

# ANSI/ASHRAE/ICC/USGBC/IES Addendum af 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 July 31, 2020; by the ASHRAE Board of Directors on August 10, 2020; by the International Code Council on July 24, 2020; by the U.S. Green Building Council and Illuminating Engineering Society on July 23, 2020; and by the American National Standards Institute on September 1, 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 ([www.ashrae.org/continuous-maintenance](http://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

- a. interpretation of the contents of this Standard,
- 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.

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## FOREWORD

*Addendum af identifies a number of requirements from Standard 189.1, Section 10, as being appropriate for local jurisdictions to consider excluding from their adopted ordinances. These jurisdictional options are designated by “[JO]” in Section 10 and added to Table 4.2. Table 4.2 was previously added and modified by Addenda o, p, q, r, s, and t.*

**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 af to Standard 189.1-2017

**Modify Table 4.2 as shown.**

**Table 4.2 Requirements Determined by the Jurisdiction**

Section	Section Title or Description and Directives	Jurisdictional Requirement
6.3.1.2.1(a)(3)	Irrigation System Design, Master Valve	<input type="checkbox"/> No
6.3.1.2.1(a)(4)	Irrigation System Design, Flow Sensors	<input type="checkbox"/> No
6.3.3	Special Water Features	<input type="checkbox"/> No
6.3.4.2	Consumption Data Collection	<input type="checkbox"/> No
6.3.4.3	Data Storage and Retrieval	<input type="checkbox"/> No
6.3.8	Dual Water Supply Plumbing	<input type="checkbox"/> No
7.4.2.1	Building Envelope Requirements	<input type="checkbox"/> No
7.4.2.2	Single-Rafter Roof Insulation	<input type="checkbox"/> No
7.4.2.3	High Speed Doors	<input type="checkbox"/> No
7.4.2.6	Permanent Projections	<input type="checkbox"/> No
7.4.2.9	Orientation	<input type="checkbox"/> No
7.4.3.2	Ventilation Controls for Densely Occupied Spaces	<input type="checkbox"/> No
7.4.3.4	Economizers	<input type="checkbox"/> No
7.4.3.5	Zone Controls	<input type="checkbox"/> No
7.4.3.7	Exhaust Air Energy Recovery	<input type="checkbox"/> No
7.4.3.8	Kitchen Exhaust Systems	<input type="checkbox"/> No
7.4.4.2	Insulation for Spa Pools	<input type="checkbox"/> No
7.4.6.2	Occupancy Sensor Controls with Multilevel Switching or Dimming.	<input type="checkbox"/> No
7.4.6.3	Automatic Controls for Egress and Security Lighting	<input type="checkbox"/> No
7.4.7.2	Supermarket Heat Recovery	<input type="checkbox"/> No
7.4.7.4	Programmable Thermostats	<input type="checkbox"/> No
7.4.7.5	Refrigerated Display Cases	<input type="checkbox"/> No
8.3.1.3(b)	Ozone	<input type="checkbox"/> No
8.3.1.4.2	Exfiltration	<input type="checkbox"/> No
8.3.3.4	Interior Sound Reverberation	<input type="checkbox"/> No
8.4.1.3	Shading for Offices	<input type="checkbox"/> No
9.3.1.2	Total Waste	<input type="checkbox"/> No
<u>10.3.1.5(b)</u>	<u>IAQ Construction Management. (flush-out)</u>	<input type="checkbox"/> No
<u>10.3.1.8</u>	<u>Construction Activity Pollution Prevention: Protection of Occupied Areas</u>	<input type="checkbox"/> No
<u>10.3.2.3</u>	<u>Service Life Plan</u>	<input type="checkbox"/> No
<u>10.3.2.4.2</u>	<u>Transportation Management Plan: Owner Occupied Building Projects or Portions of Building Projects</u>	<input type="checkbox"/> No
<u>10.3.2.4.3</u>	<u>Transportation Management Plan: Building Tenant</u>	<input type="checkbox"/> No

**Modify Section 10 as shown.**

**10.3.1.5 IAQ Construction Management.** Develop and implement an IAQ construction management plan to include the following:

[ . . . ]

- b. **[JO]** After construction ends, prior to occupancy and with all interior finishes installed, a post-construction, preoccupancy building flush-out as described under Section 10.3.1.5(b)(1), or postconstruction, preoccupancy baseline IAQ monitoring as described under Section 10.3.1.5(b)(2), shall be performed:

[ . . . ]

**10.3.1.8 [JO] Construction Activity Pollution Prevention: Protection of Occupied Areas.** The *construction documents* shall identify operable windows, doors, and air intake openings that serve occupied *spaces*, including those not associated with the *building project*, that are in the area of construction activity or within 35 ft (11 m) of the limits of construction activity. Such windows, doors, and air intake openings that are under control of the *owner* shall be closed, or other measures shall be taken to limit *contaminant* entry.

Management of the affected buildings not under the control of the *building project owner* shall be notified in writing of planned construction activity and possible entry of *contaminants* into their buildings.

[ . . . ]

**10.3.2 Plans for Operation.** This section specifies the items to be included in plans for operation of a *building project* that falls under the requirements of this standard.

[ . . . ]

**10.3.2.3 [JO] Service Life Plan.** A service life plan that is consistent with the *OPR* shall be developed to estimate to what extent structural, *building envelope* (not mechanical and electrical), and *hardscape* materials will need to be repaired or replaced during the service life of the building. The design service life of the building shall be no less than that determined using Table 10.3.2.3. The estimated service life shall be documented for building assemblies, products, and materials that will need to be inspected, repaired, and/or replaced during the service life of the building. *Site* improvements and *hardscape* shall also be included. Documentation in the service life plan shall include the *building project* design service life and basis for determination, and the following for each assembly or component:

[ . . . ]

**10.3.2.4.2 [JO] Owner-Occupied Building Projects or Portions of Building Projects.** For *owner-* occupied buildings, or for the employees in the *owner-*occupied portions of a building, the *building owner* shall offer at least one of the following primary benefits to the *owner's* employees:

[ . . . ]

**10.3.2.4.3 [JO] Building Tenant.** The *building owner*

[ . . . ]

**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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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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