

1 **BILL NO. 2025-20**

2 **ORDINANCE NO. 6913**

3 AN ORDINANCE TO ADOPT THE 2024 EDITION OF THE INTERNATIONAL ENERGY  
4 CONSERVATION CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR  
OTHER RELATED MATTERS.

5 Proposed by: Seth T. Floyd, Director of  
6 Community Development

Summary: Adopts the 2024 Edition of the  
International Energy Conservation Code,  
together with amendments thereto.

7 THE CITY COUNCIL OF THE CITY OF LAS VEGAS DOES HEREBY ORDAIN AS  
8 FOLLOWS:

9 SECTION 1: Title 16, Chapter 52, Section 10, of the Municipal Code of the City of Las  
10 Vegas, Nevada, 1983 Edition, is hereby amended to read as follows:

11 **16.52.010:** Those certain documents, three copies of which are on file in the Office of the City Clerk  
12 and are designated as follows, are adopted by reference as if set forth herein in full:

13 (A) The publication entitled "International Energy Conservation Code, [2018] 2024  
14 Edition," as published by the International Code Council, as Part 1 of this Chapter; and

15 (B) The document entitled "Southern Nevada Amendments to the [2018] 2024  
16 International Energy Conservation Code," which adds to, deletes from and amends the "International Energy  
17 Conservation Code, [2018] 2024 Edition," as Part 2 of this Chapter.

18 SECTION 2: The document entitled "Southern Nevada Amendments to the 2024  
19 International Energy Conservation Code" is attached hereto.

20 SECTION 3: Ordinance No. 6635, the 2018 International Energy Conservation Code,  
21 and the Southern Nevada Amendments to the 2018 International Energy Conservation Code, are hereby  
22 repealed in their entirety.

23 SECTION 4: This Ordinance shall be effective as of January 5, 2026.

24 SECTION 5: If any section, subsection, subdivision, paragraph, sentence, clause or phrase  
25 in this ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by  
26 any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the

1 remaining portions of this ordinance or any part thereof. The City Council of the City of Las Vegas hereby  
2 declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase  
3 thereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs,  
4 sentences, clauses or phrases be declared unconstitutional, invalid or ineffective.

5 SECTION 6: Whenever in this ordinance any act is prohibited or is made or declared to  
6 be unlawful or an offense or a misdemeanor, or whenever in this ordinance the doing of any act is required  
7 or the failure to do any act is made or declared to be unlawful or an offense or a misdemeanor, the doing of  
8 such prohibited act or the failure to do any such required act shall constitute a misdemeanor and upon  
9 conviction thereof, shall be punished by a fine of not more than \$1,000.00 or by imprisonment for a term of  
10 not more than six months, or by any combination of such fine and imprisonment. Any day of any violation  
11 of this ordinance shall constitute a separate offense.

12 SECTION 7: All ordinances or parts of ordinances or sections, subsections, phrases,  
13 sentences, clauses or paragraphs contained in the Municipal Code of the City of Las Vegas, Nevada, 1983  
14 Edition, in conflict herewith are hereby repealed.

15 PASSED, ADOPTED and APPROVED this 16<sup>th</sup> day of July, 2025.

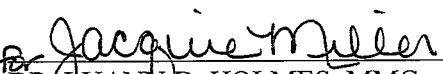
16 APPROVED:

17 By


18   
~~SHELLEY BERKLEY, Mayor~~

**Brian Knudsen, Mayor Pro-Tem**

19 ATTEST:

20   
21 DR. JUAN D. HOLMES, MMC  
City Clerk

22 APPROVED AS TO FORM:

23   
24 Val Steed,  
Deputy City Attorney

6-12-25  
Date

1 The above and foregoing ordinance was first proposed and read by title to the City  
2 Council on the 2<sup>nd</sup> day of July, 2025, and referred to a committee for recommendation;  
3 hereafter the committee reported favorably on said ordinance on the 16<sup>th</sup> day of July,  
4 2025, which as a regular meeting of said Council; that at said regular meeting, the  
5 proposed ordinance was read by title to the City Council and adopted by the following  
6 vote:

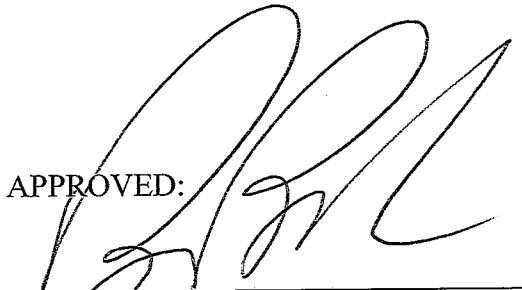
7 VOTING "AYE": Mayor Pro Tem Knudsen, and Councilmembers, Seaman,  
8 Diaz, Allen-Palenske, Brune and Summers-Armstrong

9 VOTING "NAY": None

10 EXCUSED: Mayor Berkley

11 THOSE NOT VOTING: None

12  
13  
14 APPROVED:

15   
16 \_\_\_\_\_  
17 ~~SHELLEY BERKLEY, Mayor~~  
18 **Brian Knudsen, Mayor Pro-Tem**

19 ATTEST:

20   
21 \_\_\_\_\_  
22 DR. LUANN D. HOLMES, MMC City Clerk  
23  
24  
25  
26

AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)  
COUNTY OF CLARK) SS:

LV CITY CLERK  
ATTN: ARLENE  
495 S MAIN ST  
LAS VEGAS NV 89101

Account #  
Order ID

104115  
337794

Leslie McCormick, being 1st duty sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal/Las Vegas Sun, daily newspaper regularly issued, published and circulated in the Clark County, Las Vegas, Nevada and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal/Las Vegas Sun, in 1 edition(s) of said newspaper issued from 07/03/2025 to 07/03/2025, on the following day(s):

07/03/2025

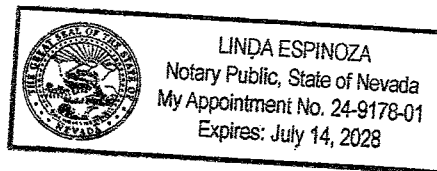
*Leslie McCormick*

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this July 3, 2025

Notary

*Linda Espinoza*



**BILL NO. 2025-20**

AN ORDINANCE TO ADOPT THE 2024 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Seth T. Floyd,  
Director of Community  
Development

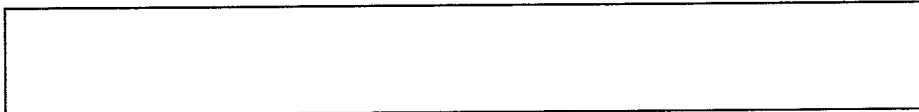
Summary: Adopts the 2024 Edition of the International Energy Conservation Code, together with amendments thereto.

