

ANSI/ASHRAE/ICC/USGBC/IES Addendum z to ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

The Complete Technical Content of the International Green Construction Code®

Approved by the ASHRAE Standards Committee on June 24, 2023; by the International Code Council and the the Illuminating Engineering Society on May 22, 2023; by U.S. Green Building Council on May 29, 2023; and by the American National Standards Institute on July 25, 2023.

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 (www.ashrae.org/continuous-maintenance).

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Cognizant TC: 2.8 Building Environmental Impacts and Sustainability

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

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FOREWORD

Addendum z revises the current requirement for the submittal of environmental product declarations within Standard 189.1 to be mandatory for products meeting specific criteria. The section includes a new requirement for reporting the global warming potential (GWP) contribution for those products within the building project. This addendum also removes UL100 from the list of third-party multiattribute certifications in Section 9.5.1.4 because UL has withdrawn the standard without replacement and discontinued subscriptions. Additional changes include the following:

- *This addendum replaces the terms product and assembly with defined terms building product and building product assembly.*
- *Numbering has been updated to be consistent with Addendum u (Section 9 editorial changes).*
- *Clarification has been added to the requirement related to cost estimating.*
- *Clarification has been added for determining compliance through building product assemblies.*
- *An alternative compliance path requiring the submission of 30 environmental product declarations (EPDs) has been added to Section 9.4.1.1.*

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 z to Standard 189.1-2020

Add new Section 9.4.1 as shown.

9.4.1 Environmental Product Declarations and Global Warming Potential Reporting

9.4.1.1 Environmental Product Declarations (EPDs). EPDs shall be submitted for *building products* that together represent not less than 25% of the total estimated costs of all *building products* permanently installed in the *building project*, or not fewer than 30 EPDs, and such that items (a) through (d) below are satisfied. EPDs submitted shall

- represent *building products* that are permanently installed at the time of issuance of the certificate of occupancy.
- represent *building products* from not fewer than ten different manufacturers.
- represent not fewer than 20 different *building products*, and
- include any *building products* with a value that exceeds 5% of the total cost of all *building products* permanently installed in the *building project*.

A value of 45% of the estimated total construction cost shall be permitted to be used in lieu of the total cost of all *building products* permanently installed in the *building project*.

9.4.1.2 EPD Requirements. EPDs used to comply with Section 9.4.1.1 shall be third-party verified Type III EPDs consistent with ISO 21930 or ISO 14025, with not less than a cradle-to-gate scope. Where an industry-wide or product-specific Type III EPD is not available for a *building product*, a critically reviewed third-party life cycle assessment report based on ISO Standards 14040 and 14044 or third-party verified summary thereof shall be permitted as an alternative method for demonstrating compliance.

Building product compliance shall be shown by submitting either a product-specific EPD or a regional- or industry-wide EPD. Each product-specific EPD shall be counted as one *building product*. Each regional- or industry-wide EPD shall be counted as half of a *building product*.

Building products delivered to the *building project* site as a *building product assembly* comprising multiple components and ready for installation into the *building project* shall be considered a single *building product*. Compliance with Section 9.4.1.1 shall be based on either

- an EPD representing the *building product assembly*, or
- the individual *building product* component parts' EPDs comprising not less than 80% of the *building product assembly*'s total cost or weight.

**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.

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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Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

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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