ANSI/ASHRAE/ICC/USGBC/IES Addendum t to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2023

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 December 31, 2025; by the International Code Council and Illuminating Engineering Society on November 17,2025; and by the U.S. Green Building Council on December 8, 2025.

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® website (www.ashrae.org/continuous-maintenance).

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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,
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.

(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 t clarifies that certain provisions in Section 8 only apply to certain types of construction (e.g., new buildings, additions, etc.). These changes will not negatively affect the cost of construction and, in most cases, provide relief from requirements that are difficult to meet or are undesirable for aesthetic reasons for additions or alterations.

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

Addendum t to Standard 189.1-2023

Modify Section 8.8 as shown.

[. . .]

8.8 Soil-Gas Control. ~~*Building projects*~~ New buildings and additions shall be designed to control soil-gas entry in accordance with Sections 8.8.1 or 8.8.2.

Exceptions to 8.8:

1. Buildings or portions thereof that are not routinely occupied, such as warehouses and open parking garages.
2. Ventilated garages that comply with ANSI/ASHRAE Standard 62.1, Sections 5.19 and 6.5.

8.8.1 Soil-Gas Control Systems. ~~*Building projects*~~ Projects shall comply with the design requirements of ANSI/AARST CC-1000, Sections 2 through 13, as modified by Section 8.8.1.1.

8.8.1.1 Soil-Gas Retarders. *Soil-gas retarder* membranes shall comply with ASTM E1745 and shall be installed in accordance with ASTM E1643.

[. . .]

Modify Sections 8.10, 8.10.2 and 8.10.3 as shown. Only the affected sections are shown.

[. . .]

8.10 Daylighting. ~~The *building project*~~ New buildings and additions shall comply with ~~either~~ Sections 8.10.1 through 8.10.3 or with Section 8.10.4.

[. . .]

8.10.2 Minimum Sidelighting Effective Aperture. The *spaces* listed in Table 8.10.2A shall comply with items (a), (b) and (c).

a. The north-, south-, and east-facing façades shall have a minimum *sidelighting effective aperture* as prescribed in Table 8.10.2B.
b. For all façades, the combined width of the *primary sidelighted areas* shall not be less than 75% of the length of the façade *wall*.
c. Opaque interior surfaces in *daylight areas* shall have average visible light reflectances greater than or equal to 80% for ceilings, 40% for partitions higher than 60 in. (1.5 m), and 60% for walls.

Exceptions to 8.10.2:

1. *Spaces* not adjacent to an exterior *wall*.
2. A *space* that would have tasks or activities requiring routine dark conditions for more than four daytime hours per day.
3. *Spaces* covered by and in compliance with Section 8.10.1 without the use of any exception.
4. *Daylight areas* where the height of existing adjacent structures above the window is not less than twice the distance between the window and the adjacent structures, measured from the top of the glazing.
5. Existing buildings undergoing addition, alteration, repair, relocation, or a change in occupancy.

[. . .]

8.10.3 [JO] Shading for Offices. For office *spaces* 250 ft^2 (23 m^2) and larger, each façade shall be designed with a shading *projection factor* (*PF*). The *PF* shall not be less than 0.5 for the first story above grade and 0.25 for other above-grade stories. Shading is allowed to be external or internal using the *interior PF*. Shading devices shall be limited to the following:

a. Louvers, sun shades, light shelves, and any other permanent device. Any *vertical fenestration* that employs a combination of interior and external shading is allowed to be separated into multiple segments for compliance purposes. Each segment shall comply with the requirements for either external or *interior PF*.
b. Building self-shading through *roof* overhangs or recessed windows.

Exceptions to 8.10.3:

1. Facades facing within 45 degrees of true north in the northern hemisphere or facades facing 45 degrees from true south in the southern hemisphere.
2. Translucent panels and glazing systems with a measured haze value greater than 90% when tested according to ASTM D1003 or other *approved* test method, and that are entirely 8 ft (2.5 m) above the floor do not require external shading devices.
3. Where equivalent shading of the *vertical fenestration* is provided by buildings, structures, geological formations, or permanent exterior projections that are not horizontal, as determined by sun-angle studies at the peak solar altitude on the summer solstice and three hours before and after the peak solar altitude on the summer solstice.
4. *Vertical fenestration* with automatically controlled shading devices in compliance with Section 7.4.2.6, Exception 2.
5. *Vertical fenestration* with automatically controlled *dynamic glazing* in compliance with Section 7.4.2.6, Exception 3.
6. Existing buildings undergoing addition, alteration, repair, relocation, or a change in occupancy.

Modify Section 8.11 as shown.

[. . .]

8.11 Solar Glare Control. ~~The *building project*~~ Alterations involving *vertical fenestration,* new buildings, and additions shall comply with ~~either~~ Section 8.11.1 or 8.11.2.

[. . .]

Modify Section 8.12 as shown.

[. . .]

8.12 Exterior Views. ~~Not~~ In new buildings, not less than 50% of the total combined floor area of each of the *space types* listed in Table 8.12 shall have a direct line-of-sight, originating at a height of not more than 42 in. (1.1 m) above the floor, to *view fenestration* meeting the criteria of this section. The line-of-sight distance to *view fenestration* shall not exceed 40 ft (12.2 m). The glazing area shall not be less than 8% of the floor area required to have exterior views. Qualifying *view fenestration* shall meet the following criteria:

a. Glazing shall have a haze value less than 3%, as determined in accordance with ASTM D1003.
b. Center-of-glass visible transmittance (VT) shall be not less than 20%.
c. The product of the center-of-glass VT and the openness factor of screens, patterned films, and ceramic frits shall be not less than 20%.
d. Where *dynamic glazing* is provided, glazing shall have a center-of-glass VT of not less than 20% at the highest setting of its VT range.
e. Where stationary opaque window treatments are provided, such as nonoperable blinds, shades, and louvers, such treatments shall not obstruct more than 40% of the fenestration glazing area.

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.

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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.

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