



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

**Public Review Draft**

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

**First Public Review (December 2024)  
(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](http://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](http://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](http://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.

© 2024 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](mailto:standards.section@ashrae.org).

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

© 2024 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

*This addendum provides an optional method to comply with the graphical display of the monitoring requirement.*

*No cost effectiveness analysis was conducted because the addendum only provides an optional method to comply with the requirement.*

*[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 br to 90.1-2022

---

### 8.4.3 Electrical Energy Monitoring

**8.4.3.1 Monitoring.** Measurement devices shall be installed in new *buildings* to monitor the electrical *energy* use for each of the following separately:

- a. Total electrical *energy*
- b. *HVAC systems*
- c. Interior lighting
- d. Exterior lighting
- e. Receptacle circuits
- f. Refrigeration *systems*

For *buildings* with tenants, these *systems* shall be separately monitored for the total *building* and (excluding shared *systems*) for each individual tenant.

**Exception to 8.4.3.1:** Where the design load of any of the categories (b) through (f) are less than 10% of the whole-building load, these categories shall be allowed to be combined with other categories.

**8.4.3.2 Recording and Reporting.** The electrical *energy* use for all loads specified in Section 8.4.3.1 shall be recorded a minimum of every 15 minutes and reported at least hourly, daily, monthly, and annually. The data for each tenant *space* shall be made available to that tenant. In *buildings* with a digital control *system* installed to comply with Section 6.4.3.10, the *energy* use data shall be transmitted to the digital control *system* or other

data acquisition system and graphically displayed. The *system* shall be capable of maintaining all data collected for a minimum of 36 months.

**Exceptions to 8.4.3.1 and 8.4.3.2:**

1. *Building* less than 25,000 ft<sup>2</sup>.
2. Individual tenant *spaces* less than 10,000 ft<sup>2</sup>.
3. *Dwelling units*.
4. *Residential buildings* with less than 10,000 ft<sup>2</sup> of common area.
5. Critical *equipment* and life-safety branches of NFPA 70, Article 517.