



# ADDENDA

**ANSI/ASHRAE Addendum f to  
ANSI/ASHRAE Standard 55-2017**

# Thermal Environmental Conditions for Human Occupancy

Approved by ASHRAE and the American National Standards Institute on September 1, 2020.

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

*Addendum f removes the prohibition against applying the adaptive model described in Section 5.4 for occupant-controlled naturally conditioned spaces in spaces that have an air conditioning system installed. It preserves the prohibition against running the air conditioning to achieve conditions in the space that satisfy the adaptive model. This addendum also editorially modifies Sections 7.2.2.2 and L1.1 to achieve consistent terminology.*

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

### Addendum e to Standard 55-2017

**Modify Section 5.4 as shown.**

#### 5.4 Determining Acceptable Thermal Conditions in Occupant-Controlled Naturally Conditioned Spaces (Adaptive Model)

**5.4.1 Applicability.** This method defines acceptable thermal environments only for occupant-controlled naturally conditioned spaces that meet all of the following criteria:

- a. There is no mechanical cooling system (e.g., refrigerated air conditioning, radiant cooling, or desiccant cooling) ~~installed. No~~ or heating system is in operation.
- b. Representative occupants have metabolic rates ranging from 1.0 to ~~1.3~~ 1.5 met.
- c. Representative occupants are free to adapt their clothing to the indoor and/or outdoor thermal conditions within a range at least as wide as 0.5 to 1.0 clo.
- d. The prevailing mean outdoor temperature is greater than 10°C (50°F) and less than 33.5°C (92.3°F).

**Modify Section 7.2.2.2 as shown. The remainder of Section 7.2.2.2 is unchanged.**

**7.2.2.2 Occupant-Controlled Naturally Conditioned Spaces.** Section 5.4 prescribes the use of the adaptive model for determining the comfort zone boundaries.

[ . . . ]

**Modify Informative Appendix L, Section L1.1b, as shown. The remainder of Section L1.1 is unchanged.**

#### L1.1 Overview of Comfort Prediction Using Physical Measurements. [ . . . ]

- b. In the adaptive model ~~method~~, used for naturally ventilated spaces, environmental measurements are linked to satisfaction through an empirical model in which the prevailing mean air outdoor temperature determines the position of percent satisfied contours bordering the comfort zone. Section 5.4 defines prevailing mean outdoor air temperature. Local discomfort limits are not used in the adaptive model ~~method~~.

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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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