

**ANSI/ASHRAE/ICC/USGBC/IES Addendum an 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 and 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 March 2, 2020.

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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.

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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

This addendum adds lighting control requirements for dwelling units to increase energy savings beyond the capabilities of energy-efficient light sources alone. The proposal reflects the continued effort to develop Standard 189.1 as a high-performance extension of base codes. The changes would align Standard 189.1 with California Title 24 Part 6 and ASHRAE Standard 90.2.

Standard 189.1 to date contains no maximum lighting power density (LPD) allowances for dwelling units. In order to ensure energy efficiency in dwelling units, efficient light sources must be used in conjunction with energy-saving lighting controls such as dimmers, timers, or occupancy sensors. The use of such controls can contribute to energy savings, enhance indoor environmental quality (visual acuity and ambience), increase convenience and accessibility (universal design), and improve security.

The Consortium for Energy Efficiency (CEE) Residential Lighting Controls Market Characterization report, published Jan. 9, 2014, shows how energy savings are enabled through the use of dimmer and timer controls for various room types and lighting sources (<https://library.cee1.org/content/cee-residential-lighting-controls-market-characterization>).

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 an to Standard 189.1-2017

Add new definitions to Section 3.2 as shown.

automatic shut-off control: a device capable of automatically turning loads off without manual intervention. Automatic shut-off controls include devices such as occupancy sensors, vacancy sensors, motion sensors, programmable time switches, or count-down timers.

dimmer: see ANSI/ASHRAE/IES Standard 90.1.

Add new Sections 7.4.6.6 as shown.

7.4.6.6 Dwelling Unit Lighting Controls. Permanently installed luminaires in laundry rooms, utility rooms, closets, and storage rooms in dwelling units shall be controlled with automatic shut-off controls.

For all other spaces and exterior applications that are controlled from within a dwelling unit, where three or more permanently installed luminaires are controlled together, the control shall be either a dimmer or an automatic shut-off control.

Dwelling units with greater than 5000 ft² (460 m²) of conditioned floor area shall have a lighting control system that has the capability to turn off all permanently installed interior lighting from a control located at an exit door or have a lighting control system that has the capability to turn off all permanently installed interior lighting from remote locations.

Exceptions to 7.4.6.6:

1. Spaces using less than 10 W of total lighting power.
2. Lighting designed for safety or security.
3. Permanently installed night lighting that does not exceed 2 W per luminaire.

**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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