

Public Review Draft

Proposed Addendum az to Standard 189.1-2017

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (February 2020)
(Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum deletes Section 5.3.7.3a, Provisions for Preferred Parking Spaces, as an option for compliance under Site Vehicle Provisions. With the rise in market availability of electric vehicles and charging stations, designated preferred parking for hybrid and low-emission vehicles is difficult to enforce and no longer a viable solution. This addendum also revises and clarifies the requirements for electric vehicle charging infrastructure.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum az to 189.1-2017

Add to the following definition to Section 3.2:

electric vehicle supply equipment (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors, and the Electric Vehicle connectors, attachment plugs, 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.

EV ready space: A designated parking space provided with a 50-ampere, 208/240-volt dedicated branch circuit for Level 2 EVSE servicing electric vehicles. The circuit shall include an overcurrent protective device and shall terminate in a junction box, NEMA 6-50 or NEMA 14-50 receptacle, or an EVSE, and be located in close proximity to the proposed location of the EV parking spaces.

Revise Section 5.3.7.3 as follows:

5.3.7.3 Site Electric Vehicle Provisions Charging Facilities. Where 20 or more on-site vehicle parking spaces are ~~is~~ provided for ~~a~~ International Building Code (IBC) Occupancy Group A, B, E, F, I, M and S buildings, that has a building occupant load greater than 100, one of the following shall be provided: 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. 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. The required number of EV ready spaces shall be rounded up to the next highest whole number.

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

~~a. **Provisions for preferred parking spaces.** Not less than 5% of the parking spaces provided shall be designated as preferred parking for vehicles that meet both the minimum greenhouse gas and air pollution scores as required for USEPA SmartWay designation. Where calculation of the parking spaces yields a fraction, such fractions shall be rounded up to the next whole number. Preferred parking spaces shall be located on the shortest route of travel from the parking facility to a building entrance but shall not take precedence over parking spaces that are required to be accessible for individuals with disabilities. Where buildings have multiple entrances with adjacent parking, parking spaces shall be dispersed and located near the entrances. Such parking spaces shall be provided with signage approved by the AHJ that specifies the permitted use.~~

~~b. **Provisions for electric vehicle charging infrastructure.** The building project shall comply with one of the following:~~

- ~~1. Two or more electric vehicle charging stations shall be available to the building occupants and shall be located not more than 1/4 mi (400 m) from the building project.~~
- ~~2. Electrical raceways shall be installed and extend from one or more of the building's electrical power distribution panels to not less than the number of parking spaces specified in Table 5.3.7.3 to facilitate the future installation of vehicle charging stations. Electrical power distribution panels serving such raceways circuits shall be sized to supply the future charging stations based on a design load of not less than 40 amp per required parking space at a supply voltage of not less than 208/240 VAC.~~

Table 5.3.7.3 Minimum Number of EV Ready Spaces Required to Have Raceways

Total Number of Parking Spaces Provided^a	<u>Minimum Number of Spaces Required to Have Raceway EV Ready Spaces</u>
1 through 25	1
26 through 50	2
51 through 75	4
76 through 100	5
101 through 150	7
151 through 200	10
201 and over	5% of total