At the City Council meeting of  
July 2, 2025

BILL NO. 2025-20 WAS READ BY TITLE AND REFERRED TO A RECOMMENDING COMMITTEE

COPIES OF THE COMPLETE ORDINANCE ARE AVAILABLE FOR PUBLIC INFORMATION IN THE OFFICE OF THE CITY CLERK, 2ND FLOOR, 495 SOUTH MAIN STREET, LAS VEGAS, NEVADA

PUB: July 3, 2025  
LV Review-Journal



AFFIDAVIT OF PUBLICATION

STATE OF NEVADA)  
COUNTY OF CLARK) SS:

LV CITY CLERK  
ATTN: ARLENE  
495 S MAIN ST  
LAS VEGAS NV 89101

Account #  
Order ID

104115  
338558

Leslie McCormick, being 1st duty sworn, deposes and says: That she is the Legal Clerk for the Las Vegas Review-Journal/Las Vegas Sun, daily newspaper regularly issued, published and circulated in the Clark County, Las Vegas, Nevada and that the advertisement, a true copy attached for, was continuously published in said Las Vegas Review-Journal/Las Vegas Sun, in 1 edition(s) of said newspaper issued from 07/19/2025 to 07/19/2025, on the following day(s):

07/19/2025

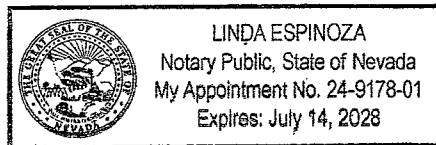
*Leslie McCormick*

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this July 19, 2025

Notary

*Linda Espinoza*



**BILL NO. 2025-20  
ORDINANCE NO. 6913**

AN ORDINANCE TO ADOPT THE 2024 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE, TOGETHER WITH AMENDMENTS THERETO, AND TO PROVIDE FOR OTHER RELATED MATTERS.

Proposed by: Seth T. Floyd,  
Director of Community  
Development

Summary: Adopts the 2024 Edition of the International Energy Conservation Code, together with amendments thereto.

The above and foregoing ordinance was first proposed and read by title to the City Council on the 2nd day of July, 2025, and referred to a committee for recommendation; thereafter the committee reported favorably on said ordinance on the 16th day of July, 2025, which was a regular meeting of said City Council; and that at said meeting, the proposed ordinance was read by title to the City Council as first introduced and adopted by the following vote:

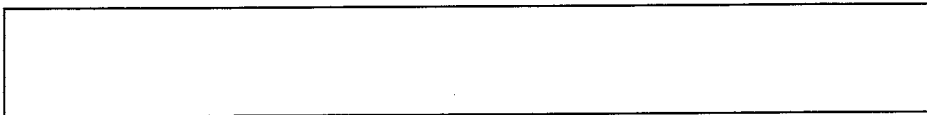
VOTING "AYE": Mayor Pro Tem Knudsen and Councilmembers Seaman, Diaz, Allen-Palenske, Brune and Summers-Armstrong.

VOTING "NAY": NONE

EXCUSED: Mayor Berkley

COPIES OF THE COMPLETE ORDINANCE ARE AVAILABLE FOR PUBLIC INFORMATION IN THE OFFICE OF THE CITY CLERK, 2ND FLOOR, 495 SOUTH MAIN STREET, LAS VEGAS, NEVADA.

PUB: July 19, 2025  
LV Review-Journal





**SOUTHERN NEVADA AMENDMENTS  
TO THE  
2024 INTERNATIONAL  
ENERGY CONSERVATION CODE**

## **Preface**

This document was developed by the Southern Nevada Building Officials' (SNBO) International Energy Conservation Code Committee and presents amendments to the 2024 International Energy Conservation Code (IECC) as published by the International Code Council (IECC).

Participation in the 2024 International Energy Conservation Code Committee was open to all interested parties. However, voting on amendments proposals was limited to one vote each for seven Southern Nevada municipalities (Clark County, Henderson, Las Vegas, North Las Vegas, Boulder City, Pahrump and Mesquite), the Clark County School District, and three industry representatives. All committee proceedings were conducted in accordance with Robert's Rules of Order.

The recommended amendments contained herein are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and their use authorized by the Building Official. This document may be copied and used in whole or in part without permission or approval from the organizations listed on the cover page.

## Table of Contents

Section C101 .....	4
Section C202, Definitions .....	5
Section C301.1 .....	6
Section C403.4.7 .....	6
Section C402.6.1.2.2 .....	7
Section C402.6.2 .....	7
Section C402.6.2.2 .....	8
Section C402.6.2.3.1 .....	9
Section C403.1 .....	9
Section C403.7.4 .....	10
Section C405.13 .....	10
Section C405.15 .....	11
Section C405.2.4.1 .....	11
Section C405.2.5 .....	12
Section C405.2.9(3) .....	12
Section C405.3.1 .....	13
Section C405.5.1 .....	15
Section C405.6 .....	15
Chapter 6 CE .....	15
Section R101 .....	15
Section R202, Definitions .....	17
Section R301.1 .....	17
Section R401.2 .....	18
Table R402.1.3 .....	18
Table R402.1.2 .....	20
Section R402.2.4 .....	21
Table R402.5.1.1 .....	21
Section R403.6 .....	24
Section R406.2, R406.4 & R406.5 .....	24
Section R501.2 .....	26
Chapter 6 RE .....	26

## Section C101

*Delete Chapter 1 in its entirety, except revise Sections C101.1, C101.2, C101.3, C102.4, C102.4.1 C102.4.2, C105.2, C105.2.1, and add C102.4.3 as follows:*

**C101.1 Title.** This code shall be known as the Energy Conservation Code. It is referred to herein as “this code.”

**C101.2 Scope.** This code applies to the design and construction of buildings not covered by the scope of the IECC—Residential Provisions.

**C101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

**C101.3 Intent.** The IECC—Commercial Provisions provide market-driven, enforceable requirements for the design and construction of commercial buildings, providing minimum efficiency requirements for buildings that result in the maximum level of energy efficiency that is safe, technologically feasible, and life cycle cost effective, considering economic feasibility, including potential costs and savings for consumers and building owners, and return on investment. Additionally, the code provides jurisdictions with supplemental requirements, including ASHRAE 90.1, and optional requirements that lead to achievement of zero energy buildings, presently, and through glide paths that achieve zero energy buildings by 2030 and on additional timelines sought by governments, and achievement of additional policy goals as identified by the Energy and Carbon Advisory Council and approved by the Board of Directors. Requirements contained in the code will include, but not be limited to, prescriptive- and performance-based pathways. The code may include nonmandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources developed by the International Code Council and others. The code will aim to simplify code requirements to facilitate the code’s use and compliance rate. The code is updated on a 3-year cycle with each subsequent edition providing increased energy savings over the prior edition. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this intent. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

**C102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be those listed in Chapter 6, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections C102.4.1 and C102.4.2.

**C102.4.1 Conflicts.** Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**Exception:** Where conflicts relate to health and safety of the occupants or building security.

**C102.4.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

**Exception:** Where conflicting subject matter relates to health and safety of the occupants or building security.

**C102.4.3 Mechanical/Plumbing reference.** Any reference to the International Mechanical Code shall be replaced by the Uniform Mechanical Code. Any reference to the International Plumbing Code shall be replaced by the Uniform Plumbing Code.

**C105.2 Information on construction documents.** Construction documents shall be drawn to scale on 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 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. Energy compliance path.
2. Insulation materials and their R-values.
3. Fenestration U-factors and solar heat gain coefficients (SHGC).
4. Area-weighted U-factor and solar heat gain coefficient (SHGC) calculations.
5. Air barrier and air sealing details, including the location of the air barrier.
6. Thermal bridges as identified in Section C402.7.
7. Mechanical system design criteria.
8. Mechanical and service water-heating systems and equipment types, sizes and efficiencies.
9. Economizer description.
10. Equipment and system controls.
11. Fan motor horsepower (hp) and controls.
12. Duct sealing, duct and pipe insulation and location.
13. Lighting fixture schedule with wattage and control narrative.
14. Location of daylight zones on floor plans.
15. Location of pathways for routing of raceways or cable from the on-site renewable energy system to the electrical distribution equipment. (A detailed location of the pathway will not be required).
16. Location reserved for inverters, metering equipment and energy storage systems (ESS), and a pathway reserved for routing of raceways or conduit from the renewable energy system to the point of interconnection with the electrical service and the ESS. (A detailed location of the pathway will not be required).
17. Location and layout of a designated area for ESS.
18. Rated energy capacity and rated power capacity of the installed or planned ESS.

