ADDENDA

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

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on August 24, 2016; by the ASHRAE Tech Council on August 29, 2016; by the IES Board of Directors on September 26, 2016; and by the American National Standards Institute on August 30, 2016.

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FOREWORD

Currently, lighting in dwelling units in high-rise buildings is exempt in both ASHRAE Standards 90.1 and 90.2. The requirements of addendum do are similar to those in Energy Star for high-efficacy lighting. In addendum do, they are simplified to apply to anticipated dwelling units in commercial buildings and to support compliance, and they are conservative to allow design flexibility. In general, the efficacy requirements will eliminate the use of incandescent/halogen sources as well as less-efficacious compact flourescent lighting (CFL) and light-emitting diode (LED) products.

Cost Justification: The three likely and common applications of this requirement include typical mixture of controls, no controls with high-efficacy lighting, and all auto controls. All cases are easily cost effective based on scalar ratio analysis or net present value (NPV) life-cycle cost analysis. The calculated scalars range from 1.3 to 4.5, which are below the scalar ratio limit of 14.1 for a 23-year life analysis. Net present values were also positive for all three cases.

[Note: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes.]

Addendum do to 90.1-2013

Modify Section 3.2, Definitions, as follows (I-P and SI):

……

dimmer: a lighting control device that is capable of varying the light output and energy usage of light sources.

Modify Section 9 as follows (I-P and SI):

9.1.1 Scope. This section shall apply to the following:

…….

1. Emergency lighting that is automatically off during normal building operation
2. ~~Lighting within dwelling units~~
3. Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation
4. Decorative gas lighting systems

Add new Section 9.4.4 (I-P and SI)::

9.4.4. Dwelling Units. Not less than 75 percent of the permanently installed lighting fixtures shall utilize lamps with an efficacy of at least 55 lm/W, or have a total luminaire efficacy of at least 45 lm/W.

Exception to Section 9.4.4:
Lighting that is controlled with dimmers or automatic control devices.

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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