



**BSR/ASHRAE/IES Addendum f
to ANSI/ASHRAE/IES Standard 90.2-2024**

Public Review Draft

Proposed Addendum f to Standard 90.2-2024, High-Performance Energy Design of Residential Buildings

**First Public Review (September 2026)
(Draft Shows Proposed Changes to Current Standard)**

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FOREWORD

This addendum includes definitions and requirements for EV capable spaces and DCFC spaces. It also provides trade-offs that will generally apply to large multifamily buildings and residential buildings with numerous parking spaces. The tradeoffs are intended to provide building owners with increased flexibility with methods to comply with the standard and to reduce barriers for buildings that provide a large number of parking spaces relative to the dwelling units.

[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 f to 90.2-2024

Add two new definitions in section 3 as follows:

**Note the other definitions are added here for reference and are not part of the public review due to no proposed changes.*

automobile parking space: a space within a building or private or public parking lot, exclusive of driveways, ramps, columns, and office and work areas, for the parking of an automobile.

...

electric vehicle (EV): an automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, *electric vehicle supply equipment (EVSE)*, a rechargeable storage battery, a fuel cell, a photovoltaic (PV) array, or other source of electric current. Offroad, self-propelled electric mobile equipment, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and boats, are not considered *electric vehicles*.

electric-vehicle-capable space (EV-capable space). A designated *automobile parking space* that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard or other electrical distribution equipment space necessary for the future installation of an *EVSE*.

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

electric vehicle supply equipment installed space (EVSE-installed space). An *automobile parking space* that is provided with a dedicated *EVSE* connection.

electric-vehicle-ready space (EV-ready space): an *automobile parking space* provided with a branch circuit and either an outlet or enclosure for connection to *EVSE*.

Add new abbreviations to Section 3 as follows:

Abbreviations

DCFC Direct Current Fast Charging

Modify Section 7.6.7 as follows

Table 7-6 EVSE-Installed, and EV-Ready, and EV-capable Space Requirements for Multifamily Buildings

Number of Automobile Parking Spaces	Minimum Spaces with EVSE Installed^a	Minimum EV-Ready Spaces	<u>Minimum EV-Capable Spaces</u>
1 to 9	100%	—	—
10 to 24	50%	50%	—
25+	25%	75% —	<u>75%</u>

a. EVSE-installed spaces that exceed the minimum requirements in the table shall be permitted to be counted as *EV-ready spaces* for table compliance.

7.6.7 Plug-In Electric Vehicle Charging

7.6.7.1 Where parking is provided, *EVSE-installed spaces* shall be provided and future installation and use of *EVSE* shall be facilitated through the provision of *EV-ready spaces* or *EV-capable spaces* provided in compliance with Sections 7.6.7.1 through 7.6.7.5 and Section 9.1.9. Where more than one parking facility is provided on a site, *EV* parking spaces shall be calculated separately for each parking facility. The service panel or subpanel circuit directory shall identify the spaces reserved to support *EV* charging as *EV-ready spaces* or *EV-capable spaces*. The raceway location for *EV-ready spaces* shall be permanently and visibly marked as “EV-Ready.”

7.6.7.1.1 EV-capable spaces. Each *EV-capable space* used to meet the requirements of Section 7.6.7.1 shall comply with the following:

a. A continuous raceway or cable assembly shall be installed between a suitable panelboard or other on-site electrical distribution equipment and an enclosure or outlet located within 6 feet (1.8 m) of the *EV-capable space*.

b. The installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with Section 7.6.7.4

c. The electrical distribution equipment to which the raceway or cable assembly connects shall have sufficient dedicated space and spare electrical capacity for a two-pole circuit breaker or set of fuses.

d. The electrical enclosure or outlet and the electrical distribution equipment directory shall be marked: “For future *electric vehicle supply equipment (EVSE)*.”

Exception to 7.6.7.1: This section does not apply to *automobile parking spaces* used exclusively for trucks or delivery vehicles.

7.6.7.2 One to Two-Family Dwellings and Townhouses. For each *dwelling unit*, provide at least one *automobile parking space* with an *EVSE* installed. If there are fewer *automobile parking spaces* than *dwelling units*, all *automobile parking spaces*, if any, shall have an *EVSE* installed.

7.6.7.3 Multifamily Buildings (three or more units). ~~*EVSE-installed spaces*, and *EV-ready spaces*, and *EV-capable spaces*~~ shall be provided in accordance with Table 7-6. Where the calculation of percent served results in a fractional parking space, it shall round up to the next whole number.

Exception to 7.6.7.3: Where a building has more than 2 *automobile parking spaces* per *dwelling unit*, 200% times the number of *dwelling units* may be used for calculating the total number of required *EVSE* installed and *EV-capable spaces* per section 7.6.7.2.

7.6.7.4 Electric Vehicle Charging System Capacity. The equipment load(s) on the electrical distribution equipment supplying the branch circuit(s) serving spaces with *EVSE-installed spaces* or *EV-ready spaces* shall be capable of supplying not less than 7.4 kVA full continuous load for each space. Where there are ten (10) or more spaces with *EVSE* installed, and an *EV* energy management system is used to control the load to each parking space, the electrical distribution equipment supplying the branch circuit(s) shall be capable of supplying not less than 2.1 3-8 kVA full continuous load for each space simultaneously with all spaces drawing power and not less than 7.4 kVA full continuous load for each space when not greater than half of all spaces are drawing power. Where an energy management system is used to control *EV* charging loads for the purposes of this section, it shall not be configured to turn off electrical power to *EVSE* or *EV-ready spaces* used to comply with Section 7.6.7.1.

7.6.7.6 Direct Current Fast Chargers: Installation of direct current fast charging (DCFC) *EVSEs* may be used to reduce the total number of required *EV-Capable spaces* per the requirements in sections 7.6.7.6.1 through 7.6.7.6.4.

7.6.7.6.1 Each DCFC shall be capable of providing 50 kVA or more simultaneously with each EVSE installed per section 7.6.7.4.

7.6.7.6.2 Each DCFC shall be permitted to reduce the minimum number of required EV-capable spaces by 5.

7.6.7.6.3 For every 5 EV-capable spaces reduced per 7.6.7.6, an additional EVSE-installed space is required. This additional space is non-inclusive of the DCFC space.

7.6.7.6.4 DCFC spaces used to trade off EV-capable spaces shall have permanent signage indicating a maximum parking time limit of no greater than 2 hours.