





**(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

*Addendum v clarifies documentation that must be submitted to the rating authority or jurisdiction by projects following Section 11 and Appendix G, and clarifies that code authorities may request the simulation files for the baseline/budget and proposed design models, which is already allowed in Section 4.2.2.2.*

*This change is consistent with the current requirements for the exceptional calculation methods in Sections G2.5(b) and 11.4.5(b), which call for copies of all spreadsheets used to perform the calculations. This allows jurisdictions and rating authorities to open the model files, if desired, in the simulation tool that was used to create the models, to facilitate a detailed review.*

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

### Addendum v to Standard 90.1-2019

#### **Modify Section 11.7.2 as shown (I-P and SI units).**

**11.7.2 Permit Application Documentation.** Compliance shall be documented and submitted to the *building official*. The information submitted shall include the following:

[ . . . ]

- d. A list of the *energy*-related features that are included in the design and on which compliance with the provisions of Section 11 is based. This list shall document all *energy* features that differ between the models used in the *energy cost* ...

[ . . . ]

- j. ~~The input and output~~ Reports from the *simulation program* showing
  1. ~~including~~ a breakdown of *energy* usage by at least the following components: lights, internal *equipment* loads, *service water-heating equipment*, *space-heating equipment*, *space cooling* and *heat rejection equipment*, fans, and other HVAC *equipment* (such as pumps);
  2. ~~The output reports shall also show~~ the amount of time any loads are not met by the HVAC system for both the *proposed design* and *budget building design*; and
  3. a description of energy-related features of the *budget building design* and the *proposed design* to support requirements of Section 11.7.2(d).

[ . . . ]

- p. Simulation input files for the *budget building design* and the *proposed design* shall be made available if requested by the *building official*.

[ . . . ]

#### **Modify Section G1.3.2 as shown (I-P and SI units).**

**G1.3.2 Application Documentation.** Simulated performance shall be documented, and documentation shall be submitted to the *rating authority*. The information shall be submitted in a report and shall include the following:

[ . . . ]

- c. A list of the *energy*-related features that are included in the design and on which the performance rating is based. This list shall document all *energy* features that differ between the models used in the *baseline building performance* and *proposed building performance* calculations.

[ . . . ]

- l. ~~Input and output reports from the simulation program or compliance software, including the following showing~~
  1. a breakdown of energy use by at least the following components: lights, internal equipment loads, service water-heating equipment, space-heating equipment, space-cooling and heat rejection equipment, fans, and other HVAC equipment (such as pumps);
  2. ~~The output reports shall also show~~ the amount of unmet load hours for both the proposed design and baseline building design; and
  3. a description of energy-related features of the baseline building design and the proposed design to support requirements of Section G1.3.2(c).

[ . . . ]

- r. Simulation input files for the budget building design and the proposed design shall be made available if requested by the rating authority.

[ . . . ]

## **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.

**ASHRAE · 180 Technology Parkway NW · Peachtree Corners, GA 30092 · [www.ashrae.org](http://www.ashrae.org)**

### **About ASHRAE**

Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

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.

To stay current with this and other ASHRAE Standards and Guidelines, visit [www.ashrae.org/standards](http://www.ashrae.org/standards), and connect on LinkedIn, Facebook, Twitter, and YouTube.

### **Visit the ASHRAE Bookstore**

ASHRAE offers its Standards and Guidelines in print, as immediately downloadable PDFs, and via ASHRAE Digital Collections, which provides online access with automatic updates as well as historical versions of publications. Selected Standards and Guidelines are also offered in redline versions that indicate the changes made between the active Standard or Guideline and its previous version. For more information, visit the Standards and Guidelines section of the ASHRAE Bookstore at [www.ashrae.org/bookstore](http://www.ashrae.org/bookstore).

### **IMPORTANT NOTICES ABOUT THIS STANDARD**

**To ensure that you have all of the approved addenda, errata, and interpretations for this Standard, visit [www.ashrae.org/standards](http://www.ashrae.org/standards) to download them free of charge.**

**Addenda, errata, and interpretations for ASHRAE Standards and Guidelines are no longer distributed with copies of the Standards and Guidelines. ASHRAE provides these addenda, errata, and interpretations only in electronic form to promote more sustainable use of resources.**