

**ANSI/ASHRAE/ICC/USGBC/IES Addendum aq 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 25, 2022; by the ASHRAE Board of Directors on June 29, 2022; by the International Code Council and U.S. Green Building Council on June 15, 2022; by the Illuminating Engineering Society on June 30, 2022; and by the American National Standards Institute on July 29, 2022.

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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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.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

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FOREWORD

Greenfield sites are a particular concern for Green building, as wildlife habitat loss is a worldwide concern. Addendum aq revises the definition of native plants and revises the requirements for maintaining native plants on the site. The addendum provides options for compliance to provide flexibility to the design and construction team, including an option to use non-native plantings that provide similar value to the local food web as native plants. These requirements replace existing requirements that are confusing and open to multiple interpretations.

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

Addendum aq to Standard 189.1-2020

Revise Section 3 as shown.

plants:

[...]

- c. ~~*native plants:*~~ *plants that adapted to a given area during a defined time period and are not invasive. In America, the term often refers to plants growing in a region prior to the time of settlement by people of European descent. plants recognized as native species by applicable city, county, state, or regional governmental bodies. Alternatively, plant species that occur or occurred without human introduction in, or within 200 miles (322 km) of, the site's U.S. EPA Level III ecoregion.*

Revise Section 5.3.3 as shown.

5.3.3 Plants

5.3.3.1 Invasive Plants. *Invasive plants shall be removed from the ~~building project site~~ and destroyed or disposed of in a ~~land fill~~ landfill. *Invasive plants shall not be planted on the ~~building project site~~.**

5.3.3.2 Greenfields Sites

- a. ~~**More than 20% existing native or adapted plants:**~~ Where more than 20% of the area of the predevelopment site has existing *native plants* or *adapted plants*, a minimum of 20% of the area of *native plants* or *adapted plants* shall be retained.
- b. ~~Less than 20% existing native or adapted plants:~~
 1. ~~Where 20% or less of the area of the predevelopment site has existing *native plants* or *adapted plants*, a minimum of 20% of the site shall be developed or retained as vegetated area. Such vegetated areas include bioretention facilities, rain gardens, filter strips, grass swales, vegetated level spreaders, constructed *wetlands*, planters, and open *space* with plantings.~~
 2. ~~A minimum of 60% of the vegetated area shall consist of *biodiverse planting* of *native plants* and/or *adapted plants* other than *turfgrass*.~~

~~**Exception to 5.3.3.2(b)(2):** The following areas shall not be included in the calculations: dedicated sports fields, driving ranges, burial grounds, vegetated pavers, and the minimum fire lanes required by the jurisdiction.~~

Building projects on greenfields shall comply with one of the following:

- a. *Existing *native plants* shall be retained on not less than 10% of the area of the parcel of land.*
- b. *Not less than 20% of the area of the parcel of land shall be dedicated to *biodiverse plantings* of *native plants*.*
- c. *Not less than 30% of the area of the parcel of land shall be dedicated to *biodiverse plantings* other than *turfgrass*, and such plantings shall contribute to the local food web as determined by*

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a registered design professional. The area of vegetated roof systems, vegetated terrace systems, and planters shall be permitted to meet not greater than 50% of the required area of *biodiverse plantings*.

**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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