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ANSI/ASHRAE/ICC/USGBC/IES Addendum q 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 ASHRAE, the Illuminating Engineering Society, and the American National Standards Institute on June 30, 2022; by the International Code Council and the U.S. Green Building Council on June 15, 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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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

James D. Lutz

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**

Addendum q updates the requirements for electric vehicle (EV) charging infrastructure in the standard. It allows the building designer or owner to install EV ready spaces, install EV charging stations (and infrastructure), or both to comply with the requirements of Section 5.3.7.3.

In addition, the addendum updates the current definitions of "electric vehicle supply equipment (EVSE)" and "EV ready space" and adds a new definition for "electric vehicle supply equipment installed space (EVSE space)."

These changes provide more flexibility to building owners and designers, especially in jurisdictions that have requirements for both EV ready and EVSE installed as part of their minimum building or energy codes.

**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 q to Standard 189.1-2020

## Modify Section 3.2 as shown.

[...]

electric vehicle supply equipment (EVSE): the conductors—equipment for plug-in power transfer, including the ungrounded, grounded, and equipment grounding conductors; and the electric vehicle connectors, attachment plugs, personnel protection system, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

<u>electric vehicle supply equipment installed space (EVSE space):</u> a vehicle parking space that is provided with a dedicated *EVSE* connection.

 $[\ldots]$ 

**EV ready space:** a designated parking space provided with <u>at least</u> a 50 A, 208/240V dedicated branch circuit for Level 2 *EVSE*. The circuit <del>shall includes</del> an overcurrent protective device and <del>shall terminates</del> in a junction box <u>or receptacle outlet</u>, NEMA 6-50 or NEMA 14-50 receptacle, or EVSE and be located in close proximity to the proposed location of the EV parking spaces.

[...]

### Revise Section 5.3.7.3 as shown.

# **5.3.7.3** Electric Vehicle Charging Facilities. [...]

Exception to 5.3.7.3: Parking spaces designated for other than passenger vehicles are permitted to be excluded from the total number of on-site parking spaces.

**5.3.7.3.1 IBC Occupancy Group A, B, E, F, I, M, and S Buildings.** Where 20 or more onsite vehicle parking spaces are provided for International Building Code (IBC) Occupancy Group A, B, E, F, I, M, and S buildings, not less than 4% of the total number of parking spaces or not less than 8% of designated employee-only parking spaces shall be *EV ready spaces* or *EVSE spaces*. The required number of *EV ready spaces* or *EVSE spaces* shall be rounded up to the next highest whole number.

**5.3.7.3.2 IBC Occupancy Group R-1, R-2, and R-4 Buildings.** Where 10 or more on-site vehicle parking spaces are provided for IBC Occupancy Group R-1, R-2, and R-4 buildings, not less than 20% of the total number of parking spaces shall be *EV ready spaces* or *EVSE spaces*. The required number of *EV ready spaces* or *EVSE spaces* shall be rounded up to the next highest whole number.

# 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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## Standard 189.1 and the International Green Construction Code

Standard 189.1 serves as the complete technical content of the International Green Construction Code  $^{(8)}$  (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.

### About ASHRAE

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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