**C105.2.1 Building thermal envelope depiction.** The building thermal envelope shall be represented on the construction drawings.

## Section C202, Definitions

*Certain definitions in Section C202 are revised, added or modified, as follows:*

**AFFORDABLE HOUSING.** Housing that serves those with income levels as defined by Nevada Revised Statutes (NRS) § 278.0105 “Affordable housing” defined. “Affordable housing” means tier one affordable housing, tier two affordable housing or tier three affordable housing.

**Renewable Energy Resources.** Energy derived from solar radiation, wind, waves, tides, biogas, biomass waste or extracted from hot fluid or steam heated within the earth.

**Luminaire.** A complete lighting unit consisting of a light source such as a lamp or lamps, together with the parts designed to position the light source and connect it to the power supply. It may also

include parts to protect the light source or the ballast or to distribute the light. A lampholder itself is not a luminaire.

## Section C301.1

*Revise Section C301.1, as follows:*

**C301.1 General.** *Climate zones* from Figure C301.1 or Table C301.1 shall be used for determining the applicable requirements from Chapter 4. Locations not indicated in Table C301.1 shall be assigned a *climate zone* in accordance with Section C301.3.

**Exception:** Areas within Clark County above altitudes of 4000 feet shall be considered in *Climate Zone 5B*. Areas within Nye County below altitudes of 4000 feet shall be considered in *Climate Zone 3B*.

## Section C403.4.7

*Revise Section 403.4.7, as follows:*

### **C403.4.7 Heating and cooling system controls for operable openings to the outdoors.**

All doors from a conditioned space to the outdoors and all other operable openings from a conditioned space to the outdoors that are larger than 40 square feet (3.7 m<sup>2</sup>) when fully open shall have automatic controls interlocked with the heating and cooling system. The controls shall be configured to do the following within 5 minutes of opening:

1. Disable mechanical heating to the zone or reset the space heating temperature setpoint to 55°F (12.5°C) or less.
2. Disable mechanical cooling to the zone or reset the space cooling temperature setpoint to 90°F (32°C) or more. Mechanical cooling can remain enabled if the outdoor air temperature is below the space temperature.

#### **Exceptions:**

1. Building entrances with automatic closing devices.
2. Emergency exits with an automatic alarm that sounds when open.
3. Operable openings and doors serving enclosed spaces without a thermostat or heating or cooling temperature sensor.
4. Separately zoned areas associated with the preparation of food that contain appliances that contribute to the heating or cooling loads of a restaurant or similar type of occupancy.
5. Warehouses that utilize operable openings for the function of the occupancy, where approved by the code official.
6. The first entrance doors where located in the exterior wall and are part of a vestibule system.
7. Operable openings into spaces served by radiant heating and cooling systems.
8. Alterations where walls would have to be opened solely for the purpose of meeting

this requirement and where approved.

9. Doors served by air curtains meeting the requirements of Section C402.6.6.
10. Arenas, Nightclubs, Day Clubs, Exhibition Halls, Banquet Halls, other Assembly Group A-1, A-2, A-3, and A-4 venues used for Sports or Entertainment purposes, and similar uses as approved by the building official

### Section C402.6.1.2.2

Revise Section C402.6.1.2.2, as follows:

**C402.6.1.2.2 Electrical and communication boxes.** Electrical and communication boxes that penetrate the *air barrier* of the *building thermal envelope*, and that do not comply with **Section C402.6.1.2.2.1**, shall be caulked, taped, gasketed or otherwise sealed to the *air barrier* element being penetrated. Where present, insulation shall rest against all concealed portions of the box.

**C402.6.1.2.2.1 Air-sealed boxes.** Where air-sealed boxes are installed, they shall be marked in accordance with **NEMA OS 4**. Air-sealed boxes shall be installed in accordance with the manufacturer's instructions.

### Section C402.6.2

Revise Section C402.6.2, as follows:

**C402.6.2 Air leakage compliance.** *Air leakage* of the *building thermal envelope* shall be tested by an *approved* third party in accordance with Section C402.6.2.1. The measured air leakage shall not be greater than 0.35 cubic feet per minute per square foot (1.8 L/s × m<sup>2</sup>) of the *building thermal envelope* area at a pressure differential of 0.3 inch water gauge (75 Pa) with the calculated *building thermal envelope* surface area being the sum of the above- and below-grade *building thermal envelope*.

#### Exceptions:

1. Where the measured *air leakage* rate is greater than 0.35 cfm/ft<sup>2</sup> (1.8 L/s × m<sup>2</sup>) but is not greater than 0.45 cfm/ft<sup>2</sup> (2.3 L/s × m<sup>2</sup>), the *approved* third party shall perform a diagnostic evaluation using a smoke tracer or infrared imaging. The evaluation shall be conducted while the building is pressurized or depressurized along with a visual inspection of the *air barrier* in accordance with ASTM E1186. All identified leaks shall be sealed where such sealing can be made without damaging existing building components. A report specifying the corrective actions taken to seal leaks shall be deemed to establish compliance with the requirements of this section where submitted to the *code official* and the *building owner*. Where the measured *air leakage* rate is greater than 0.45 cfm/ft<sup>2</sup> (2.3 L/s × m<sup>2</sup>), corrective actions must be made to the *building* and an additional test completed for which the results are 0.45 cfm/ft<sup>2</sup> (2.3 L/s × m<sup>2</sup>) or less.
2. Buildings in *Climate Zone 2B*.
3. Buildings larger than 25,000 square feet (2323 m<sup>2</sup>) floor area in *Climate Zones 0* through 4, other than Group I and R occupancies, that comply with Section C402.6.2.3.
4. As an alternative, buildings or portions of buildings containing Group I-1 and R-2 occupancies shall be permitted to be tested by an *approved* third party in accordance with Section C402.6.2.2. The reported *air leakage* of the *building thermal envelope* shall not be greater than 0.27 cfm/ft<sup>2</sup> (1.4 L/s × m<sup>2</sup>) of the *testing unit enclosure* area at a pressure differential of 0.2 inch water gauge (50 Pa).

5. A building or dwelling unit tested in accordance with the requirements of Section C402.6.2.2 that is verified as having an *air leakage* rate not exceeding four air changes per hour when nonsprinklered, or 4.5 air changes per hour when sprinklered or attached or an equivalent  $\text{cfm}/\text{ft}^2$  rate as demonstrated by the design professional or approved agency.
6. Building using an approved above code program, testing shall be allowed to conform to the program requirements when the following documentation is submitted to the jurisdiction by the developer:
  - 6.1 Approved software per Section C407.
  - 6.2 A copy of the contractual agreement between the developer and an approved agency to perform all mandatory field testing, sampling protocols and program verifications.
  - 6.3 Additional documentation as deemed necessary by the jurisdiction.

