

# Accessible Parking and Electrical Vehicle (EV) Charging Stations

## 1. Accessible parking spaces and Electric Vehicle charging compliance guide for NEW buildings:

### Part A: accessible parking requirements:

1. The adopted 2021 IBC, section 1106.2 requires 1 space per 25 parking spaces be accessible (for the first 100 spaces) and not less than 1 of the provided parking must be accessible. See Table 1106.2 for more spaces.
2. See sections 1106.4 for hospital and 1106.5 for rehabilitation and outpatient therapy facility requirements.
3. IBC 1106.6 requires for every 6 accessible spaces 1 must be van accessible.
4. Open surface parking must be calculated separately from covered/garage parking.
5. Per ICC A117.1 Accessible parking spaces must be 8 feet wide minimum, and van accessible space must be 11 feet wide, and both require a 5 feet wide access aisle. Van accessible spaces that are not EV charging spaces are allowed to be 8 feet wide if the access aisle is also 8 feet wide.

### Part B: EV charging parking space requirements:

1. Fort Collins local IBC amendment 3604 requires that a new **Tier 2** building provide the following types of EV charging spaces based on the number of spaces required by the Land-use-code (Planning).
  - a. 5% of spaces must have Level 2 chargers.
  - b. 15% of spaces must have EV ready (circuit, wiring, and receptacle installed).
  - c. 20% of spaces must have EV capable (empty 1" conduit from space to nearest building electrical room).
2. IBC 1107.2 requires 5% (and not less than one) of parking spaces served by EV systems must be accessible. These accessible EV spaces must be van width (11 feet wide with 5 feet aisle). The R-2 exemption in this code section has been removed by local amendment.

**TABLE 3604.5**

City of Fort Collins Occupancy Classification	EVSE - installed	EV - Ready	EV - capable
<b>Tier 1</b>			
Residential (R-1, R-2)	10%	20%	40%
Affordable housing	Min of 1 space	15%	20%
<b>Tier 2</b>			
Mercantile	5%	15%	20%
Assembly	5%	15%	20%
Institutional	5%	15%	20%
Business	5%	15%	20%
Educational	5%	15%	20%
Factory	5%	15%	20%
<b>Tier 3</b>			
High hazard	1%	5%	15%
Storage	1%	5%	15%
Utility and misc. group	1%	5%	15%

## 2. Accessible parking spaces and Electric Vehicle charging compliance guide for Multi-Family R-2 (apartment and condominium) occupancies:

### Part A: accessible parking requirements:

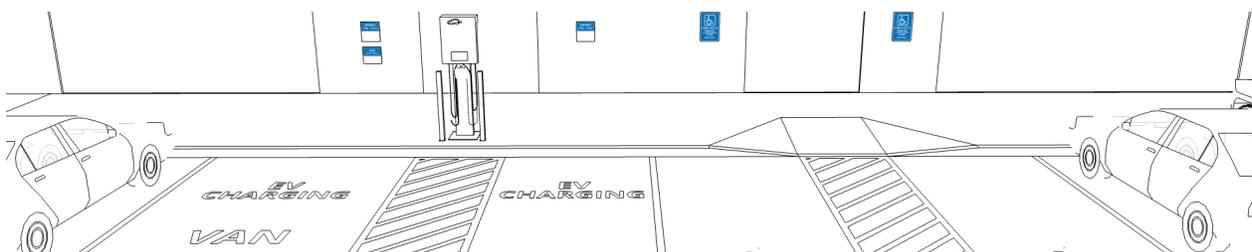
1. The adopted 2021 IBC, section 1106.3 requires 2% (and not less than 1) of provided parking must be accessible.
2. IBC 1106.6 requires for every six accessible spaces, one space must be van accessible.
3. Open surface parking must be calculated separately from covered/garage parking.
4. Per ICC A117.1 Accessible parking spaces must be 8 feet wide minimum, and van accessible space must be 11 feet wide, and both require a 5 feet wide access aisle. Van accessible spaces that are not EV charging spaces are allowed to be 8 feet wide if the access aisle is also 8 feet wide.

