© ASHRAE. Per international copyright law, additional reproduction, distribution, or transmission in either print or digital form is not permitted without ASHRAE's prior written permission.

ANSI/ASHRAE/ICC/USGBC/IES Addendum bw to ANSI/ASHRAE/USGBC/IES Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

The Complete Technical Content of the International Green Construction Code®

Approved by ASHRAE and the American National Standards Institute on September 30, 2020; by the International Code Council on September 5, 2020; by U.S. Green Building Council on September 17, 2020; by the Illuminating Engineering Society on September 22, 2020.

These addenda were 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® website (https://www.ashrae.org/continuous-maintenance).

The latest edition of an ASHRAE Standard may be purchased on the ASHRAE website (www.ashrae.org) or from ASHRAE Customer Service, 180 Technology Parkway NW, Peachtree Corners, GA 30092, telephone: 404-636-8400 (worldwide), or toll free 1-800-527-4723 (for orders in the United States and Canada), or e-mail: orders@ashrae.org. For reprint permission, go to www.ashrae.org/permissions.

© 2020 ASHRAE ISSN 1041-2336











© ASHRAE. Per international copyright law, additional reproduction, distribution, or transmission in either print or digital form is not permitted without ASHRAE's prior written permission.

ASHRAE Standing Standard Project Committee 189.1

Cognizant TC: 2.8 Building Environmental Impacts and Sustainability SPLS Liaison: Walter T Grondzik · ASHRAE Staff Liaisons: Emily Toto ICC Liaison: Mike Pfieffer · IES Liaison: Mark Lien · USGBC Liaison: Wes Sullens

Roger Hedrick*, Chair Michael Cudahy* Stephen Kanipe Steven Rosenstock* Charles Eley*, Co-Vice-Chair Loren Ross Thomas Culp* James Kendzel Katherine Hammack*, Co-Vice-Chair David Delaquila Andrew Klein Michael Schmeida Josh Jacobs*, Co-Vice-Chair **Greg Eades*** Vladimir Kochkin Benjamin Seeley Michael Jouaneh*, Co-Vice-Chair Jim Edelson* Thomas Lawrence Larry Smith Lawrence Schoen*, Co-Vice-Chair Anthony Floyd* Neil Leslie* Kent Sovocool* Costas Balaras Ellen Franconi Christine Locklear Christine Subasic* James Bogdan Patricia Fritz Richard Lord Dennis Stanke Jeff Bradley* Susan Gitlin* C. Webster Marsh Wayne Stoppelmoor Scott Buckley Gregg Gress* Joel Martell Michael Temple Julie Chandler Paul Grahovac Jonathan McHugh* Martha VanGeem* Kim Cheslak Maureen Guttman Adam McMillen* Scott West* Glen Clapper Thomas Hogarth* Erik Miller-Klein Daniel Whittet Ernest Conrad* Donald Horn* Gwelen Paliaga Joe Winters* Dru Crawley Jonathan Humble Thomas Pape* Jian Zhang* John Cribbs Ksenija Janjic Jason Radice

Teresa Rainey

Greg Johnson

ASHRAE STANDARDS COMMITTEE 2020-2021

Drury B. Crawley, Chair Susanna S. Hanson Cesar L. Lim Christian R. Taber Rick M. Heiden, Vice Chair Jonathan Humble James D. Lutz Russell C. Tharp Theresa A. Weston Fls Baert Srinivas Katipamula Karl L. Peterman Erick A. Phelps Charles S. Barnaby Gerald J. Kettler Craig P. Wray Robert B. Burkhead Essam E. Khalil Jaap Hogeling, BOD ExO David Robin Thomas E. Cappellin Malcolm D. Knight William F. McQuade, CO Lawrence J. Schoen Douglas D. Fick Jay A. Kohler Steven C. Sill

Larry Kouma Richard T. Swierczyna

Connor Barbaree, Senior Manager of Standards

SPECIAL NOTE

This American National Standard (ANS) is a national voluntary consensus Standard developed under the auspices of ASHRAE. *Consensus* is defined by the American National Standards Institute (ANSI), of which ASHRAE is a member and which has approved this Standard as an ANS, as "substantial agreement reached by directly and materially affected interest categories. This signifies the concurrence of more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that an effort be made toward their resolution." Compliance with this Standard is voluntary until and unless a legal jurisdiction makes compliance mandatory through legislation.

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

a. interpretation of the contents of this Standard,

John Cross*

Walter T. Grondzik

- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard, or
- d. permission to reprint portions of the Standard.

DISCLAIMER

ASHRAE uses its best efforts to promulgate Standards and Guidelines for the benefit of the public in light of available information and accepted industry practices. However, ASHRAE does not guarantee, certify, or assure the safety or performance of any products, components, or systems tested, installed, or operated in accordance with ASHRAE's Standards or Guidelines or that any tests conducted under its Standards or Guidelines will be nonhazardous or free from risk.

ASHRAE INDUSTRIAL ADVERTISING POLICY ON STANDARDS

ASHRAE Standards and Guidelines are established to assist industry and the public by offering a uniform method of testing for rating purposes, by suggesting safe practices in designing and installing equipment, by providing proper definitions of this equipment, and by providing other information that may serve to guide the industry. The creation of ASHRAE Standards and Guidelines is determined by the need for them, and conformance to them is completely voluntary. In referring to this Standard or Guideline and in marking of equipment and in advertising, no claim shall be made, either stated or implied, that the product has been approved by ASHRAE.

^{*} Denotes members of voting status when the document was approved for publication

© ASHRAE. Per international copyright law, additional reproduction, distribution, or transmission in either print or digital form is not permitted without ASHRAE's prior written permission.

(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 bw removes confusing language regarding setback requirements for HVAC systems in hotel guest rooms and replaces it with a reference to Standard 90.1, Section 6.4.3.3.5.1, that has identical intent. Published addendum bt made changes to this section that are made moot by the approval of this addendum, as the modified language will be deleted.

Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum bw to Standard 189.1-2017

Revise Section 7.4.3.9.3 as shown.

7.4.3.9.3 HVAC Set-Point Control. HVAC system controls shall be in accordance with ANSI/ASHRAE/IES Standard 90.1, Section 6.4.3.3.5.1. Within 30 minutes of all occupants leaving the guest room, HVAC set points shall be automatically raised by at least 5°F (3°C) from the occupant set point in the cooling mode and automatically lowered by at least 5°F (3°C) from the occupant set point in the heating mode. When the guest room is unrented and unoccupied, HVAC set points shall be automatically reset to 80°F (27°C) or higher in the cooling mode and to 60°F (16°C) or lower in the heating mode. Unrented and unoccupied guest rooms shall be determined by either of the following criteria:

- a. The guest room has been continuously unoccupied for up to 16 hours.
- b. A networked guest room control system indicates the guest room is unrented and the guest room is unoccupied for no more than 30 minutes.

Exceptions to 7.4.3.9.3:

- A networked guest-room control system may return the thermostat set points to their default set points 60 minutes prior to the time the room is scheduled to be occupied.
- 2. Cooling for humidity control shall be permitted during unoccupied periods.

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

Standard 189.1 and the International Green Construction Code

Standard 189.1 serves as the complete technical content of the International Green Construction Code[®] (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.

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, and connect on Linkedln, 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 edition. For more information, visit the Standards and Guidelines section of the ASHRAE Bookstore at 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 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.