### Section C402.6.2.2

Revise Section C402.6.2.2, as follows:

**C402.6.2.2 Dwelling and sleeping unit enclosure method and reporting.** The *building thermal envelope* shall be tested for *air leakage* in accordance with **ASTM E779**, **ANSI/RESNET/ICC 380**, **ASTM E1827** or an equivalent *approved method*. Where multiple *dwelling units* or *sleeping units* or other spaces are contained within one *building thermal envelope*, each shall be considered an individual testing unit, and the *building air leakage* shall be the weighted average of all tested unit results, weighted by each *testing unit enclosure area*. Units shall be tested without simultaneously testing adjacent units and shall be separately tested as follows:

1. Where buildings have less than eight total dwelling or *sleeping units*, each testing unit shall be tested.
2. Where buildings have eight or more dwelling or *sleeping units*, the greater of seven units or 20 percent of the units in the building shall be tested, including a top floor unit, a middle floor unit, a ground floor unit and a unit with the largest *testing unit enclosure area*. For each tested unit that exceeds the maximum *air leakage* rate, an additional three units shall be tested, including a mixture of testing unit types and locations.
3. *Enclosed spaces* with not less than one *exterior wall* in the *building thermal envelope* shall be tested in accordance with **Section C402.6.2.1**.
 

**Exception:** Corridors, stairwells, and enclosed spaces having a conditioned floor area not greater than 1,500 square feet (139  $\text{m}^2$ ) shall be permitted to comply with Section C402.6.2.3 and either Section C402.6.2.3.1 or Section C402.6.2.3.2.
4. A building or dwelling unit tested in accordance with the requirements of this section that is verified as having an *air leakage* rate not exceeding four air changes per hour when nonsprinklered, or 4.5 air changes per hour when sprinklered or attached or an equivalent  $\text{cfm}/\text{ft}^2$  rate as demonstrated by the design professional or approved agency.
5. Building using an approved above code program, testing shall be allowed to conform to the program requirements when the following documentation is submitted to the jurisdiction by the developer:
  - A. Approved software per Section C407.
  - B. A copy of the contractual agreement between the developer and an approved agency to perform all mandatory field testing, sampling protocols and program verifications.
  - C. Additional documentation as deemed necessary by the jurisdiction.

### Section C402.6.2.3.1

Revise Section C402.6.2.3.1, as follows:

**C402.6.2.3.1 Materials.** Materials with an air permeability not greater than 0.004 cfm/ft<sup>2</sup> (0.02 L/s × m<sup>2</sup>) under a pressure differential of 0.3 inch water gauge (75 Pa) when tested in accordance with **ASTM E2178** shall comply with this section. Materials in Items 1 through 16 shall be deemed to comply with this section, provided that joints are sealed and materials are installed as *air barriers* in accordance with the manufacturer's instructions.

1. Plywood with a thickness of not less than <sup>3</sup>/<sub>8</sub> inch (10 mm).
2. Oriented strand board having a thickness of not less than <sup>3</sup>/<sub>8</sub> inch (10 mm).
3. Extruded polystyrene insulation board having a thickness of not less than <sup>1</sup>/<sub>2</sub> inch (12.7 mm).
4. Foil-back polyisocyanurate insulation board having a thickness of not less than <sup>1</sup>/<sub>2</sub> inch (12.7 mm).
5. Closed-cell spray foam having a minimum density of 1.5 pcf (2.4 kg/m<sup>3</sup>) and having a thickness of not less than 1<sup>1</sup>/<sub>2</sub> inches (38 mm).
6. Open-cell spray foam with a density between 0.4 and 1.5 pcf (0.6 and 2.4 kg/m<sup>3</sup>) and having a thickness of not less than 4.5 inches (113 mm).
7. Exterior or interior gypsum board having a thickness of not less than <sup>1</sup>/<sub>2</sub> inch (12.7 mm).
8. Cement board having a thickness of not less than <sup>1</sup>/<sub>2</sub> inch (12.7 mm).
9. Built-up roofing membrane.
10. Modified bituminous roof membrane.
11. Single-ply roof membrane.
12. A Portland cement/sand parge, stucco, or gypsum plaster having a thickness of not less than <sup>5</sup>/<sub>8</sub> inch (15.9 mm).
13. Cast-in-place and precast concrete.
14. Fully grouted concrete block masonry.
15. Sheet steel or aluminum.
16. Solid or hollow masonry constructed of clay or shale masonry units.

### Section C403.1

Revise Section C403.1, as follows:

**C403.1 General.** Mechanical systems and equipment serving the building heating, cooling, ventilating or refrigerating needs shall comply with one of the following:

1. Section C403.1.1 and Sections C403.2 through C403.17.
2. Data Centers shall comply with Section C403.1.1, Section C403.1.2 and Sections C403.6 through C403.17
3. Section C409.

**Exception:** Equipment dedicated to the function of smoke management and smoke removal.

## Section C403.7.4

Revise Section C403.7.4, as follows:

**C403.7.4 Energy recovery systems.** Energy recovery ventilation systems shall be provided as specified in either **Section C403.7.4.1** or **C403.7.4.2**, as applicable.

**C403.7.4.1 Nontransient dwelling units.** Nontransient dwelling units shall be provided with outdoor air energy recovery ventilation systems complying with an *enthalpy recovery ratio* of not less than 50 percent at cooling design condition and not less than 60 percent at heating design condition. one of the following:

1. The system shall have an *enthalpy recovery ratio* of not less than 50 percent at cooling design condition and not less than 60 percent at heating design condition.
2. The system shall have a sensible recovery efficiency (SRE) that is not less than 65 percent at 32°F (0°C) and in Climate Zones 0A, 1A, 2A and 3A shall have a net moisture transfer (NMT) that is not less than 40 percent at 95°F (35°C). SRE and NMT shall be determined from a *listed* value or from interpolation of *listed* values at an airflow not less than the design airflow, based on testing in accordance with **CAN/CSA C439**.

### Exceptions:

1. Nontransient dwelling units in Climate Zones 3B and 3C.
2. Nontransient dwelling units with not more than 500 square feet (46 m<sup>2</sup>) of *conditioned floor area* in Climate Zones 0, 1, 2, 3, 4C and 5C.
3. *Enthalpy recovery ratio* requirements at heating design condition in Climate Zones 0, 1 and 2.
4. *Enthalpy recovery ratio* requirements at cooling design condition in Climate Zones 4, 5, 6, 7 and 8.

## Section C405.13

Revise Section C405.13, as follows:

**C405.13 Energy monitoring.** New *buildings* with a gross *conditioned floor area* of 25,000 square feet (2322 m<sup>2</sup>) or larger not less than 10,000 square feet (929 m<sup>2</sup>) shall be equipped to measure, monitor, record and report energy consumption in accordance with **Sections C405.13.1** through **C405.13.6** for load categories indicated in **Table C405.13.2** and **Sections C405.13.7** through **C405.13.11** for end-use categories indicated in **Table C405.13.8**.

### Exceptions:

1. *Dwelling units* in R-2 occupancies.
2. Individual tenant spaces are not required to comply with this section provided that the space has its own utility services and meters and has less than 5,000 square feet (464.5 m<sup>2</sup>) of *conditioned floor area*.
3. Common areas in R-2 occupancy buildings.

## Section C405.15

Revise Section C405.15, as follows:

**C405.15 Renewable energy systems.** Buildings designed with Renewable energy systems and built in Climate Zones 0 through 7 shall comply with Sections C405.15.1 through C405.15.4.

**C405.15.1 On-site renewable energy systems.** Buildings shall be provided with on-site renewable electricity generation systems with a direct current (DC) nameplate power rating of not less than 0.75 watts per square foot ( $8.1 \text{ W/m}^2$ ) multiplied by the sum of the gross conditioned floor area of all floors, not to exceed the combined gross conditioned floor area of the three largest floors.