### Part B: EV charging parking space requirements:

1. Fort Collins local IBC amendment 3604 requires that a market rate **R-2** building provide the following types of EV charging spaces based on the number of spaces required by the Land-use-code (Planning).
  - a. 10% of spaces must have Level 2 chargers.
  - b. 20% of spaces must have EV ready (circuit, wiring, and receptacle installed).
  - c. 40% of spaces must have EV capable (empty 1" conduit from space to nearest building electrical room).
2. IBC 1107.2 requires 5% (and not less than 1) of parking spaces served by EV systems must be accessible. These accessible EV spaces must be van width (11 feet wide with 5 feet aisle). The R-2 exemption in this code section has been removed by local amendment.

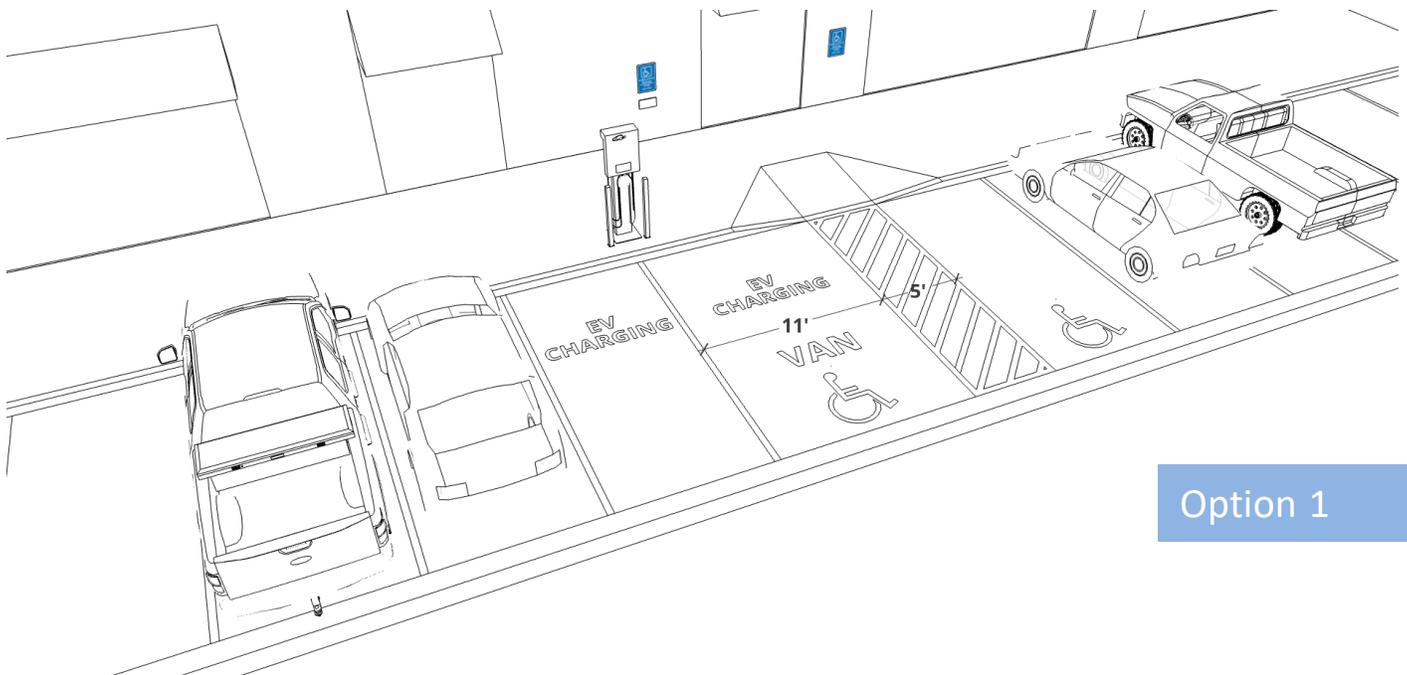
Part C: Example of compliance. A new R-2 apartment development is proposed with several multi-family buildings. There will be 70 open parking spaces provided and 30 enclosed garage parking spaces. During the planning (LUC) phase there were 50 parking spaces required.

1. 2% of 70 parking spaces = 1.4 (round up) so 2 accessible spaces required, 1 of which must be van width.
2. 2% of 30 garage spaces = .6 so 1 accessible garage space and it must be van width (16 ft wide garage space).
3. 50 parking spaces required by LUC requires the following EV infrastructure:
  - a. 10% of spaces require EV chargers = 5
  - b. 20% of spaces require EV ready = 10
  - c. 40% of spaces require EV capable= 20 spaces. These can be provided via open surface spaces or garage spaces or a combo of both.
  - d. One of the five required Level 2 EV chargers must be accessible and be van width.

