

ANSI/ASHRAE/ICC/USGBC/IES Addendum ap 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 July 6, 2020; by the International Code Council on June 1, 2020; by the U.S. Green Building Council on June 3, 2020; and by the Illuminating Engineering Society on July 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).

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ASHRAE Staff Liaisons: Emily Toto
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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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(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 objections on informative material are not offered the right to appeal at ASHRAE or ANSI.)

FOREWORD

Addendum ap removes the outdoor lighting requirements that are provided in ANSI/ASHRAE/IES Standard 90.1, Section 5, because they are provided in Sections 7.4.6 of this standard.

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 ap to Standard 189.1-2017

Revise Section 5.3.6 as shown (I-P and SI units). Renumber Tables 5.3.6.2A, 5.3.6.2B, and 5.3.6.3 as Tables 5.3.6.1A, 5.3.6.1B, and 5.3.6.2, respectively (tables not shown).

5.3.6 Reduction of Light Pollution

~~5.3.6.1~~ **General.** Exterior lighting systems shall comply with ANSI/ASHRAE/IES Standard 90.1, Sections 9.1, 9.4.1.4, 9.4.2, 9.4.3, and 9.7, and with Sections 5.3.6.2 and 5.3.6.3 of this standard.

~~5.3.6.2~~ **5.3.6.1 Backlight and Glare**

- a. ~~All building~~ **Building** mounted luminaires located less than two mounting heights from any property line shall meet the maximum allowable glare ratings in Table ~~5.3.6.1A~~ ~~5.3.6.2A~~.
- b. All other luminaires shall meet the maximum allowable backlight and glare ratings in Table ~~5.3.6.1B~~ ~~5.3.6.2B~~.

~~5.3.6.3~~ **Uplight.** ~~All exterior~~ **Exterior** lighting shall meet one of the following uplight requirements:

- a. Exterior luminaires shall meet the maximum allowable Uplight Ratings of Table ~~5.3.6.1B~~ ~~5.3.6.2B~~.
- b. Exterior lighting shall meet the uplight requirements of Table ~~5.3.6.2~~ ~~5.3.6.3~~.

Exceptions to ~~5.3.6.2~~ ~~5.3.6.3~~:

1. Lighting in LZ3 and LZ4, solely for uplighting structures, building façades, or landscaping.
2. Lighting in LZ1 and LZ2, solely for uplighting structures, building façades, or landscaping, provided the applicable lighting power densities (LPDs) do not exceed 50% of the *lighting power allowances* in ANSI/ASHRAE/IES Standard 90.1, Table 9.4.2-2.

Exceptions to ~~5.3.6.1~~ and ~~5.3.6.2~~ ~~5.3.6.2~~ and ~~5.3.6.3~~:

1. Specialized signal, directional, and marker lighting associated with transportation.
2. Advertising signage or directional signage.
3. Lighting integral to equipment or instrumentation and installed by its manufacturer.
4. Lighting for theatrical purposes, including performance, stage, film production, and video production.
5. Lighting for athletic playing areas.
6. Lighting that is in use for no more than 60 continuous days and is not reinstalled any sooner than 60 days after being uninstalled.
7. Lighting for industrial production, material handling, transportation *sites*, and associated storage areas.
8. Theme elements in theme/amusement parks.
9. Roadway lighting required by governmental authorities.
10. Lighting classified for and used in hazardous locations as specified in NFPA 70.
11. Lighting for swimming pools and water features.

**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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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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