0.55	NR	49	20+5 or 13+10 ^h	15/20	30 ^g	15 / 19	15, 4 ft.	15/19
6 option 2	0.28	0.55	NR	49	25 cavity	15/20	30 ^g	15 / 20	15, 4 ft.	15/20

NOTE: The remainder of Table R402.1.2 shall not be deemed to be deleted or otherwise amended by this Section 3.8. The remainder of Table R402.1.2 continues in full force and effect.

3.9. Amendments to Section R402.2.11 (Crawl space walls).

Section R402.2.11 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R402.2.11 Crawl space walls. As an alternative to insulating floors over crawl spaces, crawl space walls shall be permitted to be insulated when the crawl space is not vented to the outside. Crawl space wall insulation shall be permanently fastened to the wall and extend downward from the floor to the finished grade level and then vertically and/or horizontally for at least an additional 24 inches (610 mm). Exposed earth in unvented crawl space foundations shall be covered with a continuous Class I vapor retarder in accordance with the *2015 International Building Code (as amended)*, the *2015 International Residential Code (as amended)*, or the New York City Construction Codes, as applicable. All joints of the vapor retarder shall overlap by 6 inches (153 mm) and be sealed or taped. The edges of the vapor retarder shall extend at least 6 inches (153 mm) up the stem wall and shall be attached to the stem wall.

3.10. Amendments to Section R402.4 (Air leakage (Mandatory)).

Section R402.4 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R402.4 Air leakage (Mandatory). The *building thermal envelope* shall be constructed to limit air leakage in accordance with the requirements of Sections R402.4.1 through R402.4.6.

NOTE: See Note following Item 3.14 of this 2016 Energy Code Supplement for a more complete description of the effect of Items 3.10 through 3.14 of this 2016 Energy Code Supplement on Section R402.4 (including Sections R402.4.1, R402.4.1.1, R402.4.1.2, R402.4.1.3, R402.4.2, R402.4.3, R402.4.4, R402.4.5, and R402.4.6) of the 2015 IECC Residential Provisions.

3.11. Amendments to Section R402.4.1.2 (Testing).

Section R402.4.1.2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R402.4.1.2 Testing. The *building* or dwelling unit shall be tested and verified as having an air leakage rate not exceeding three air changes per hour. Testing shall be conducted in

accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inch w.g. (50 Pascals). Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*. During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather-stripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Where required by the *code official*, testing shall be conducted by an *approved* third party. A written report of the results of the test shall be prepared and signed by the party conducting the test and provided to the *code official*. The written report shall include:

1. the name and place of business of the party conducting the test;
2. the address of the building which was tested;
3. the conditioned floor area of dwelling, calculated in accordance with ANSI Z65, except that conditioned floor area shall include areas where the ceiling height is less than 5 feet (1524 mm);
4. measurement of the air volume lost at an internal pressurization of 0.2 inches w.g. (50 Pascals);
5. the date(s) of the test;
6. a certification by the party conducting the test of the accuracy of the test results; and
7. the signature of the party conducting the test.

3.12. Addition of new Section R402.4.1.3 (Optional testing procedure for buildings with two or more dwelling units within the *building thermal envelope*) and new Section R402.4.1.3.1 (Buildings with seven or more dwelling units).

Section R402.4.1 of the 2015 IECC Residential Provisions shall be deemed to be amended by the addition of a new Section R402.4.1.3 and a new Section R402.4.1.3.1, to read as follows:

R402.4.1.3 Optional testing procedure for buildings with two or more dwelling units within the *building thermal envelope*. Where two or more dwelling units are located within the *building thermal envelope* of a *building*, the testing procedure specified in this Section R402.4.1.3 shall be permitted as an alternative to compliance with Section R402.4.1.2.

In this Section R402.4.1.3, each dwelling unit and each other conditioned occupied space located within the *building thermal envelope* of the *building* shall be referred to as a “testing unit,” and the “enclosure surface area” within a testing unit shall be equal to the sum of the areas of (i) each exterior wall in such testing unit, (ii) each interior wall in such testing unit that abuts other testing unit(s), (iii) each ceiling in such testing unit that abuts other testing unit(s) or abuts unconditioned space, and (iv) each floor in such testing unit that abuts other testing unit(s) or abuts unconditioned space.

Each testing unit shall be tested and verified as having an air leakage rate not exceeding 0.3 cubic feet per minute per square foot of enclosure surface area within the testing area. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals), and shall be conducted in accordance with ASTM E779. Testing shall be performed at any time after creation of all penetrations of the *building thermal envelope*. During testing:

1. Exterior windows and doors, fireplace and stove doors shall be closed, but not sealed, beyond the intended weather-stripping or other infiltration control measures.
2. Dampers including exhaust, intake, makeup air, backdraft and flue dampers shall be closed, but not sealed beyond intended infiltration control measures.
3. Interior doors, if installed at the time of the test, shall be open.
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed.
5. Heating and cooling systems, if installed at the time of the test, shall be turned off.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

Where required by the *code official*, testing shall be conducted by an *approved* third party.

