ANSI/ASHRAE/IES Addendum I to
ANSI/ASHRAE/IES Standard 90.2-2018

Energy Efficient
Design of Low-Rise
Residential Buildings

Approved by the ASHRAE Standards Committee on January 20, 2024; by the Illuminating Engineering Society on December 21, 2023; and by the American National Standards Institute on February 21, 2024.

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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FOREWORD

Addendum 1 matches the Standard 90.2 lighting efficacy values for dwelling units with the ones recently published in Standard 90.1-2022. The proposal goes beyond Standard 90.1, however, by requiring all lighting to be high efficacy (not 75% as in Standard 90.1). This addendum also adds the language “capable of operating at” to allow color tunable (RGB color) and tunable white (CCT tunable) light sources to comply with the values. These tunable light sources provide for higher lighting quality and help in meeting mandatory requirements in the indoor environmental quality section of Standard 90.2. Finally, this addendum removes the safety/security exception, as lighting designed for safety and security can still meet the efficacy and control requirements.

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 1 to Standard 90.2-2018

Modify Section 7.5.2 as shown.

7.5.2 Efficiency and Controls. All permanently installed luminaires shall be capable of operating at have an efficacy of 50 lm/W, or have a luminaire efficiency rating (LER) of at least 4550 lm/W, or contain lamps capable of operating at with efficacies of at least 675 lm/W and controlled with either dimmers or automatic shut-off controls. Gas lamps shall not be equipped with a constant-burning pilot light.

Exception to 7.5.2:
1. Spaces using less than 10 W of total lighting power.
2. Lighting designed for safety or security.
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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