

## **IECC®: R401.3, R406.7.2.2**

**Proponents:** Gayathri Vijayakumar, Steven Winter Associates, Inc.

### **2021 International Energy Conservation Code**

**Revise as follows:**

#### **SECTION R401 GENERAL**

**R401.3 Certificate.** A permanent certificate shall be completed by the builder or other approved party and posted on a wall in the space where the furnace is located, a utility room or an approved location inside the building. Where located on an electrical panel, the certificate shall not cover or obstruct the visibility of the circuit directory label, service disconnect label or other required labels. The certificate shall indicate the following:

1. The predominant R-values of insulation installed in or on ceilings, roofs, walls, foundation components such as slabs, basement walls, crawl space walls and floors and ducts outside conditioned spaces.
2. U-factors of fenestration and the solar heat gain coefficient (SHGC) of fenestration. Where there is more than one value for any component of the building envelope, the certificate shall indicate both the value covering the largest area and the area weighted average value if available.
3. The results from any required duct system and building envelope air leakage testing performed on the building.
4. The types, sizes and efficiencies of heating, cooling and service water-heating equipment. Where a gas-fired unvented room heater, electric furnace or baseboard electric heater is installed in the residence, the certificate shall indicate “gas-fired unvented room heater,” “electric furnace” or “baseboard electric heater,” as appropriate. An efficiency shall not be indicated for gas-fired unvented room heaters, electric furnaces and electric baseboard heaters.
5. Where on-site photovoltaic panel systems have been installed, the array capacity, inverter efficiency, panel tilt and orientation shall be noted on the certificate.
6. For buildings where an Energy Rating Index score is determined in accordance with Section R406, the Energy Rating Index score [and CO<sub>2</sub>e Index](#), both with and without any on-site generation, shall be listed on the certificate.
7. The code edition under which the structure was permitted and the compliance path used.

#### **SECTION R406 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE**

**Revise as follows:**

**R406.7.2.2 Confirmed compliance report for a certificate of occupancy.** A confirmed compliance report submitted for obtaining the certificate of occupancy shall be made site and address specific and include the following:

1. Building street address or other building site identification.
2. Declaration of ERI [and CO<sub>2</sub>e Index](#) on title page and on building plans.
3. The name of the individual performing the analysis and generating the report.
4. The name and version of the compliance software tool.

5. Documentation of all inputs entered into the software used to produce the results for the reference design and/or the rated home.

6. A final confirmed certificate indicating that the confirmed rated design of the built home complies with Sections R406.2 and R406.4. The certificate shall report the energy features that were confirmed to be in the home, including: component-level insulation R-values or U-factors; results from any required duct system and building envelope air leakage testing; and the type and rated efficiencies of the heating, cooling, mechanical ventilation, and service water-heating equipment installed. Where on-site renewable energy systems have been installed on or in the home, the certificate shall report the type and production size of the installed system.

**Revise as follows:**

## **CHAPTER 6 [RE] REFERENCED STANDARDS**

**ICC**

**International Code Council, Inc.  
500 New Jersey Avenue NW6th Floor  
Washington, DC 20001**

**ANSI/APSP/ICC 14—2019: American National Standard for Portable Electric Spa Energy Efficiency**  
R403.11

**ANSI/APSP/ICC 15a—2020: American National Standard for Residential Swimming Pool and Spa Energy Efficiency**  
R403.12

**ANSI/RESNET/ICC 301—~~2019~~ 2022: Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index**  
R406.4

**Reason:**

As stated in the [Executive Summary](#) of the “Path Forward on Energy and Sustainability to Confront a Changing Climate,” reduction of greenhouse gas emissions is part of our mission on this Committee. This proposal is a simple step toward that goal, by simply reporting an index, similar to ERI, that helps a builder/homeowner understand the performance of their home with respect to GHG. The software that calculates an ERI in 2024 IECC R406 path will be done so in accordance with ANSI 301-2022. That Standard requires software to list this CO<sub>2e</sub> Index on labels & certificates. It is intended to be published in time for reference within the 2024 IECC to include an update to GHG emission factors ([Addendum B](#)).

This proposal doesn’t mandate a maximum CO<sub>2e</sub> Index although it paves the way for a future proposal to do so.

It would also be possible to report GHG emissions, as calculated in accordance with the same standard, if the concept of the CO<sub>2e</sub> Index is too new to receive enough support.

**Cost Impact:**

The code change proposal will neither increase nor decrease the cost of construction since the reporting of this value is already part of compliance with the referenced Standard.

**Attached Files:**

Until ANSI 301-2022 is published, this approved Addendum D to ANSI 301-2019 is being shared, to provide context for the CO2e Index, which will be modified by Addendum B above.

[https://www.resnet.us/wp-content/uploads/FS\\_301-2019AdndmD\\_webpost.docx](https://www.resnet.us/wp-content/uploads/FS_301-2019AdndmD_webpost.docx)