A written report of the results of the test shall be prepared and signed by the party conducting the test and provided to the *code official*. The written report shall include:

1. the name and place of business of the party conducting the test;
2. the address of the building which was tested;
3. the conditioned floor area of dwelling, calculated in accordance with ANSI Z65-1996, except that conditioned floor area shall include areas where the ceiling height is less than 5 feet (1524 mm);
4. measurement of the air leakage rate of each testing unit;
5. the date(s) of the test;
6. a certification by the party conducting the test of the accuracy of the test results; and
7. the signature of the party conducting the test.

R402.4.1.3.1 Buildings with more than seven dwelling units. When the optional testing procedure authorized by Section R402.4.1.3 is used for a *building* with more than seven dwelling units, testing each testing unit shall not be required, and testing of sample testing units selected in accordance with the provisions set forth below in this Section 402.4.1.3.1 shall be permitted, when *approved* by the *code official*.

1. Testing units shall be grouped into sample sets of not more than seven testing units and common rooms in each sample set. Each sample set shall contain testing units that are representative of all dwelling unit types and all other conditioned occupied spaces.
2. If all testing units in the first sample set tested are verified as having an air leakage rate not exceeding 0.3 cubic feet per minute per square foot of enclosure surface area within the testing area, remaining sample sets shall be permitted to be tested at the rate of one testing unit per sample set.
3. If any testing unit tested in accordance with paragraph 2 above is not verified as having an air leakage rate not exceeding 0.3 cubic feet per minute per square foot of enclosure surface area within the testing area, two additional testing units in the sample set shall be tested.
4. If any testing unit tested in accordance with paragraph 3 above is not verified as having an air leakage rate not exceeding 0.3 cubic feet per minute per square foot of enclosure surface area within the testing area, all testing units in the sample set shall be tested, and all testing units in the subsequent sample set, if any, shall be tested.
5. If all testing units in the sample set tested in accordance with paragraph 4 above are verified as having an air leakage rate not exceeding 0.3 cubic feet per minute per square foot of enclosure surface area within the testing area, subsequent sample sets shall be permitted to be tested in accordance with paragraph 2 above, where approved by the *code official*.

3.13. Amendments to Section R402.4.2 (Fireplaces).

Section R402.4. 2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R402.4.2 Fireplaces. New wood-burning fireplaces that are designed to allow an open burn and new wood-burning fireplace units that are designed to allow an open burn shall have tight-fitting flue dampers or tight-fitting doors. Tight-fitting doors used on a factory-built fireplace listed and labeled in accordance with UL 127 or on a factory-built fireplace unit listed and labeled in accordance with UL 127 shall be tested and listed for such fireplace or fireplace unit. Tight-fitting doors used on a masonry fireplace shall be listed and labeled in accordance with UL 907.

New wood-burning fireplaces that are designed to allow an open burn and new wood-burning fireplace units that are designed to allow an open burn shall be provided with a source of outdoor combustion air as required by the fireplace construction provisions of the *2015 International Building Code (as amended)*, the *2015 International Residential Code (as amended)* or the New York City Construction Codes, as applicable.

3.14. Addition of new Section R402.4.6 (Tenant separation walls (Mandatory)).

Section R402.4 of the 2015 IECC Residential Provisions shall be deemed to be amended by the addition of a new section R402.4.6, to read as follows:

R402.4.6 Tenant separation walls (Mandatory). Fire separations between dwelling units in two-family dwellings and multiple single-family dwellings (townhouses) shall be insulated to no less than R-10 and the walls shall be air sealed in accordance with Section R402.4. of this chapter.

NOTE: Sections R402.4.1, R402.4.1.1, R402.4.3, R402.4.4, and R402.4.5 of the 2015 IECC Residential Provisions continue in full force and effect without amendment.

The effect of Items 3.10 through 3.14 of this 2016 Energy Code Supplement on Section R402.4 (including subordinate Sections R402.4.1, R402.4.1.1, R402.4.1.2, R402.4.1.3, R402.4.1.3.1, R402.4.2, R402.4.3, R402.4.4, R402.4.5, and R402.4.6) of the 2015 IECC Residential Provisions is summarized as follows:

Section R402.4 (Air leakage (Mandatory)): amended by Item 3.10
Section R402.4.1 (Building thermal envelop): unchanged
Section R402.4.1.1 (Installation): unchanged
Section R402.4.1.2 (Testing): amended by Item 3.11
Section R402.4.1.3 (Optional testing procedure for buildings with two or more dwelling units within the *building thermal envelope*): added by Item 3.12
Section R402.4.1.3.1 (Buildings with seven or more dwelling units): added by Item 3.12
Section R402.4.2 (Fireplaces): amended by Item 3.13
Section R402.4.3 (Fenestration air leakage): unchanged
Section R402.4.4 (Rooms containing fuel-burning appliances): unchanged
Section R402.4.5 (Recessed lighting): unchanged
Section R402.4.6 (Tenant separation walls (Mandatory)): added by Item 3.14.

3.15. Amendments to Section R403.3.2 (Sealing (Mandatory)).

Section R403.3.2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R403.3.2 Sealing (Mandatory). Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with the *2015 International Mechanical Code (as amended)*, the *2015 International Residential Code (as amended)*, or the New York City Construction Codes, as applicable.

