# ADDENDA

ANSI/ASHRAE/IES Addendum dn to ANSI/ASHRAE/IES Standard 90.1-2022

# Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and by the American National Standards Institute on October 31, 2025; and by the Illuminating Engineering Society on October 21, 2025.

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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ISSN 1041-2336







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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

Tatsuro Kobayashi

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### **FOREWORD**

ASHRAE Guideline 12 and other codes and accreditation standards require service water-heating storage temperatures of 140°F and higher to prevent microbial growth. Section 7.4.4.1 requires storage water heaters to be capable of thermostatic settings that allow storing water at temperatures of 120°F or lower. Although this requirement does not conflict with Guideline 12 or the other standards, it has caused concern in at least one jurisdiction that requires service water-heating storage at higher temperatures. Further, some new technologies require production and storage at higher temperatures. Finally, existing safety standards require thermostatic controls for storage water heaters. Therefore, there is no longer a need for the requirement, and it should be deleted.

This measure does not change the cost of construction or reduce energy efficiency.

Informative Note: In this addendum, changes to the current standard are indicated in the text by <u>underlining</u> (for additions) and <u>strikethrough</u> (for deletions) unless the instructions specifically mention some other means of indicating the changes.

### Addendum dn to Standard 90.1-2022

### Delete Section 7.4.4.1 as shown (I-P and SI).

### 7.4.4 Service Water-Heating System Controls

*Informative Note:* Service water\_heating system control settings and operating temperatures should be determined in accordance with the ASHRAE Standard 188 building water systems water management program for the building, or with generally accepted engineering standards and guidance (e.g., ASHRAE Guideline 12).

7.4.4.1 Temperature Controls. Temperature controls shall be provided that allow for storage temperature adjustment from 120°F or lower to a maximum temperature compatible with the intended use.

Exception to 7.4.4.1: When the *manufacturers*' installation instructions specify a higher minimum thermostat setting to minimize condensation and resulting corrosion.

**7.4.4.12 Temperature Maintenance Controls.** *Systems* designed to maintain usage temperatures in hot water pipes, such as recirculating hot-water *systems* or *heat trace*, shall be equipped with *automatic* time switches or other controls that can be set to switch off the usage temperature maintenance *system* during extended periods when hot water is not required.

**7.4.4.23** Outlet Temperature Controls. Temperature controlling means shall be provided to limit the maximum temperature of water delivered from lavatory faucets in *public facility restrooms* to 110°F (49°C).

**7.4.4.33** Circulating Pump Controls. When used to maintain storage tank water temperature, recirculating pumps shall be equipped with controls limiting operation to a period from the start of the heating cycle to a maximum of five minutes after the end of the heating cycle.

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## 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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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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