ADDENDA

ANSI/ASHRAE/IES Addendum bn 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 Board of Directors on Septebmer 6, 2016; by the IES Board of Directors on September 26, 2016; and by the American National Standards Institute on September 28, 2016.

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FOREWORD

Currently, Standard 62.1 establishes the minimum outdoor air required for ventilation; however, there is no upper limit for ventilation in Standard 90.1 prescriptive requirements. This addendum offers the designer three options:

- *Green building rating systems have established 130% of required minimum ventilation for indoor air quality credits. This option limits ventilation to 135%.*
- *The intent of the second option is to allow increased design outdoor air, if desired, to improve indoor air quality but to allow operators to reduce outdoor air rates to the minimum in the future without significant cost to modify the system.*
- *Should more ventilation be desired, heat recovery can be used for systems with higher ventilation.*

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

[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 bn to 90.1-2013

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

Add the following:

6.3.2 Criteria. The HVAC system must meet all of the following criteria:

. . .

q. The system shall comply with the demand control ventilation requirements in Section 6.4.3.8 and the ventilation design requirements in Section 6.5.3.6.

. . .

6.5.3.6 Ventilation Design. The required minimum outdoor air rate is the larger of the minimum outdoor air rate or the minimum exhaust air rate required by Standard 62.1, Standard 170, or applicable codes or accreditation standards. Outdoor air ventilation systems shall comply with one of the following:

1. Design minimum system outdoor air provided shall not exceed 135% of the required minimum outdoor air rate.
2. Dampers, ductwork, and controls shall be provided that allow the system to supply no more than the required minimum outdoor air rate with a single setpoint adjustment.
3. The system includes exhaust air energy recovery complying with Section 6.5.6.1.

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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