# ADDENDA

ANSI/ASHRAE/IES Addendum br to ANSI/ASHRAE/IES Standard 90.1-2019

# Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on June 25, 2022; by the ASHRAE Board of Directors on June 29, 2022; by the Illuminating Engineering Society on June 17, 2022; and by the American National Standards Institute on July 29, 2022.

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 (https://www.ashrae.org/continuous-maintenance).

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ASHRAE Standard Project Committee 90.1

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### **FOREWORD**

Addendum br increases the efficacy threshold for lamps and luminaires to address currently available technology. The committee also considered raising the threshold for the percentage of lights in a dwelling unit that must be high efficacy but found that raising the threshold above 75% (existing threshold) would entail adding exceptions. In the interest of keeping the requirements straightforward and clear, it was decided not to introduce exceptions.

Lighting control requirements have also been added in dwelling units, for both interior spaces and exterior areas, where the exterior lights are dedicated to the dwelling unit. An exception was included for exterior controls for low total wattage applications.

Because lighting controls were added as a requirement, the previous exception to efficacy requirements based on the availability of controls was eliminated. A cost effectiveness analysis was completed and found to meet the scalar requirements.

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

### Addendum br to Standard 90.1-2019

### Modify the standard as shown (I-P and SI).

9.4.3 Dwelling Units. <u>Dwelling unit lamps, luminaires</u> and lighting controls shall be installed to meet the provisions of Sections 9.4.3.1, 9.4.3.2, and 9.4.3.3. Not less than 75% of the <u>permanently installed</u> lighting <u>fixtures</u> shall use <u>lamps</u> with an <u>efficacy</u> of at least 55 lm/W or have a total <u>luminaire efficacy</u> of at least 45 lm/W. No other provisions of Section 9 apply to a <u>dwelling unit</u>.

### Exception to 9.4.3:

- 1. Lighting that is controlled with dimmers or controlled in accordance with Section 9.4.1.1(h).
- 2. Hotel/motel guest rooms. The requirements for hotel/motel guest rooms are covered in Table 9.6.1 and Section 9.4.1.3(b).
- 9.4.3.1 Lamp and Luminaire Efficacy. At least 75% of the permanently installed luminaires shall use lamps with an efficacy of at least 75 lm/W or have a total luminaire efficacy of at least 50 lm/W.
- <u>9.4.3.2 Interior Lighting Controls.</u> Fifty percent (50%) of *permanently installed* interior *luminaires* shall be controlled with *dimmers* or shall *automatically* be shut off within 20 minutes of all occupants leaving a space.
- 9.4.3.3 Exterior Lighting Controls. Permanently installed exterior luminaires dedicated to a dwelling unit shall be provided with manual controls and be automatically shut off through time of day, available daylight, or when no activity has been detected for 15 minutes.

Exception to 9.4.3.3: Applications with a total rated luminaire wattage of no greater than 8 W.

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## 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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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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