**Exceptions:** The following *buildings* or building sites shall comply with Section C405.15.2:

1. A *building site* located where an unshaded flat plate collector oriented toward the equator and tilted at an angle from horizontal equal to the latitude receives an annual daily average incident solar radiation less than  $1.1 \text{ kBtu/ft}^2$  per day ( $3.5 \text{ kWh/m}^2/\text{day}$ ).
2. A *building* where more than 80 percent of the roof area is covered by any combination of permanent obstructions such as, but not limited to, mechanical equipment, vegetated space, access pathways or occupied roof terrace.
3. Any *building* where more than 50 percent of the roof area is shaded from direct-beam sunlight by natural objects or by structures that are not part of the *building* for more than 2,500 annual hours between 8:00 a.m. and 4:00 p.m.
4. A *building* with gross conditioned floor area less than 5,000 square feet ( $465 \text{ m}^2$ ).

**C405.15.2 Off-site renewable energy.** Buildings that qualify for one or more of the exceptions to Section C405.15.1 or do not meet the requirements of Section C405.15.1 with an on-site renewable energy system shall procure off-site renewable electrical energy, in accordance with Sections C405.15.2.1 and C405.15.2.2, that shall be not less than the total off-site renewable electrical energy determined in accordance with Equation 4-11.

### Section C405.2.4.1

Revise Section C405.2.4.1, as follows:

**C405.2.4.1 Daylight responsive control function.** Where required, *daylight responsive controls* shall be provided within each space for control of lights in that space and shall comply with all of the following:

1. Lights in *toplit daylight zones* in accordance with **Section C405.2.4.3** shall be controlled independently of lights in *sidelit daylight zones* in accordance with **Section C405.2.4.2**.
2. Lights in the primary *sidelit daylight zone* shall be controlled independently of lights in the secondary *sidelit daylight zone*.
3. *Daylight responsive controls* within each space shall be configured so that they can be calibrated from within that space by authorized personnel.
4. Calibration mechanisms shall be in a location capable of being reached for operation, renewal, or inspection.
5. *Daylight responsive controls* shall dim lights continuously from full light output to 15 percent of full light output or lower.
6. *Daylight responsive controls* shall be configured to completely shut off all

controlled lights.

7. When occupant sensor controls have reduced the lighting power to an unoccupied setpoint in accordance with Sections C405.2.1.2 through C405.2.1.4, *Daylight responsive controls* shall continue to adjust electric light levels in response to available daylight but shall be configured to not increase the lighting power above the specified unoccupied setpoint.

8. Lights in *sidelit daylight zones* in accordance with **Section C405.2.4.2** facing different cardinal orientations [within 45 degrees (0.79 rad) of due north, east south, west] shall be controlled independently of each other.  
(The exceptions remain unchanged)

## Section C405.2.5

Revise Section C405.2.5, as follows:

**C405.2.5 Specific application controls.** Specific application controls shall be provided for the following:

1. The following lighting shall be controlled by an occupant sensor complying with Section C405.2.1.1 or a *time-switch control* complying with Section C405.2.2.1. In addition, a *manual control* shall be provided to control such lighting separately from the *general lighting* in the space:

1.1. Luminaires for which additional lighting power is claimed in accordance with Section C405.3.2.2.1.

1.2. Display and accent, including lighting in display cases.

1.3. Supplemental task lighting, including permanently installed under-shelf or undercabinet lighting.

1.4. Lighting equipment that is for sale or demonstration in lighting education.

2. Lighting for nonvisual applications, such as plant growth and food warming, shall be controlled by a *time switch control* complying with Section C405.2.2.1 that is independent of the controls for other lighting within the room or space.

3. Task lighting for medical and dental purposes that is in addition to *general lighting* shall be provided with a *manual control*.

## Section C405.2.9(3)

Revise Section C405.2.9(3), as follows:

3. The power to luminaires within 20 feet (6096 mm) of perimeter wall openings shall automatically reduce in response to daylight by at least 50 percent.

### Exceptions:

1. Where the opening-to-wall ratio is less than 40 percent as viewed from the interior and encompassing the vertical distance from the driving surface to the lowest structural element.

2. Where the distance from the opening to any exterior daylight blocking obstruction is less than one-half the height from the bottom of the opening or fenestration to the top of the obstruction.
3. Where openings are obstructed by permanent screens or architectural elements restricting daylight entering the interior space.
4. Parking garages constructed to requirements of the 2024 *International Building Code* Chapter 10 or the 2024 *International Fire Code*.

### Section C405.3.1

Revise C405.3.1, as follows:

#### **C405.3.1 Total connected interior lighting power.**

The total connected interior lighting power shall be determined in accordance with Equation 4-9.

$$\text{TCLP} = [\text{LVL} + \text{BLL} + \text{LED} + \text{TRK} + \text{Other}] \quad \text{Equation 4-9 where:}$$

TCLP = Total connected lighting power (watts).

LVL = For luminaires with lamps connected directly to building power, such as line voltage lamps, the rated wattage of the lamp.

BLL = For luminaires incorporating a ballast or transformer, the rated input wattage of the ballast or transformer when operating that lamp.

LED = For light-emitting diode luminaires with either integral or remote drivers, the rated wattage of the luminaire.

TRK = For lighting track, cable conductor, rail conductor, and plug-in busway systems that allow the addition and relocation of luminaires without rewiring, the wattage shall be one of the following:

1. The specified wattage of the luminaires, but not less than 8 W per linear foot (25 W/lin m).
2. The wattage limit of the permanent current-limiting devices protecting the system.
3. The wattage limit of the transformer supplying the system.

Other = The wattage of all other luminaires and lighting sources not covered previously and associated with interior lighting verified by data supplied by the manufacturer or other approved sources.

The connected power associated with the following lighting equipment and applications is not included in calculating total connected lighting power.

1. Emergency lighting automatically off during normal building operation.
2. Lighting in spaces specifically designed for use by occupants with special lighting needs, including those with visual impairment and other medical and age-related issues.

3. Mirror lighting in makeup or dressing areas used for video broadcasting, video or film recording, or live theatrical and music performance.
4. Task lighting for medical and dental purposes that is in addition to general lighting.
5. Display lighting for exhibits in galleries, museums and monuments that is in addition to general lighting.
6. Lighting in any location that is specifically used for video broadcasting, video or film recording, or live theatrical and music performance.
7. Lighting for photographic processes.
8. Lighting integral to equipment or instrumentation and installed by the manufacturer.
9. Task lighting for plant growth or maintenance.
10. Advertising signage or directional signage.
11. Lighting for food warming.
12. Lighting equipment that is for sale.
13. Lighting demonstration equipment in lighting education facilities.
14. Lighting approved because of safety considerations.
15. Lighting in retail display windows, provided that the display area is enclosed by ceiling-height partitions.
16. Furniture-mounted supplemental task lighting that is controlled by automatic shutoff.
17. Exit signs.
18. Antimicrobial lighting used for the sole purpose of disinfecting a space.
19. Lighting in sleeping units and dwelling units.
20. For exit access and exit stairways, including landings, where the applicable code requires an illuminance of 10 footcandles or more on the walking surface, the power in excess of the allowed power calculated according to Section C405.3.2.2 is not included.
21. Theme/entertainment elements in theme/amusement parks and casinos.
22. Casino gaming areas



**R101.2 Scope.** This code applies to the design and construction of detached one- and two-family dwellings and multiple single-family dwellings (townhouses) and Group R-2, R-3 and R-4 buildings three stories or less in height above grade plane.