Exceptions:

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams, and locking-type joints and seams of other than the snap-lock and button-lock types.

NOTE: Subsequent section R403.3.2.1 of the 2015 IECC Residential Provisions continues in full force and effect without amendment.

3.16. Amendments to Section R403.6 (Mechanical ventilation (Mandatory)).

Section R403.6 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

Section R403.6 Mechanical ventilation (Mandatory). The building shall be provided with ventilation that meets the requirements of the *2015 International Mechanical Code (as amended)*, the *2015 International Residential Code (as amended)*, or the New York City Constructions Codes, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

NOTE: Subsequent section R403.6.1 of the 2015 IECC Residential Provisions continues in full force and effect without amendment.

3.17. Amendments to Section R403.8 (Systems serving multiple dwelling units (Mandatory)).

Section R403.8 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R403.8 Systems serving multiple dwelling units (Mandatory). Systems serving multiple dwelling units shall comply with the Section C403 and C404 of the 2015 IECC Commercial Provisions (as amended) in lieu of Section R403 of the 2015 IECC Residential Provisions (as amended).

3.18. Amendments to Section R403.10.3 (Covers).

Section R403.10.3 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R403.10.3 Covers. Outdoor heated pools and outdoor heated permanent spas shall be equipped with a vapor-retardant pool cover or other *approved* vapor-retardant means. Outdoor heated pools and outdoor heated permanent spas heated to more than 90 degrees F (32 degrees C) shall have a pool cover with a minimum insulation value of R-12.

Exception: Where more than 60 percent of the energy used for heating an outdoor heated pool or outdoor heated permanent spa is from site-recovered energy or solar energy source, covers or other vapor-retardant means shall not be required.

3.19. Amendment to Section R403.12 (Residential pools and permanent residential spas)

In Section R406.12 of the 2015 IECC, the phrase “in accordance with APSP-15” shall be deemed to be amended to read as follows: “in accordance with APSP-15a.”

3.20. Amendments to Section R406.2 (Mandatory requirements).

Section R406.2 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R406.2 Mandatory requirements. Compliance with this section requires that (1) the provisions in Sections R401 through R404 labeled as “mandatory” and (2) the provisions of Section R403.5.3 be met. The *building thermal envelope* shall be greater than or equal to levels of efficiency and Solar Heat Gain Coefficient in Table 402.1.1 or 402.1.3 of the 2010 Energy Conservation Construction Code of New York State (ECCCNYS-2010).

Exception. Supply and return ducts not completely inside the *building thermal envelope* shall be insulated to a minimum of R-6.

3.21. Amendments to Section R501.4 (Compliance).

Section R501.4 of the 2015 IECC Residential Provisions shall be deemed to be amended to read as follows:

R501.4 Compliance. *Alterations, repairs, additions* and changes of occupancy to, or relocation of, existing buildings and structures shall comply with (i) all applicable provisions of the 2015 IECC Residential Provisions (as amended), (ii) the provisions for *alterations, repairs, additions* and changes of occupancy or relocation, respectively, in the *Uniform Code*, and (iii) NFPA 70.

Exception: In the case of a building that is subject to the New York City Construction Codes, *alterations, repairs, additions* and changes of occupancy to, or relocation of, existing buildings and structures shall comply with (i) all applicable provisions of the 2015 IECC Residential Provisions (as amended), (ii) the provisions for *alterations, repairs, additions* and changes of occupancy or relocation, respectively, in the New York City Construction Codes, and (iii) the New York City Electrical Code.

NOTES:

1. In the 2015 IECC Residential Provisions, ECCCNY-2010 is referred to as the “2010 Energy Conservation Construction Code of New York State,” IBC-15 is referred to as the “*International Building Code*,” IECC-09 is referred to as the “2009 *International Energy Conservation Code*,” ECC-06 is referred to as the “2006 *International Energy Conservation Code*,” IFC-15 is referred to as the “*International Fire Code*,” IFGC-15 is referred to as the “*International Fuel Gas Code*,” IMC-15 is referred to as the “*International Mechanical Code*,” IPC-15 is the “*International Plumbing Code*,” IPMC-15 is referred to as the “*International Property Maintenance Code*,” and IRC-15 is referred to as the “*International Residential Code*.”
2. For the purposes of applying IBC-15, IFC-15, IFGC-15, IMC-15, IPC-15, IPMC-15, and IRC-15 in New York State, said publications are deemed to be amended in the manner specified in the *2016 Uniform Code Supplement*.

3.25. Unaffected Residential Provisions.

The chapters, sections, tables, and other provisions in the 2015 IECC Residential Provisions that are not deemed to be amended by any one or more of the foregoing Items in this Part 3 of the 2016 Energy Code Supplement are hereafter referred to as the “Unaffected Residential Provisions.” Nothing in this 2016 Energy Code Supplement shall be construed as deleting all or any part of any Unaffected Residential Provision. Each Unaffected Residential Provision shall continue in full force and effect, and shall be deemed to be part of the “2015 IECC Residential Provisions (as amended).”