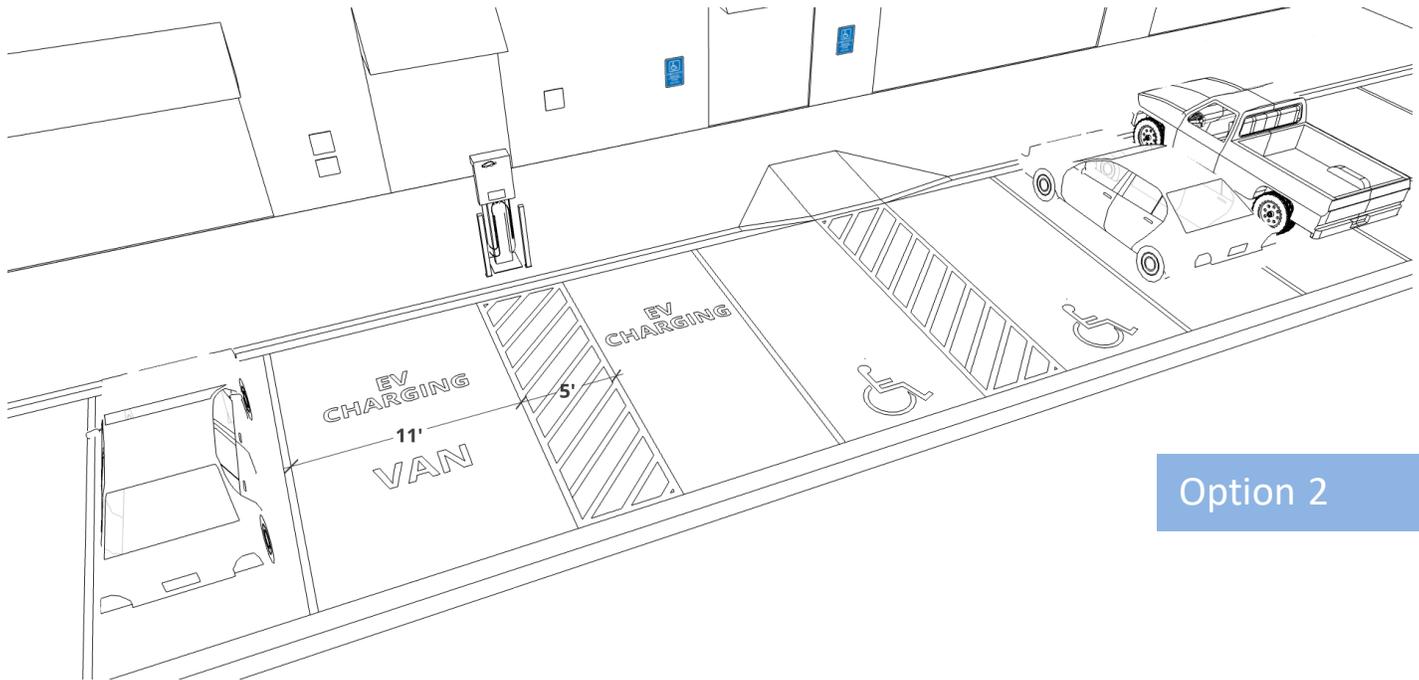


**3. Existing Buildings: Installing EV charging stations at an existing building/existing parking requires a building permit and plans must be submitted showing compliance with the following:**

1. EV chargers installed at existing buildings must comply with current 2023 NEC electrical code, 2021 IBC building code, and ICC-A117.1 accessibility standard, and local code amendments. See the EV charger permit application submittal checklist at our city webpage: [www.fcgov.com/building](http://www.fcgov.com/building)
2. Option 1: The first EV charger must be located at an accessible parking space and must be van width. The van width space is 11 feet wide with a 5 feet access aisle. The first new EV charger can be installed between the accessible parking space and a non-accessible space to serve both spaces. Charger must comply with ICC-A117.1 for height, reach range, operable parts, clear floor space, and accessible route.
3. Option 2: Create a new dual purpose EV charging space that is van width but can serve anyone (accessible or non) and sign this space to identify that anyone can park and charge. This would be in addition to existing accessible parking spaces and would require an access aisle that can't be used for parking and must be stripped as such.
4. Option 3 fleet vehicles: A new EV charger can be installed at a commercial facility for charging fleet vehicles (IBC employee work area exception 1103) if charging stations are used only by employees for charging company fleet vehicles. No employee or customer (public) parking is allowed in this space. Due to this EV charging parking space not being installed at an accessible space, a sign must be provided as follows: 'This EV charging station is for charging 'Company name' fleet vehicles only. No employee or customer (public) parking allowed'.



