

ANSI/ASHRAE/ICC/USGBC/IES Addendum ac 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 the ASHRAE Standards Committee on February 1, 2020; by the ASHRAE Board of Directors on February 5, 2020; by the International Code Council on January 7, 2020; by the U.S. Green Building Council on January 9, 2020; by the Illuminating Engineering Society on January 24, 2020; and by the American National Standards Institute on February 6, 2020.

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

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FOREWORD

This addendum limits automated demand response requirements to regions where a demand response program is available. Exceptions are added for buildings with a gross conditioned floor area less than 5000 ft² and those with thermal or electrical energy storage systems that meet the specified capacity.

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

Addendum ac to Standard 189.1-2017

Add new definition to Section 3.2 as shown.

gross conditioned floor area: see ANSI/ASHRAE/IES Standard 90.1.

Revise Section 7.3.4 as shown (sections not shown are not changed).

7.3.4 Automated Demand Response. ~~Where a demand response (DR) program is available to the building project, Building projects shall contain automatic control systems that have the capability to reduce building equipment loads to lower electric peak demand of the building. The building controls shall be designed with automated demand response (DR) infrastructure capable of receiving DR requests from the utility, electrical system operator, or third-party DR program provider and automatically implementing load adjustments to the HVAC and lighting systems.~~

Exceptions to 7.3.4:

1. Buildings with a gross conditioned floor area less than 5000 ft² (500 m²).
2. Buildings that employ a thermal or electrical energy storage system with a total storage capacity that complies with one of the following:
 - a. For thermal energy storage, the system shall be capable of displacing the HVAC design cooling coil capacity for not less than the equivalent of three hours.
 - b. For electrical energy storage, the capacity shall be not less than the requirements of the following formula:

$$\text{Minimum kWh Capacity} = \text{Gross Conditioned Floor Area (ft}^2 \text{ [m}^2\text{])} \times \\ 5.0 \text{ W/ft}^2 \text{ (50 W/m}^2\text{)} \times 1.0 \text{ h} \times (1 \text{ kW/1000 W})$$

**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.

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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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