**R101.2.1 Appendices.** Provisions in the appendices shall not apply unless specifically adopted.

**R101.3 Intent.** The IECC—Residential Provisions provide market-driven, enforceable requirements for the design and construction of residential buildings, providing minimum efficiency requirements for buildings that result in the maximum level of energy efficiency that is safe, technologically feasible, and life cycle cost-effective, considering economic feasibility, including potential costs and savings for consumers and building owners, and return on investment. Additionally, the code provides jurisdictions with optional supplemental requirements, including requirements that lead to achievement of zero energy buildings, presently, and, through glidepaths that achieve zero energy buildings by 2030 and on additional timelines sought by governments, and achievement of additional policy goals as identified by the Energy and Carbon Advisory Council and approved by the Board of Directors. The code may include nonmandatory appendices incorporating additional energy efficiency and greenhouse gas reduction resources developed by the International Code Council and others. Requirements contained in the code will include, but not be limited to, prescriptive- and performance-based pathways. The code will aim to simplify code requirements to facilitate the code's use and compliance rate. The code is updated on a 3-year cycle with each subsequent edition providing increased energy savings over the prior edition. The IECC residential provisions shall include an update to Chapter 11 of the International Residential Code. This code is intended to provide flexibility to permit the use of innovative approaches and techniques to achieve this intent. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

**R102.4 Referenced codes and standards.** The codes and standards referenced in this code shall be those listed in Chapter 6, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections C102.4.1 and C102.4.2. Where the International Mechanical Code or International Plumbing code is referenced, the Uniform Mechanical Code or Uniform Plumbing Code shall be substituted.

**R102.4.1 Conflicts.** Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

**Exception:** Where conflicts relate to health and safety of the occupants or building security.

**R102.4.2 Provisions in referenced codes and standards.** Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

**Exception:** Where conflicting subject matter relates to health and safety of the occupants or building security.

**R105.2 Information on construction documents.** Construction documents shall be drawn to scale on 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 show in sufficient detail pertinent data and features of the building, systems and equipment as herein governed. Details shall include the following as applicable:

1. Energy compliance path.
2. Insulation materials and their R-values.
3. Fenestration U-factors and solar heat gain coefficients (SHGC).
4. Area-weighted U-factor and solar heat gain coefficients (SHGC) calculations.
5. Mechanical system design criteria.
6. Mechanical and service water-heating systems and equipment types, sizes and efficiencies.
7. Equipment and system controls.
8. Duct sealing, duct and pipe insulation and location.
9. Air sealing details.

**R105.2.1 Building thermal envelope depiction.** The building thermal envelope shall be represented on the construction drawings.

**R105.2.2 Solar-ready system.** Where a solar-ready zone is provided, the construction documents shall indicate details for a dedicated roof area for the solar-ready zone, roof dead load, roof live load, ground snow load and the routing of conduit or prewiring from the solar-ready zone to an electrical service panel or plumbing from the solar-ready zone to a service water heating system.

## Section R202, Definitions

*Add a definition to Section R202, as follows:*

**AFFORDABLE HOUSING.** Housing that serves those with income levels as defined by Nevada Revised Statutes (NRS) § 278.0105 **“Affordable housing” defined.** “Affordable housing” means tier one affordable housing, tier two affordable housing or tier three affordable housing.

## Section R301.1

*Revise Section R301.1, as follows:*

### **R301.1 General.**

*Climate zones* from Figure R301.1 or Table R301.1 shall be used for determining the applicable requirements from Chapter 4. Locations not indicated in Table R301.1 shall be assigned a *climate zone* in accordance with Section R301.3

**Exception:** Areas within Clark County above altitudes of 4,000 feet shall be considered in Climate Zone 5B. Areas within Nye County below altitudes of 4,000 feet shall be considered in Climate Zone 3B.

**Section R401.2**

Revise Section R401.2, as follows:

**R401.2 Application.** Residential buildings shall comply with Section R401.2.1, R401.2.2, R401.2.3 or R401.2.4.

**Exceptions:**

1. Additions, alterations, repairs and changes of occupancy to existing buildings complying with Chapter 5.
2. Non-habitable accessory spaces, attached or detached, such as garages, workshops or storage areas, shall not be required to comply with the above sections if they are conditioned for occasional use.

**Table R402.1.3**

Revise Table R402.1.3, as follows:

**TABLE R402.1.3  
INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY  
COMPONENT <sup>a</sup>**

CLIMATE ZONE	0	1	2	3	4 EXCEP T MARIN E	5 AND MARIN E 4	6	7 AND 8
Vertical fenestration U-factor	0.50	0.50	0.40	0.30	0.30	0.28 <sup>g</sup>	0.28 <sup>g</sup>	0.27 <sup>g</sup>
Skylight U-factor	0.60	0.60	0.60	0.53	0.53	0.50	0.50	0.50
Glazed vertical fenestration SHGC	0.25	0.25	0.25	0.25	0.40	NR	NR	NR
Skylight SHGC	0.28	0.28	0.28	0.28	0.40	NR	NR	NR
Ceiling R-value	30	30	38	38	49	49	49	49
Insulation entirely above roof deck	25ci	25ci	25ci	25ci	30ci	30ci	30ci	35ci

Wood-framed wall R-value <sup>e</sup>	13 or 0&10ci i	13 or 0&10ci i	13 or 0&10ci i	20 or 13&5ci i or 0&15ci i	30 or 20&5ci or 13&10ci or 0&20ci	30 or 20&5ci or 13&10ci or 0&20ci	30 or 20&5ci or 13&10ci or 0&20ci	30 or 20&5ci or 13&10ci i or 0&20ci
Mass wall R-value <sup>f</sup>	3/4	3/4	4/6	8/13	8/13	13/17	15/20	19/21
Floor R-value <sup>h</sup>	13 or 7+5ci or 10ci	13 or 7+5ci or 10ci	13 or 7+5ci or 10ci	19 or 13+5ci or 15ci	19 or 13+5ci or 15ci	30 or 19+7.5ci or 20ci	30 or 19+7.5ci i or 20ci	38 or 19+10ci or 25ci
Basement wall R-value <sup>b, e</sup>	0	0	0	5ci or 13 <sup>d</sup>	10ci or 13	15ci or 19 or 13&5ci	15ci or 19 or 13&5ci	15ci or 19 or 13&5ci
Unheated slab R-value & depth <sup>c</sup>	0	0	0	0	10ci, 3 ft	10ci, 3 ft	10ci, 4 ft	10ci, 4 ft
Heated slab R-value & depth <sup>c</sup>	R-5ci edge and R-5 full slab	R-5ci edge and R-5 full slab	R-5ci edge and R-5 full slab	R- 10ci, 2 ft and R-5 full slab	R-10ci, 3 ft and R- 5 full slab	R-10ci, 3 ft and R- 5 full slab	R-10ci, 4 ft and R-5 full slab	R-10ci, 4 ft and R-5 full slab
Crawl space wall R-value <sup>b, e</sup>	0	0	0	5ci or 13 <sup>d</sup>		15ci or 19 or 13&5ci	15ci or 19 or 13&5ci	15ci or 19 or 13&5ci

For SI: 1 foot = 304.8 mm.

NR = Not Required, ci= Continuous Insulation.

