

ADDENDA

**ANSI/ASHRAE/IES Addendum bm to
ANSI/ASHRAE/IES Standard 90.1-2019**

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and the American National Standards Institute on January 21, 2022, and by the Illuminating Engineering Society on January 18, 2022.

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. Instructions for how to submit a change can be found on the ASHRAE® website (<https://www.ashrae.org/continuous-maintenance>).

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FOREWORD

The occupied-standby requirement in 90.1-2019 requires shutting off ventilation air to unoccupied zones. For single-zone systems, this saves fan energy and the thermal energy associated with conditioning outside air. For multiple-zone systems, the zone ventilation air is shut off, which reduces fan energy and reheat energy. Still, currently, there is not an explicit requirement to reset the outdoor air amounts at the system level. Thus there are not the thermal energy savings associated with conditioning less outdoor air. Significant energy savings can be achieved by also resetting the minimum outdoor airflow set point at the air handler.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum bm to Standard 90.1-2019

Modify Section 6.5.3.8 as shown (I-P and SI).

6.5.3.8 Occupied-Standby Zone Controls. Zones serving only rooms that are required to have automatic partial OFF or automatic full OFF lighting controls per Section 9.4.1.1, where the ASHRAE Standard 62.1 occupancy category permits ventilation air to be reduced to zero when the space is in *occupied-standby mode*, and when using the Ventilation Rate Procedure, shall meet the following within five (5) minutes of all rooms in that zone entering occupied-standby mode.

- Active heating set point shall be setback at least 1°F (0.5°C).
- Active cooling set point shall be setup at least 1°F (0.5°C).
- All airflow supplied to the zone shall be shut off whenever the space temperature is between the active heating and cooling set points.

6.5.3.8.1 Occupied-Standby Control of Multiple-Zone Systems. Multiple-zone *systems* that are capable of resetting the minimum *outdoor air* set point and that serve zones with occupied-standby zone controls shall reset the minimum *outdoor air* set point based on a zone *outdoor air* requirement of zero for all zones in *occupied-standby mode*.

Exception to 6.5.3.8: Multiple zone systems without *automatic* zone flow control dampers.

Informative Note: ASHRAE Guideline 36 includes sequences for this reset.

Modify Informative Appendix E as shown. (I-P and SI).

Subsection No.	Reference	Title/Source
[...]		
6.5.3.8	ASHRAE Guideline 36-2021	High-Performance Sequences of Operation for HVAC Systems
[...]		

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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