

# BSR/ASHRAE/IES Addendum a to ANSI/ASHRAE/IES Standard 90.2-2024

## **Public Review Draft**

# Proposed Addendum a to Standard 90.2-2024, High-Performance Energy Design of Residential Buildings

First Public Review (April 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 <a href="www.ashrae.org/standards-research--technology/public-review-drafts">www.ashrae.org/standards-research--technology/public-review-drafts</a> 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 <a href="www.ashrae.org/bookstore">www.ashrae.org/bookstore</a> or by calling 404-636-8400 or 1-800-727-4723 (for orders in the U.S. or Canada).

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(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**

This addendum introduces energy monitoring requirements to this standard, aligning it with similar provisions found in commercial energy standards and codes such as ASHRAE 90.1 and IECC. ASHRAE 90.2 should include energy monitoring requirements to maintain its position as a leading residential energy performance standard.

Energy monitoring provides several benefits for occupants:

- It allows them to view energy usage before receiving their energy bill, enabling proactive measures to address any issues and avoid unexpected charges.
- It helps in identifying and reducing unnecessary energy consumption, leading to cost savings.
- It promotes energy awareness and encourages more efficient energy use habits.

The proposal sets a threshold for energy monitoring at larger than 2,300 square feet of conditioned floor area. This size is chosen because larger homes typically consume more energy, and 2,300 square feet is the average size of a single-family home in the U.S. (source: <u>Median home size in the U.S. 2000-2022</u> | Statista).

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and <del>strikethrough</del> (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 a to 90.2-2024**

Modify the standard as follows (IP and SI Units)

### 7.6 Other Systems

 $[\ldots]$ 

**7.6.8 Energy Monitoring.** Energy monitoring devices shall be installed in new *dwelling units* larger than 2,300 square feet of *conditioned floor area* to monitor at least two of the following separate *energy* load types:

- a. Permanently installed heating
- b. Permanently installed cooling
- c. Permanently installed interior general lighting
- d. Permanently installed exterior general lighting

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- e. Refrigeration
- f. Clothes drying
- g. Dishwashing
- h. Cooking
- i. Water heating
- j. EV charging

The monitored load types (a through j) shall be allowed to include up to 10% of related or unrelated loads.

7.6.8.1 Recording and Reporting. The *energy* use for all loads monitored to comply with Section 7.6.8 shall be recorded a minimum of every 30 minutes and reported at least hourly, daily, monthly, and annually. *Energy* use data shall be graphically displayed on an app or somewhere within the *dwelling unit*. The data shall be maintained for a minimum of 36 months.