- a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity that is less than the label or design thickness of the insulation, the installed R-value of the insulation shall be not less than the R-value specified in the table.
- b. "5ci or 13" means R-5 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "10ci or 13" means R-10 continuous insulation (ci) on the interior or exterior surface of the wall or R-13 cavity insulation on the interior side of the wall. "15ci or 19 or 13&5ci" means R-15 continuous insulation (ci) on the interior or exterior surface of the wall; or R-19 cavity insulation on the interior side of the wall; or R-13 cavity insulation on the interior of the wall in addition to R-5 continuous insulation on the interior or exterior surface of the wall.
- c. Slab insulation shall be installed in accordance with Section R402.2.10.1.
- d. Basement wall insulation is not required in Warm Humid locations as defined by Figure R301.1 and Table R301.1.
- e. The first value is cavity insulation; the second value is continuous insulation. Therefore, as an example, "13&5" means R-13 cavity insulation plus R-5 continuous insulation.
- f. Mass walls shall be in accordance with Section R402.2.6. The second R-value applies where more than half of the insulation is on the interior of the mass wall.
- g. A maximum U-factor of 0.30 shall apply in Marine Climate Zone 4 and Climate Zones 5 through 8 to vertical fenestration products installed in buildings located either:

1. Above 4,000 feet in elevation.
2. In windborne debris regions where protection of openings is required by Section R301.2.1.2 of the International Residential Code.
- h. "30 or 19+7.5ci or 20ci" means R-30 cavity insulation alone or R-19 cavity insulation with R-7.5 continuous insulation or R-20 continuous insulation alone.

**Table R402.1.2**

Revise Table R402.1.2, as follows:

**TABLE R402.1.2**  
**MAXIMUM ASSEMBLY U-FACTORS<sup>a</sup> AND FENESTRATION REQUIREMENTS**

CLIMATE ZONE	0	1	2	3	4 EXCEPT MARINE	5 AND MARINE 4	6	7 AND 8
Vertical fenestration U-factor	0.50	0.50	0.40	0.30	0.30	0.28 <sup>d</sup>	0.28 <sup>c</sup>	0.27 <sup>d</sup>
Skylight U-factor	0.60	0.60	0.60	0.53	0.53	0.50	0.50	0.50
Glazed vertical fenestration SHGC	0.25	0.25	0.25	0.25	0.40	NR	NR	NR
Skylight SHGC	0.28	0.28	0.28	0.28	0.40	NR	NR	NR
Ceiling U-factor	0.035	0.035	0.030	0.030	0.026	0.026	0.026	0.026
Insulation entirely above roof deck	0.039	0.039	0.039	0.039	0.032	0.032	0.032	0.028
Wood-framed wall U-factor	0.084	0.084	0.084	0.060	0.045	0.045	0.045	0.045
Mass wall U-factor <sup>b</sup>	0.197	0.197	0.165	0.098	0.098	0.082	0.060	0.057
Floor U-factor	0.064	0.064	0.064	0.047	0.047	0.033	0.033	0.028
Basement wall U-factor	0.360	0.360	0.360	0.091 <sup>c</sup>	0.059	0.050	0.050	0.050
Unheated slab F-factor <sup>e</sup>	0.73	0.73	0.73	0.73	0.51	0.51	0.48	0.48
Heated slab F-factor <sup>e</sup>	0.74	0.74	0.74	0.66	0.66	0.66	0.66	0.66
Crawl space wall U-factor	0.477	0.477	0.477	0.136	0.065	0.055	0.055	0.055

For SI: 1 foot = 304.8 mm.

- a. Non Fenestration U-factors and F-factors shall be obtained from measurement, calculation, an approved source, or Appendix RF where such appendix is adopted or approved.
- b. Mass walls shall be in accordance with Section R402.2.6. Where more than half the insulation is on the interior, the mass wall U-factors shall not exceed 0.17 in Climate Zones 0 and 1, 0.14 in Climate Zone 2, 0.12 in Climate Zone 3, 0.087 in Climate Zone 4 except Marine, 0.065 in Climate Zone 5 and Marine 4, and 0.057 in Climate Zones 6 through 8.
- c. In Warm Humid locations as defined by Figure R301.1 and Table R301.1, the basement wall U-factor shall not exceed 0.360.
- d. A maximum U-factor of 0.30 shall apply in Marine Climate Zone 4 and Climate Zones 5 through 8 to vertical fenestration products installed in buildings located either:
  1. Above 4,000 feet in elevation above sea level, or
  2. In windborne debris regions where protection of openings is required by Section R301.2.1.2 of the International Residential Code.
- e. F-factors for slabs shall correspond to the R-values of Table R402.1.3 and the installation conditions of Section R402.2.10.1.

**Section R402.2.4**

Revise R402.2.4, as follows:

**R402.2.4 Eave baffle.** For air-permeable insulation in vented attics, a baffle shall be installed adjacent to soffit and eave vents and over roof vents installed less than 3 feet above the settled insulation level. Baffles shall maintain a net free area opening equal to or greater than the size of the vent. For soffits and eave vents, the baffle shall extend over the top of the attic insulation. The baffle shall be permitted to be any solid material. The baffle shall be installed to the outer edge of the exterior wall top plate so as to provide maximum space for attic insulation coverage over the top plate. Where soffit venting is not continuous, baffles shall be installed continuously to prevent ventilation air in the eave soffit from bypassing the baffle. For roof vents installed less than 3 feet above the settled insulation level, the baffle shall be installed to prevent air from being blown on or into the air-permeable insulation. All bird (eave) blocks shall be sealed to prevent wind washing.

**Table R402.5.1.1**

Revise Table R402.5.1.1, as follows:

<p align="center"><b>TABLE R402.5.1.1</b> <b>AIR BARRIER, AIR SEALING AND INSULATION INSTALLATION<sup>a</sup></b></p>		
<p>General requirements</p>	<p>A continuous air barrier shall be installed in the building thermal envelope. Breaks, joints, or penetrations of the air barrier shall be sealed.</p>	<p>Air-permeable insulation shall not be used as a sealing material.</p>
<p>Ceiling/attic</p>	<p>An air barrier shall be installed in any dropped ceiling or soffit to separate it from unconditioned space. Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed with gasketing materials that allow for repeated entrance over time.</p>	<p>The insulation in any dropped ceiling/soffit shall be aligned with the air barrier. Access hatches and doors shall be installed and insulated in accordance with <b>Section R402.2.5</b>. Eave baffles shall be installed in accordance with <b>Section R402.2.4</b>.</p>
<p>Walls</p>	<p>The junction of the foundation and sill plate shall be sealed at the building thermal envelope. The junction of the top plate and top of exterior walls shall be sealed where they intersect with unconditioned spaces.</p>	<p>Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance, R-value, of not less than R-3 per inch. Exterior building thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.</p>