Option 1



**Code Reference:**

**Section 3604 Electrical vehicle charging. (City Amendment to the 2021 IBC)**

**3604.1 Scope:** The provisions of this Section shall control the design and construction for Electric Vehicle Charging.

**3604.2 Definitions applicable to this Chapter:**

**Affordable Housing:** Residential occupancies that meet the criteria established in the Land Use Code Section 5.1.2 as affordable housing.

**Electric Vehicle (EV):** A vehicle registered for on-road use, primarily powered by an electric motor that draws current from a rechargeable storage source that is charged by being plugged into an electrical current source.

**Electric Vehicle Supply Equipment (EVSE).** The electrical conductors and associated equipment external to the *electric vehicle* that provide a connection between the premises wiring and the *electric vehicle* to provide *electric vehicle* charging.

**Electric Vehicle Fast Charger.** *Electric vehicle supply equipment* with a minimum power output of 20 kW.

**Electric Vehicle Load Management System.** A system designed to allocate charging capacity among multiple *electric vehicle supply equipment* that complies with the current National Electric Code.

**Electric Vehicle Capable Space.** A designated parking space or spaces that are provided with conduit from the parking space to a *building* electrical room with sufficient physical space in the electrical room to accommodate the future installation of Level 2 charging equipment (EVSE) to those parking spaces. (Can provide a single 1-inch conduit between two spaces)

**Electric Vehicle Ready Space.** A parking space that is provided with one continuous 40-amp, 208/240-Volt dedicated branch circuit for *electric vehicle supply equipment* that is terminated at a receptacle or *electric vehicle supply equipment* within the parking space. If an Electric Vehicle Load Management System is specified, then the electrical requirements may be adjusted per the current National Electric Code.

**Electric Vehicle Supply Equipment Installed Space.** A parking space or spaces with minimum of level 2 *electric vehicle supply equipment* capable of supplying a minimum 40-amp dedicated branch circuit rated at 240 Volt from a *building* electrical panelboard. If an Electric Vehicle Load Management System is specified, then the electrical requirements may be adjusted per the current National Electric Code.

**Permanent Supportive Housing.** Land development projects (or portions thereof) that are subject to recorded covenants restricting the affordability for all residents of all dwelling units and which combine the housing with services that help people who face the most complex challenges to live with stability, autonomy, and dignity, such that the dwelling units may be classified as “permanent supportive housing.”

**3604.3 Electric Vehicle Supply Equipment:** All electric vehicle supply equipment shall be sized and installed in accordance with article 625 of the currently adopted National Electrical Code.

**3604.4 Accessibility:** All *Electric Vehicle Ready* and *Electric vehicle supply equipment installed spaces* shall meet all requirements in Chapter 11 of this code. The total amount of required accessible parking spaces shall be removed from the total number of available spaces when calculating the required percentage of spaces for EV.

**3604.5 New Buildings:** All new buildings or buildings undergoing a primary or partial change of occupancy or use in which more than 50% of the total building area is changing shall provide electrical vehicle parking spaces based on the minimum number of parking spaces as defined by the standards in the Land Use Code (LUC). A parking schedule shall be shown on the submitted plans that lists the required parking spaces and the provided EV spaces in accordance with the TABLE 3604.5.

Exceptions:

1. Level 2 Chargers can be reduced by up to five, provided that the building includes not less than one parking space equipped with an electric vehicle fast charger and not less than one electric vehicle ready space.
2. Parking spaces associated with structures and tenant spaces intended for quick transactions, including takeout, pickup, and drop-off shall be exempt.
3. All new and existing developments, where the EV-capacity requirements would require an upgrade of an existing transformer, are exempt.
4. All affordable housing development classified as permanent supportive housing.

**3604.6 Existing Buildings:** Existing buildings that provide on-site parking and undergo renovation or alteration in which the scope of work is more than 50% of the total building area, shall provide at least one EVSE-installed space.