ANSI/ASHRAE/ICC/USGBC/IES Addendum y to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

A Compliance Option of the International Green Construction $\mathsf{Code}^{\mathbb{R}}$

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FOREWORD

Addendum y addresses situations where wall-mounted mechanical equipment defined in ASHRAE/IES Standard 90.1, Table 6.8.1-4, can account for a significant portion of the wall area. For example, Packaged Terminal Air Conditioners (PTACs) can cover as much as 20% of the wall area, having a significant impact on the thermal performance of the wall. This independent substantive change (ISC) to addendum y clarifies how to calculate penetration area in accordance with Standard 90.1, Section 5.5.3. It also increases the threshold for triggering the proposed requirements.

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

Addendum y to Standard 189.1-2017

Add new Section 7.4.2.2 as shown and renumber subsequent sections.

7.4.2.2 Mechanical Equipment Penetration Requirements. Where the total area of penetrations from mechanical equipment listed in ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-4, exceeds 2% of the opaque above-grade wall area, the mechanical equipment penetration area shall be calculated as a separate assembly with a published U-factor value for that equipment or a default U-factor of 0.5 Btu/h·ft²·°F (3 W/m²·K) in accordance with ANSI/ASHRAE/IES Standard 90.1, Section 5.5.3(b). Where Exception 2 to ANSI/ASHRAE/IES Standard 90.1 Section 5.5.3 is used for compliance, the penetration shall be considered to be the same class of construction as an adjacent wall.

7.4.2.23 Single-Rafter Roof Insulation. [...]

Revise Appendix C, Table C1.1, as shown.

Proposed Building Performance	Baseline Building Performance
5. Building Envelope	
No modifications When the total area of penetrations from mechanical equipment listed in ANSI/ASHRAE/IES Standard 90.1, Table 6.8.1-4, exceeds	No modifications
1% of the opaque above-grade wall area, the mechanical equipment penetration	
area shall be calculated as a separate assembly with a default <i>U</i> -factor of $0.5 \text{ Btu/h·ft}^{2.\circ}\text{F}$ (3 W/m ^{2.} K).	

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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.

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Standard 189.1 and the International Green Construction Code

Standard 189.1 serves as the complete technical content of the International Green Construction Code[®] (IgCC). The IgCC creates a regulatory framework for new and existing buildings, establishing minimum green requirements for buildings and complementing voluntary rating systems. For more information, visit www.iccsafe.org.

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