# ADDENDA

ANSI/ASHRAE/IES Addendum f to ANSI/ASHRAE/IES Standard 90.2-2018

# Energy Efficient Design of Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on June 24, 2023; by the Illuminating Engineering Society on June 7, 2023; and by the American National Standards Institute on July 25, 2023.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (https://www.ashrae.org/continuous-maintenance).

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### **FOREWORD**

The revised title, purpose, and scope (TPS) of Standard 90.2 now includes reduction of greenhouse gas (GHG) emissions. Additionally, ANSI/RESNET/ICC 301-2022, which Standard 90.2 references for compliance score calculations, now include a CO2e calculation for GHG emissions in residential buildings. Preliminary analysis indicates that a CO2e Index of 55 would be an appropriate starting point for this criterion in Standard 90.2. Most homes complying with the Standard 90.2 ERI requirement would also be able to comply with a CO2e Index requirement of 55 or less.

Informative Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes.

### Addendum f to Standard 90.2-2018

Modify Section 6 as shown, and renumber the remaining sections.

### 6. PERFORMANCE REQUIREMENTS

- **6.1** The dwelling unit shall be planned, designed, and constructed to achieve <u>both</u> the Energy Rating Index (ERI) by climate zone shown in Table 6-1 and a CO<sub>2</sub>e Index of 55 or less.
- 6.<u>1.12</u> The ERI of the proposed design shall be determined using the energy simulation program conducted in accordance with ANSI/RESNET/ICC Standard 301-20<u>22</u>14, including Addenda A-2015 and E-2018, as modified by the modeling requirements included in Normative Appendices A and B.
- <u>6.1.2</u> The CO<sub>2</sub>e Index of the proposed design shall be determined using the energy simulation program conducted in accordance with the provisions of ANSI/RESNET/ICC Standard 301-2022, including Addendum B-2022.
- **6.23** On-Site Power Utilization. When on-site power production is used to meet the ERI requirements of Section 6.1, the following requirements for building thermal envelope and envelope air leakage shall be met. [...]

### Modify Section 9.1.10 as shown.

9.1.10 The achieved CO<sub>2</sub>e Index of the proposed design and the as-built construction, calculated according to ANSI/RESNET/ICC Standard 301-2022, Addendum B-2022, Equation 8-1, shall be reported to be equal to or less than 55.

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## POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted Standards and the practical state of the art.

ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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