

**ANSI/ASHRAE/ICC/USGBC/IES Addendum e to  
ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020**

# **Standard for the Design of High-Performance Green Buildings**

## **Except Low-Rise Residential Buildings**

*The Complete Technical Content of the International Green Construction Code<sup>®</sup>*

Approved by ASHRAE staff and the American National Standards Institute on June 30, 2021; by the International Code Council on May 27, 2021; by the Illuminating Engineering Society on June 16, 2021; and by the U.S. Green Building Council on June 9, 2021.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE<sup>®</sup> website (<https://www.ashrae.org/continuous-maintenance>).

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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

The Senior Manager of Standards of ASHRAE should be contacted for

- interpretation of the contents of this Standard,
- participation in the next review of the Standard,
- offering constructive criticism for improving the Standard, or
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## FOREWORD

*Addendum e clarifies the permitted methods of supply air reheat in Section 8.3.1.6.1 through the use of defined terms. To provide design flexibility, all types of on-site renewable energy systems can be used for supply air reheat, even though some may be considered to have other more beneficial uses. This addendum does not make substantive changes to the section.*

*The requirements addressed by this addendum are expected to be enforced through the normal plan review process. The requirements include specifics on application to certain HVAC system types and are applicable to any building type with those systems.*

**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 e to Standard 189.1-2020

**Revise Section 3.2 as shown.**

site-recovered energy: see ANSI/ASHRAE/IES Standard 90.1.

**Revise Section 8.3.1.6.1 as shown.**

**8.3.1.6.1 Cooling Coils.** HVAC systems with dehumidification capability in Climate Zones 0A, 1A, 2A, 3A, 4A, and 4C shall be designed in accordance with one of the following:

- a. Where recirculating systems do not include means for HVAC zone humidity sensing, such systems shall include controls capable of maintaining the average cooling-coil leaving air temperature at 53°F (12°C) or lower and shall include devices and controls capable of maintaining each HVAC zone sensible temperature set point using one of the following approaches:
  1. Variable HVAC zone supply airflow rate
  2. Variable return-air bypass flow around each cooling coil serving one or more HVAC zones
  3. Variable HVAC zone supply air reheat using ~~site-recovered energy~~ site-recovered energy or ~~site-solar energy~~ on-site renewable energy systems.

**Revise Appendix C as shown.**

**C1.1 Renewable, Recovered, and Purchased Energy.** *On-site renewable energy systems and ~~site-recovered energy~~ site-recovered energy: The modeling requirements for on-site renewable energy systems in the proposed building performance in ANSI/ASHRAE/IES Standard 90.1, Section G2.4.1, shall not apply and are superseded by Table C1.1, Section 15, "Renewable Energy Systems."*

**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.

### **Standard 189.1 and the International Green Construction Code**

Standard 189.1 serves as the complete technical content of the International Green Construction Code<sup>®</sup> (IgCC). The IgCC creates a regulatory framework for new and existing buildings, establishing minimum green requirements for buildings and complementing voluntary rating systems. For more information, visit [www.iccsafe.org](http://www.iccsafe.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.

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