ADDENDA

ANSI/ASHRAE/IES Addendum as to
ANSI/ASHRAE/IES Standard 90.1-2013

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on January 23, 2016; by the ASHRAE Board of Directors on January 27, 2016; by the IES Board of Directors on December 31, 2015; and by the American National Standards Institute on January 28, 2016.

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. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website (www.ashrae.org) or in paper form from the Senior Manager of Standards.

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FOREWORD

Currently the controls requirements for outdoor lighting are photocontrols or an astronomical timeclock to turn lighting off during the daytime and a scheduling control to turn lighting off or reduce lighting power after midnight or after normal business hours. This proposal would require activity sensing controls for parking lot lighting with low mounting heights (below 24 ft) and luminaire rated wattage greater than 78 W. These controls would reduce lighting power by at least 50% per luminaire when no activity is detected in the zone served by the lighting. The amount of lighting that can be controlled together is limited to 1500 W. This requirement is very similar to the parking garage lighting control requirements in Section 9.4.1.3. Note that this applies only to "parking areas" and does not apply to outdoors sales or outdoor "vehicle sales" lots. This proposal would save lighting energy in parking lots during normal business hours whenever portions of the lot are unoccupied. Cost analysis was completed and shows that it is cost effective with a scalar of 8.8.

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 as to 90.1-2013

Modify the standard as follows (IP and SI Units)

9.4.1.4 Exterior Lighting Control. Lighting for exterior applications not exempted in Section 9.1 shall meet the following requirements:

a. Lighting shall be controlled by a device that automatically turns off the lighting when sufficient daylight is available.
b. All building façade and landscape lighting shall be automatically shut off between midnight or business closing, whichever is later, and 6 a.m. or business opening, whichever comes first, or between times established by the authority having jurisdiction.
c. Lighting not specified in Section 9.4.1.4(b) and lighting for signage shall be controlled by a device that automatically reduces the connected lighting power by at least ~~30~~ 50% for at least one of the following conditions:
   1. From 12 midnight or within one (1) hour of the end of business operations, whichever is later, until 6 a.m. or business opening, whichever is earlier
   2. During any period when no activity has been detected for a time of no longer than 15 minutes

d. Luminaires serving outdoor parking areas and having a rated input wattage of greater than 78 W and a mounting height of 24 ft (7.3 m) or less above the ground shall be controlled to automatically reduce the power of each luminaire by a minimum of 50% when no activity has been detected in the area illuminated by the controlled luminaires for a time of no longer than 15 minutes. No more than 1500 W of lighting power shall be controlled together.

All time switches shall be capable of retaining programming and the time setting during loss of power for a period of at least ten hours.

EXCEPTIONS:

1. Lighting for covered vehicle entrances or exits from buildings or parking structures where required for safety, security, or eye adaptation
2. Lighting that is integral to signage and installed in the signage by the manufacturer

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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