Knee wall	Knee walls shall have an air barrier between conditioned and unconditioned space	Insulation installed in a knee wall assembly shall be installed in accordance with <b>Section R402.2.3</b> .  Air-permeable insulation shall be enclosed inside an air barrier assembly
Windows, skylights and doors	The rough opening gap between framing and the frames of skylights, windows and doors, shall be sealed in accordance with fenestration manufacturer's instructions.	Insulation shall not be required in the rough opening gap except as required by the fenestration manufacturer's instructions.
Rim joists	Rim joists shall include an air barrier. <sup>b</sup> The junctions of the rim board to the sill plate and the rim board and the subfloor shall be air sealed.	Rim joists shall be insulated so that the insulation maintains permanent contact with the exterior rim board <sup>b</sup>
Floors, including cantilevered floors and floors above garages	Floor framing members that are part of the building thermal envelope shall be air sealed to maintain a continuous air barrier.	Floor insulation shall be installed in accordance with the requirements of <b>Section R402.2.8</b> .
Basement, crawl space and slab foundation	Exposed earth in unvented crawl spaces shall be covered with a Class I vapor retarder/ air barrier in accordance with <b>Section 402.2.11</b> . Penetrations through concrete foundation walls and slabs shall be air sealed. Class 1 vapor retarders shall not be used as an air barrier on below-grade walls and shall be installed in accordance with <b>Section R702.7</b> of the <i>International Residential Code</i> .	Crawl space insulation, where provided instead of floor insulation, shall be installed in accordance with <b>Section R402.2.11</b> . Conditioned basement foundation wall insulation shall be installed in accordance with <b>Section R402.2.9.1</b> . Slab-on-grade floor insulation shall be installed in accordance with <b>Section R402.2.10</b> .
Shafts, penetrations	Duct and flue shafts to exterior or unconditioned space shall be sealed. Utility penetrations of the air barrier shall be caulked, gasketed or otherwise sealed and shall allow for expansion, contraction of materials and mechanical vibration.	Insulation shall be fitted tightly around utilities passing through shafts and penetrations in the building thermal envelope to maintain required R-value.

Narrow cavities	Narrow cavities of 1 inch or less that are not able to be insulated shall be air sealed.	Batts to be installed in narrow cavities shall be cut to fit or narrow cavities shall be filled with insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	Insulated portions of the garage separation assembly shall be installed in accordance with <b>Sections R303 and R402.2.8.</b>
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be air sealed in accordance with <b>Section R402.5.4.</b>	Recessed light fixtures installed in the building thermal envelope shall be airtight and IC rated, and shall be buried in or surrounded with insulation.
Plumbing, wiring or other obstructions	All holes created by wiring, plumbing or other obstructions in the air barrier assembly shall be air sealed.	Insulation shall be installed to fill the available space and surround wiring, plumbing, or other obstructions, unless the required <i>R</i> -value can be met by installing insulation and air barrier systems completely to the exterior side of the obstructions.
Showers, tubs and fireplaces adjacent to the building thermal envelope	An air barrier shall separate insulation in the building thermal envelope from the shower, tub or fireplace assemblies.	Exterior framed walls adjacent to showers, tubs and fireplaces shall be insulated.
Electrical, communication and other equipment boxes, housings and enclosures	The annular space of boxes, housing and enclosures that penetrate the air barrier shall be caulked, taped, gasketed or otherwise sealed to the air barrier element being penetrated. Alternatively, air-sealed boxes shall be installed in accordance with Section R402.5.5.	Boxes, housing and enclosures shall be buried in or surrounded by insulation.
HVAC register boots	HVAC supply and return register boots shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	HVAC supply and return register boots located within a building thermal envelope assembly shall be buried in or surrounded by insulation.
Concealed sprinklers	Where required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover	

<p>Common walls or double walls separating attached single-family dwellings or townhouses</p>	<p>An interior air barrier shall be provided. Air sealing at the intersections with building thermal envelope shall be provided.</p> <p>Where installed in a fire-resistance-rated wall assembly, air sealing materials shall comply with one of the following:</p> <ol style="list-style-type: none"> <li>1. Be in accordance with an approved design for the fire-resistance-rated assembly.</li> <li>2. Be supported by approved data that shows the assembly as installed complies with the required fire-resistance rating.</li> </ol>	<p>Insulation materials recognized in the approved common wall or double-wall design and installed in accordance with the approved design shall be permitted to be used.</p>
---	---	--

3. Inspection of log walls shall be in accordance with the provisions of **ICC 400**.
4. Insulation full enclosure is not required in unconditioned/ventilated attic spaces and at rim joists.

**Section R403.6**

*Revise R403.6, as follows:*

**R403.6 Mechanical ventilation.** The buildings and dwelling units complying with Section R402.5.1.1 shall be provided with mechanical ventilation that complies with the requirements of Section M1505 of the International Residential Code or the Uniform Mechanical Code, 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.

**Exception:** Where clothes dryer exhaust vents terminate vertically at the roof, back draft dampers are not permitted.

**Section R406.2, R406.4 & R406.5**

*Revise Sections R406.2, R406.4, R406.5, Delete Tables R406.5(1); -(2), - (3),-(4),-(5, and -(6) entirely and replace with new, as follows:*

**R406.2 ERI compliance.** Compliance based on the *ERI* requires that the *rated design* and as built *dwelling unit* meet all of the following:

1. The requirements of the sections indicated within **Table R406.2**.
2. Maximum *ERI* values indicated in **Tables R406.5** (1-6), based on permit date.

**R406.4 Energy Rating Index.** The *Energy Rating Index* (ERI) shall be determined in accordance with the most current version of **ANSI/RESNET/ICC 301** as adopted by the Residential Energy Services Network. The mechanical *ventilation* rates used for the purpose of determining the *ERI* shall not be construed to establish minimum *ventilation* requirements for compliance with this code.

[Remainder of section left unchanged.]

**R406.5 ERI-based compliance.** Compliance based on an *ERI* analysis requires that the *rated design* and each confirmed as-built *dwelling unit* be shown to have an *ERI* less than or equal to the appropriate value indicated in **Table R406.5** (1-6) where compared to the *ERI reference design* as follows:

1. Where on-site renewables are not installed, the values under ENERGY RATING INDEX NOT INCLUDING OPP apply.
2. Where on-site renewables are installed, the values under ENERGY RATING INDEX WITH OPP apply.
3. Where the building meets the mandatory requirements of the 2024 International Energy Conservation Code.
4. Where the building thermal envelope is equal to or greater than the levels of efficiency and solar heat gain coefficient in Table R402.1.2 or 402.1.4 of the 2024 International Energy Conservation Code.
5. Where all confirmed as-built dwelling units shall be subject to quality assurance oversight by an independent third party (An EPA or DOE approved HCO).
6. Where all confirmed ERI scores are required to be uploaded to the HERS Registry or an EPA or DOE approved HCO registry.

[Remainder of Section Left Unchanged]

**TABLE R406.5 (1)**  
**MAXIMUM ENERGY RATING INDEX NOT INCLUDING OPP**

<u>CLIMATE ZONE</u>	<u>ENERGY RATING INDEX</u>
<u>3</u>	<u>56</u>
<u>5</u>	<u>58</u>

<sup>1</sup> This table is effective January 2025 to 2027

**TABLE R406.5 (2)**  
**MAXIMUM ENERGY RATING INDEX WITH OPP**

<u>CLIMATE ZONE</u>	<u>ENERGY RATING INDEX</u>
<u>3</u>	<u>33</u>
<u>5</u>	<u>43</u>

<sup>1</sup> This table is effective January 2025 to 2027

**TABLE R406.5 (3)**  
**MAXIMUM ENERGY RATING INDEX NOT INCLUDING OPP**

<u>CLIMATE ZONE</u>	<u>ENERGY RATING INDEX</u>
<u>3</u>	<u>52</u>
<u>5</u>	<u>54</u>

<sup>1</sup> This table is effective January 2028 to 2030

**TABLE R406.5 (4)**  
**MAXIMUM ENERGY RATING INDEX WITH OPP**

