ADDENDA

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

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on June 25, 2016; by the ASHRAE Technology Council on June 29, 2016; by the IES Board of Directors on June 27, 2016; and by the American National Standards Institute on June 30, 2016.

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FOREWORD

Dedicated outdoor air systems (DOAS) use significant heating energy when controlled to provide a "neutral" supply temperature that matches the space setpoint. In fact, for humidity control, DOAS air is often cooled to remove moisture then reheated to a neutral temperature. In addition, when cooling is required in the building, the neutral air does not contribute to cooling like ventilation though a single air system would. Addendum bi limits heating the DOAS supply air to 60°F (16°C) when the majority of the building is expected to require cooling. This can be established based either on zone conditions or outdoor air temperature. Zones that do not require cooling can provide heating to neutral with the zone conditioning system. Zones that do require cooling will benefit from the lower outdoor air temperature.

Cost effectiveness: This represents a control requirement rather than a requirement for additional equipment, so there is no anticipated cost increase and cost effectiveness analysis is not required.

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

Addendum bi to 90.1-2013

Modify the standard as follows (IP and SI Units)

Add the following:

<u>6.5.2.6 Ventilation Air Heating Control</u><u>. Units that provide ventilation air to multiple zones and operate in conjunction with zone heating and cooling systems shall not use heating or heat recovery to warm supply air above 60ºF (16ºC) when representative building loads or outdoor air temperature indicate that the majority of zones require cooling.</u>

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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