



**BSR/ASHRAE/IES Addendum cf
to ANSI/ASHRAE/IES Standard 90.1-2022**

**Advisory Public
Review Draft**

Proposed Addendum cf to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (February 2025)
(Draft Shows Proposed Changes to Current Standard)**

This draft has been recommended for public review by the responsible project committee. To submit a comment on this proposed standard, go to the ASHRAE website at www.ashrae.org/standards-research--technology/public-review-drafts and access the online comment database. The draft is subject to modification until it is approved for publication by the Board of Directors and ANSI. Until this time, the current edition of the standard (as modified by any published addenda on the ASHRAE website) remains in effect. The current edition of any standard may be purchased from the ASHRAE Online Store at www.ashrae.org/bookstore or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

This standard is under continuous maintenance. To propose a change to the current standard, use the change submittal form available on the ASHRAE website, www.ashrae.org.

The appearance of any technical data or editorial material in this public review document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, or design, and ASHRAE expressly disclaims such.

© 2025 ASHRAE. This draft is covered under ASHRAE copyright. Permission to reproduce or redistribute all or any part of this document must be obtained from the ASHRAE Manager of Standards, 180 Technology Parkway NW, Peachtree Corners, GA 30092. Phone: 404-636-8400, Ext. 1125. Fax: 404-321-5478. E-mail: standards.section@ashrae.org.

ASHRAE, 180 Technology Parkway NW, Peachtree Corners, GA 30092

© 2025 ASHRAE

This draft is covered under ASHRAE copyright. The appearance of any technical data or editorial material in this publication document does not constitute endorsement, warranty, or guaranty by ASHRAE of any product, service, process, procedure, design or the like and ASHRAE expressly disclaims such. Permission to republish or redistribute must be obtained from the MOS.

(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

Section 12 Energy Cost Budget Method and Appendix G Performance Rating Method are two available whole building performance compliance options. Each option has different limitations and advantages. Four new informative notes are proposed and summarized below.

#1. Addresses a CMP and helps the practitioner avoid spending time evaluating PRM under difficult applications.

#2. Highlights PRM advantages to achieve positive compliance outcome.

#3. Reiterates ECB is recommended for minimal compliance only. PRM is recommended for demonstrating performance that exceeds the standard.

#4. Recommends that ECB should not be used to evaluate different HVAC systems as it may incentivize lower performance designs.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum cf to 90.1-2022

4.2 Compliance

4.2.1 Compliance Paths

4.2.1.1 New Buildings. New buildings shall comply with Section 4.2.2 through 4.2.5 and either the provisions of

a. Sections 5, “Building Envelope”; 6, “Heating, Ventilating, and Air Conditioning”; 7, “Service Water Heating”; 8, “Power”; 9, “Lighting”; 10, “Other Equipment”; and 11, “Additional Efficiency Requirements,”

or

b. Section 12, “Energy Cost Budget Method,” or

c. Normative Appendix G, “Performance Rating Method.”

Informative Note:

When deciding which of the whole building performance paths to use (Section 12 Energy Cost Budget or Appendix G Performance Rating Method), the following should be considered:

- Buildings may have difficulty complying with the Performance Rating Method. This is particularly true for buildings with high internal gains such as data centers, those with high ventilation loads such as laboratories or other operational factors which may deviate from the building types included in Table 4.2.1.1
- Buildings employing energy savings strategies which include, but are not limited to, the following, may benefit from using the Performance Rating Method:

- Optimized use of thermal mass
- Optimized orientation
- Passive solar heating
- Optimized daylighting controls
- Reduced fan power
- Optimized HVAC system selection
- Right-sizing of HVAC systems
- Natural ventilation or passive cooling
- Optimized elevator systems
- Efficient exterior lighting
- Optimized service water heating system type
- Optimized DOAS (Dedicated outdoor air system)