

# ANSI/ASHRAE/ICC/USGBC/IES Addendum ah 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 June 26, 2020; by the ASHRAE Board of Directors on July 1, 2020; by the International Code Council on June 1, 2020; by the U.S. Green Building Council on June 3, 2020; by the Illuminating Engineering Society on July 1, 2020; and by the American National Standards Institute on July 31, 2020.

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](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

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- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard, or
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## FOREWORD

*Dwelling unit lighting efficacy is regulated in ASHRAE/IES Standard 90.1, Section 9.4.4, and relies on an efficacy requirement that does not reflect the availability of highly efficient products in the market.*

*Addendum ah increases the efficacy requirements for light sources, as well as the percentage of light sources in dwelling units that must meet the higher requirements. The proposal reflects the continued effort to develop Standard 189.1 as a high-performance extension of base codes.*

*The requirements of this addendum exceed the existing EnergyStar standards currently referenced in Standard 189.1 in all cases except for omnidirectional lamps with a color rendering index (CRI) under 90. These are lamps that are intended for utility or outdoor applications where color rendering is not important and that are not appropriate to indoor residential applications covered in this section of the standard. The approach herein groups all lamps and luminaires under a common set of requirements to provide better clarity and alignment with Standard 90.1.*

*The values in this addendum were selected with consideration of published averages for directional and omnidirectional lamps (77 lm/W and greater than 90 lm/W, respectively, per California's JA8 lighting dataset). Both lamp types have an average CRI below 95, so a threshold of 75 lm/W was deemed appropriate to accommodate higher CRI lamps. This addendum also includes an exception for appliance lighting, as that lighting is often subject to more demanding operating conditions.*

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

### Addendum ah to Standard 189.1-2017

***Add new Section 7.4.6.2 and renumber remaining sections.***

**7.4.6.2 Dwelling Units.** This section supersedes ANSI/ASHRAE/IES Standard 90.1, Section 9.4.3. Not less than 90% of the permanently installed lighting serving dwelling units shall be provided by lamps with an efficacy of not less than 75 lm/W or luminaires with an efficacy of not less than 55 lm/W.

**Exception to 7.4.6.2: Lighting attached to, or integral to, appliances.**

***Revise Section 7.4.7.3.1 (e) as shown.***

e. Lighting

1. Integral LED lamps not subject to Section 7.4.6.2: ENERGY STAR Program Requirements for Integral LED Lamps

**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).

### **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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