

# ANSI/ASHRAE/ICC/USGBC/IES Addendum bu to ANSI/ASHRAE/ICC/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 August 18, 2020; by the International Code Council on July 24, 2020; and by the U.S. Green Building Council and Illuminating Engineering Society on July 23, 2020.

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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.

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## FOREWORD

*Addendum bu aligns Standard 189.1 with recent changes to ASHRAE Standard 90.1, in which the terms “energy recovery effectiveness” and “sensible heat recovery effectiveness” were replaced with “enthalpy recovery ratio” and “sensible energy recovery ratio,” respectively. These terms are typically used in product specifications per industry standards (ASHRAE Standard 85 and AHRI Standard 1060) for the performance certification of such devices.*

*The addendum also aligns Standard 189.1 with recent section number changes in ASHRAE Standard 90.1. It does not impact the stringency of the energy efficiency requirements.*

**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 bu to Standard 189.1-2017

**Modify Section 3.2 as shown.**

***design conditions:*** see ANSI/ASHRAE/IES Standard 90.1.

***enthalpy recovery ratio:*** see ANSI/ASHRAE/IES Standard 90.1.

***sensible energy recovery ratio:*** see ANSI/ASHRAE/IES Standard 90.1.

**Revise Section 7.4.3.7 as shown. (Note: This addendum reflects changes previously made by Addenda p and ar.)**

**7.4.3.7 [JO] Exhaust Air Energy Recovery.** The exhaust air energy recovery requirements defined in ANSI/ASHRAE/IES Standard 90.1, Section 6.5.6.1.2, including the requirements in Tables 6.5.6.1.2-1 and 6.5.6.1.2-2, shall be used except that the ~~energy recovery effectiveness~~ enthalpy recovery ratio shall not be less than 60%.

[ ... ]

**7.4.3.8.2 [JO] Kitchen/dining facilities with total kitchen hood exhaust airflow rate greater than 2000 cfm (950 L/s) shall comply with at least one of the following:**

[ ... ]

- c. *Listed energy recovery devices with a ~~sensible heat recovery effectiveness~~ sensible energy recovery ratio of not less than 40% shall be applied on at least 50% of the total exhaust airflow. A 40% sensible energy recovery ratio shall mean a change in the dry-bulb temperature of the outdoor air supply equal to 40% of the difference between the outdoor air and entering exhaust air dry-bulb temperatures at design conditions.*

**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® (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).

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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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