

ADDENDA

**ANSI/ASHRAE/IES Addendum z to
ANSI/ASHRAE/IES Standard 90.1-2019**

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and the American National Standards Institute on February 28, 2022, and by the Illuminating Engineering Society on February 25, 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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FOREWORD

The track lighting requirement was introduced in Standard 90.1-1999 as 30 W per linear foot. This value has not been updated in subsequent versions of the standard. Changes in lighting technology (e.g., shift from halogen to LED) in track applications allows for a revised value. Further, as lighting power allowances (or density) values have decreased, the 30 W per linear foot has represented a larger portion of the calculated load. In general, the value can be lower because LEDs are common and more efficient than halogen sources used in track lighting applications. Halogen lamp efficacy is 10 to 17 lm/W, and halogen was the primary source when the value was developed. For context, the 2020 ENERGY STAR directional lamp specification efficacy is 61 lm/W and 70 lm/W depending on color characteristics. The ENERGY STAR luminaires track minimum is 55 lm/W. LEDs in this application are more than three times more efficacious than the halogen sources originally used to establish the wattage threshold more than 20 years ago.

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

Addendum z to Standard 90.1-2019

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

9.1.4 Interior and Exterior Luminaire Wattage. The wattage of lighting *equipment*, when used to calculate either *installed interior lighting power* or *installed exterior lighting power*, shall be determined in accordance with the following criteria:

- a. The wattage of lighting *equipment* connected to line voltage shall be the *manufacturers' labeled* maximum wattage.
- b. The wattage of line voltage lighting *equipment* with remote *ballasts/drivers* or similar devices shall be the total input wattage of all line voltage components in the *system*.

Exception to 9.1.4(b): Lighting power calculations for *ballasts* with adjustable *ballast* factors shall be based on the *ballast* factor that will be used in the *space*, provided that the *ballast* factor is not user field-changeable.

- c. The wattage of For line-voltage lighting track and plug-in busway designed to allow the addition and/or relocation of lighting *equipment* without altering the wiring of the *system*, ~~the wattage~~ shall be the lesser of
 1. the specified wattage of the lighting *equipment* included in the *system* with a minimum of ~~30~~10 W/lin ft (~~98~~33 W/lin m); or
 2. ~~the wattage limit of the system's circuit breaker, or~~
 3. ~~the wattage limit of other~~ permanent current-limiting devices on the *system*.

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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