

COMMISSIONER'S BULLETIN

INSPECTIONAL SERVICES DEPARTMENT CITY OF BOSTON

Number: 2024-03

Date: September 10, 2024

Subject: Modified Electric Vehicle Charging

Purpose: This Bulletin outlines procedures for the installation of residential and commercial

electric vehicle charging stations. Commissioner's Bulletin 2024-02, Electric Vehicle

Charging, is rescinded and replaced by this Bulletin.

01. Determination:

In addition to all applicable Federal, State and local Code regulations and requirements, electric vehicle charging stations ("Electric Vehicle Service Equipment", "EVSE") within the City of Boston are subject to the administrative requirements set forth in this Bulletin.

02. Requirements:

Specific requirements shall apply based on the EVSE Installation Level, as set forth below:

Level 1 EVSE Installations:

- For cord-and-plug connectors used in residential applications, charging devices can be fastened in place or cord-and-plug connected, provided that the charging device is grounded and there are no exposed live wires.
- EV connectors, for conductive connection only, shall be polarized, protected by double insulation, and non-interchangeable with receptacles in other electrical systems.
- All charging equipment areas must be clearly marked "FOR USE WITH ELECTRIC VEHICLES ONLY"
- Overcharge Protection: EVSE wires and branch circuits must be sized for continuous flow of current with a rating of no less than 125% load of EVSE
- Electricity Backfeed Power Prohibition: The EV must not be used as a stand-by power supply for any residential building.
- Level 1 outlets may be 12 inches and no higher than 48 inches from the surface of the floor.

Level 2 EVSE Installations:

- Ventilation Requirement: Indoor Level 2 installations must be properly ventilated according to manufacturer specifications.
- Level 2 EVSE may have multiple connectors along with an automatic load management system (ALMS) for each 40 amp circuit. It is permissible to serve up to two or more spaces with one Level 2 EVSE, but each associated connector must be able to reach the individual parking space per 225 CMR C405.13 amd C405.13.1
- EVSE charging stations installed in Flood Hazard Zones must be installed at least 2 feet above base flood elevation (BFE) or waterproofed. Station height Maximum 48" from finish floor per accessibility requirements
 - Raceway shall be wired through the ceiling if the site is located within the flood zone. Evaluate flood risk using Boston Planning and Development Agency's "Climate Resilience Layer" in the Zoning Viewer.
 - Raceway shall be sized and installed per the National Electrical Code; however, in no case shall the EVSE infrastructure be less than 1" (one inch) in size.
- EVSE charging stations must have appropriate warning signage per industry standards

Level 3 EVSE Installations:

- Level 3 Charing shall not be permitted for residential projects under 20,000 SF
- For all new developments requiring TAPA or Article 80 review, 25% of all parking spaces in parking areas shall be EVSE-Installed, meaning each parking space must be equipped with functioning Level 2 Chargers, or the equivalent thereof must be provided. The City approved EV Requirement Equivalent Calculator must be used if chargers other than Level 2 Chargers are installed.

03. Zoning:

Applicability of provisions of the Boston Zoning Code shall be as follows:

- Vehicle charging infrastructure accessory to a lawful parking use and including no more than four Direct Current Fast Charging (DCFC) stations or any number of level 1 and level 2 electrical vehicle charging stations as defined by the US Department of Energy. See <u>Article</u> 8 Table A <u>Definitions</u> of the City of Boston Zoning Code.
- Level 1 and 2 EVSE are permitted in any zoning district as accessory to the main use, EV charging stations shall not be deemed non-conforming.
 - $\circ~$ New accessory structures associated with Level 3 EVSE infrastructure shall be conditional and subject to design review
- Accessibility: For charging stations associated with non-residential uses or residential uses with three or more units, at least one charger must be provided on a space which meets the size requirements for accessible spaces outlined in the Americans with Disabilities Act (ADA) including an access aisle. This space would be in addition to any fully accessible (non-charger) spaces required by the ADA.

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- All public services must comply with 521 CMR. Connectors, receptacle height, locations of curb cuts, ramps and signage
- o For facilities with more than one EV charger, at minimum 5% of the provided electric vehicle charging station parking spaces, but not less than one (1), shall be accessible; the accessible EV charger space shall follow a "use last" model, including signage, as defined by the U.S. Access Board's Design Recommendations for Accessible Electric Vehicle Charging Stations. Such use shall not be subject to the provisions of Section 8-2.5b General Use Provisions of the Zoning Code
- o Installations in excess of 25 EV charging stations must include a van accessible charging station beyond what is required under 521 CMR 23.2..

04. Other ISD Division-specific Requirements:

- No Auto Shop License shall be required for EVSE infrastructure
- All EV charging station installations require electrical permits (building permits in some cases)

Signed: Tania Del Rio	Date 9/12/2024
Commissioner	2400
Marc A. Joseph Inspector of Buildings	