ADDENDA

ANSI/ASHRAE/IES Addendum cf 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

In the section 6 Heating, Ventilating, And Air Conditioning scope the current 90.1-2013 requires that New HVACR equipment as a direct replacement of existing HVACR equipment shall comply with the specific minimum efficiency requirements applicable to that equipment, but does not require the replacement equipment to comply with any of the other section 6 requirements. For example this does not require economizers, fan speed control, setback thermostats and more. This eliminates many of the significant energy savings that new equipment is capable of doing as required by new construction and major retrofits. This proposed addendum adds additional requirements to section 6.1.1.3.1 for direct replacement HVAC equipment. Only requirements are being added that are easily done as part of a direct replacement.

All the features that are being added have already been justified by prior addendums for new construction equipment so no additional cost justification is needed.

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 cf to 90.1-2013

Revise the standard as follows (I-P and SI).

6.1.1.3.1. New HVACR equipment as a direct replacement of existing HVACR equipment shall comply with the ~~specific minimum efficiency requirements applicable to that equipment.~~ following sections as applicable for the equipment being replaced;

6.3 Simplified Approach Option for HVAC Systems
6.4.1 Equipment Efficiencies, Verification, and Labeling Requirements
6.4.3.1 Zone Thermostatic Controls
6.4.3.2 Setpoint overlap Restrictions
6.4.3.3 Off-Hour Control except for Section 6.4.3.3.4 zone isolation
6.4.3.4 Ventilation Control
6.4.3.7 Freeze Protection and Snow/Ice Melting Systems
6.4.3.8 Ventilation Controls for High-Occupancy Areas only for single zone equipment.
6.4.3.9 Heating in Vestibules
6.4.5 Walk-In Coolers and Freezers
6.5.1.1 Air Economizers for units located outdoors
6.5.1.3 Integrated Economizer Control
6.5.1.4 Staging Requirements
6.5.1.5 Economizer Heating Requirements
6.5.3.1.3 Fan Efficiency
6.5.3.2.1 Fan Airflow Control
6.5.3.5 Fractional Horsepower Fan Motors
6.5.4.1 Boiler Turndown
6.5.4.3 Chiller and Boiler Isolation
6.5.5.2 Fan Speed Control

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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