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Cognizant TC: 2.8 Building Environmental Impacts and Sustainability
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FOREWORD
Addendum az deletes Section 5.3.7.3(a), “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: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and strikethrough (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum az to Standard 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 A, 208/240V dedicated branch circuit for Level 2 EVSE. The circuit shall include an overcurrent protective device and shall terminate in a junction box, 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 Site Electric Vehicle Provisions Charging Facilities. Where 20 or more on-site vehicle parking spaces are 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 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.

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 speci-
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. Number of Spaces Required to Have Raceways

<table>
<thead>
<tr>
<th>Total Number of Parking Spaces Provided</th>
<th>Number of Spaces Required to Have Raceway</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 through 25</td>
<td>1</td>
</tr>
<tr>
<td>26 through 50</td>
<td>2</td>
</tr>
<tr>
<td>51 through 75</td>
<td>4</td>
</tr>
<tr>
<td>76 through 100</td>
<td>5</td>
</tr>
<tr>
<td>101 through 150</td>
<td>7</td>
</tr>
<tr>
<td>151 through 200</td>
<td>10</td>
</tr>
<tr>
<td>201 and over</td>
<td>5% of total</td>
</tr>
</tbody>
</table>
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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