

This document has been prepared as part of the implementation project of Legal Pathways to Deep Decarbonization (Michael B. Gerrard and John C. Dernbach, eds. Environmental Law Institute [2019]) (LPDD). For background information on the project, see <https://lpdd.org>

Model EV Ready Building Code for One- and Two-Family Homes

To be used by municipalities and adjusted to fit their respective codes and other legislation.

Model bill text for new one- or two-family dwellings and townhouses:

Section 1. Findings.

_____The [*Legislative Body of the City/Town/Village of _____*] hereby finds as follows:

a. The sale and use of electric vehicles are proliferating in the United States, the State of _____ and the [*city, town, village*].

b. Electric vehicles provide a wide range of environmental benefits, including the reduction in emissions of greenhouse gases and other air pollutants that adversely affect public health and welfare.

c. Electric vehicles also have the potential to provide significant economic benefits to the citizens of [*insert name of municipality*] by lowering fuel costs and costs for vehicle maintenance.

d. Such benefits, and public welfare and convenience, can be enhanced by assuring that the infrastructure needed to support the charging of electric vehicles is readily available in new or substantially altered one- and two-family residential buildings in the [*city, town, village*].

e. New building construction and the significant alteration of existing one- and two-family residential buildings provide opportunities for the cost-effective installation of electric vehicle charging infrastructure, which opportunities are not as available when existing buildings are retrofitted.

Section 2. Scope.

The provisions of this section shall apply to the new construction or significant alteration of one- or two-family dwellings and townhouses with a dedicated attached or detached garage or carport.

Section 3. Requirements.

At least one 208/240-volt individual branch circuit shall be installed for the provision of electrical service within or in close proximity to the garage or carport for each dwelling unit in conformity with one of the three options below:

a. Installation of an electrical outlet, a receptacle or charging station, supplied by a separate branch circuit that supplies no other loads except ventilation equipment intended for use with the EVSE.

b. In the case of any circumstance where the City Electrician considers it necessary or desirable; installation of a complete run of Electric Vehicle Supply Equipment-Ready raceway system (minimum trade size 21 equipped with pull string) connected between the service panelboard (with sufficient spaces left for future overcurrent and an electrical outlet, a receptacle or an charging station, supplied by a separate branch circuit that supplies no other loads except ventilation equipment intended for use with the electric vehicle supply equipment. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service or subpanel and shall terminate into a listed cabinet, box or other enclosure in close proximity to a location convenient for the installation of a Level 2 electric vehicle charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The service panel or subpanel circuit directory shall provide capacity to install a 40-ampere minimum dedicated branch circuit and space(s) reserved to permit installation of a branch circuit overcurrent device. All work required hereunder shall be performed in accordance with [*insert applicable electric code.*]

Section 4. Definitions.

- (a) “Level 2 Charger” shall mean electric vehicle supply equipment that is serviced by an electrical room equipped to provide 208/240 V 40-amp electric service, and is designed and installed to supply such electrical energy to plug-in electric vehicles.
- (b) “New construction” shall mean the construction of an entirely new structure on a site.
- (c) “Significant alteration” shall mean an addition or alteration to an existing dwelling or townhouse that increases the existing total floor area of the building by either [*50% (fifty percent)*] or by [*TBD*] square feet, and involves the construction or expansion of a garage or carport.

Section 5. Effective Date.

The requirements herein shall be effective 180 days from [*insert the date of enactment.*]