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

Energy Efficient Design of Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on March 27, 2024, by the Illuminating Engineering Society on March 15, 2024, and by the American National Standards Institute on April 22, 2024.

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FOREWORD

Addendum m provides a compliance path for residential projects undergoing a major renovation. The addendum does this by adding a new definition for “substantial energy alteration” and requires projects that qualify as such to meet a minimum Energy Rating Index (ERI) score.

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

Addendum m to Standard 90.2-2018

Modify Section 3.1 as shown.

substantial energy alteration: an alteration that includes replacement of two or more of the following within a 30-day period:

a. Fifty percent or more of the area of interior wall-covering material of the building thermal envelope.

b. Fifty percent or more of the area of the exterior wall-covering material of the building thermal envelope or fenestration.

c. Space conditioning equipment constituting 50% or more of the total input capacity of the space heating or space cooling equipment serving the building.

d. Water-heating equipment constituting 50% of more of the total input capacity of all the water-heating equipment serving the building.

e. Fifty percent or more of the permanently installed luminaires in the building.

Add new Section 5.3 as shown.

5.3 Substantial Energy Alterations. Substantial energy alterations to existing dwelling units shall comply with the requirements of Section 5.2 and shall be planned, designed, and constructed to achieve the Energy Rating Index (ERI) by climate zone shown in Table 5-4.

Exception to 5.3: Multifamily structures and townhouses.

Table 5-4 Maximum Energy Rating Index for Substantial Energy Alterations to Existing Dwelling Units for Compliance with This Standard

<table>
<thead>
<tr>
<th>Climate Zone</th>
<th>Energy Rating Index</th>
</tr>
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<td>1</td>
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<td>7</td>
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<td>8</td>
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</tr>
</tbody>
</table>
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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