

ADDENDA

**ANSI/ASHRAE/IBPSA Addendum a to
ANSI/ASHRAE/IBPSA Standard 209-2024**

Building Performance Simulation Process

Approved by ASHRAE and the American National Standards Institute on January 30, 2026, and by the International Building Performance Simulation Association on December 19, 2025.

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ASHRAE Standing Standard Project Committee 209

Cognizant TC: 4.7, Energy Calculations

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FOREWORD

Addendum a makes changes to Modeling Cycle #4, HVAC System Selection Modeling. The changes (1) align the level of detail with the level of detail in other modeling cycles, (2) incorporate comments on the original language, and (3) add informative notes and clarifying language.

Informative 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 a to Standard 209-2024

Modify Section 3.2 as follows.

3.2 Definitions

[...]

design development: the phase of the project that builds on the *schematic design* phase. This phase lays out mechanical, electrical, plumbing, structural, and architectural details.

[...]

Modify Section 5.5.3 as follows.

5.5.3 A designated participant shall be charged with creating and bringing a preliminary list of potential energy efficiency measures (EEMs) and a list of potential HVAC system types to the charrette.

Modify Section 6.4 as follows.

6.4 Modeling Cycle #4—HVAC System Selection Modeling

6.4.1 Purpose. Estimate the annual energy use and demand impacts of *HVAC system* options to inform system type selection and configuration.

6.4.2 Applicability. This *modeling cycle* shall be applicable prior to *HVAC system* selection. When this *modeling cycle* is used to show compliance with this standard, it shall be ~~started after~~ completed before the end of the design development phase. It shall be completed after, or concurrently with, Modeling Cycle #3 is complete.

6.4.3 Analysis. Use *energy modeling* to evaluate a baseline and a minimum of two alternate *HVAC systems*.

Evaluation of options using equipment with different levels of efficiency shall not qualify as HVAC system alternates.

Informative Note: Review the ASHRAE Advanced Energy Design Guides (AEDGs) for systems to consider. Alternates should be determined in collaboration with the design team and owner and be based upon site master planning and project goals, available utilities, operation and maintenance requirements, space and structural requirements for equipment, equipment availability in local markets, ability of staff to maintain the equipment and controls, site conditions, building type and size, and climate. Some specific considerations include, but are not limited to the following:

1. Distribution type (e.g., radiant versus convective systems)
2. Fuel type
3. Heating and cooling type (e.g., electric resistance coil versus direct expansion coil)
4. Heat rejection type (e.g., air or water)
5. Ventilation strategy
6. Fixed versus variable speed equipment
7. Multiple-zone versus single zone systems
8. System water use, consumption and cost

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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