



REACH CODE CHECKLIST

FOR NEW NON-RESIDENTIAL BUILDINGS

This includes offices, hotels and motels, and all other non-residential buildings

The Reach Code is a local ordinance adopted in Hayward which modifies the CA Building Code (CalGreen) to reduce natural gas use in new construction. The Reach Code also amends CalGreen to expand the requirements for parking spaces for Electric Vehicle (EV) charging. For new residential buildings, please use the [Reach Code Checklist for Residential Buildings](#). For checklists, background information and the full text of the Reach Code, please see the City of Hayward website here: <https://www.hayward-ca.gov/reach-code>

PART 1: ELECTRIFICATION (EITHER CHECKLIST 1A OR CHECKLIST 1B MUST BE COMPLETED)

CHECKLIST 1A: ALL-ELECTRIC APPROACH

- **WHERE ALL-ELECTRIC INFRASTRUCTURE IS INSTALLED, THE DESIGN FOR THE BUILDING SHALL INCLUDE THE FOLLOWING:**

(Check each item as you confirm it in the plans)

- All-electric end uses
- No fuel gas (such as natural gas or propane) appliances *(use heat pumps for water heaters and HVAC)*
- No fuel gas meters, piping or infrastructure
- Compliance with CalGreen and CA Energy Code

CHECKLIST 1B: ELECTRIC READINESS APPROACH

- **WHERE FUEL GAS INFRASTRUCTURE IS INSTALLED, THE DESIGN FOR THE BUILDING SHALL INCLUDE THE FOLLOWING:**

- Sufficient electrical capacity to facilitate future full building electrification (including reserved circuit breakers, electrical conduit, subpanels, panels, switchboards, and transformers)
- Physical space for future electric heating appliances (including equipment footprint and associated ducting)
- Construction documents must depict plans for electrification infrastructure and appliances.
- Compliance with CalGreen and CA Energy Code

PART 2: EV CHARGING READINESS

CHECKLIST 2A – OFFICES

- Is the new building an office? YES NO

If you checked “yes,” complete checklist below. If you checked “no,” continue to CHECKLIST 2B for hotels and motels, or CHECKLIST 2C for all other use buildings.

- A minimum of 20% of parking spaces shall be provided with a Level 2 Ready and Electric Vehicle Charging Station (EVCS) (see definitions of Level 2 EV Ready and EVCS in 'DEFINITIONS' section below).
- A minimum of 50% of parking spaces shall be provided with a Level 2 Ready and EVCS or are Level 2 EV Capable.
- Automatic Load Management Systems (ALMS) shall be permitted to reduce load when multiple vehicles are charging.

CHECKLIST 2B – HOTELS AND MOTELS

- Is the new building a hotel or a motel? YES NO
If you checked "yes," complete checklist below. If you checked "no," continue to CHECKLIST 2A for offices, or CHECKLIST 2C for all other non-residential buildings.
 - A minimum of 15% of parking spaces shall be provided with a Level 2 Ready and EVCS.
 - A minimum of 40% of parking spaces shall be provided with a Low Power Level 2 Ready and EVCS or are Low Power Level 2 EV Ready.
 - ALMS shall be permitted to reduce load when multiple vehicles are charging.

CHECKLIST 2C – OTHER NON-RESIDENTIAL BUILDINGS

- Is the new building non-residential other than an office, hotel, or motel? YES NO
If you checked "yes," complete checklist below. If you checked "no," see previous checklists.
 - A minimum of 10% of parking spaces shall be provided with a Level 2 Ready and EVCS.
 - A minimum of 20% of parking spaces shall be provided with a Level 2 Ready and EVCS or are Level 2 EV Capable.
 - ALMS shall be permitted to reduce load when multiple vehicles are charging.

DEFINITIONS:

- **'Automatic Load Management Systems (ALMS).'** A control system designed to manage load across one or more electric vehicle supply equipment (EVSE), circuits, or panels, and share electrical capacity and/or automatically manage power at each connection point. ALMS systems must be designed to deliver no less than 3.3 kVa (208/240 volt, 16-ampere) to each EV Capable, EV Ready, or EVCS space served by the ALMS, and meet the requirements of California Electrical Code, Article 625. The connected amperage to the building site for the EV charging infrastructure shall not be lower than the required connected amperage per California Green Building Standards Code, Title 24 Part 11.
- **'Direct Current Fast Charging (DCFC).'** A parking space provided with electrical infrastructure that meets the following conditions:
 - A minimum of 48 kVa (480 volt, 100-ampere) capacity wiring.
 - Electric vehicle supply equipment (EVSE) located within three (3) feet of the parking space providing a minimum capacity of 80-ampere.
- **'Electric Vehicle Charging Station (EVCS).'** A parking space that includes installation of electric vehicle supply equipment (EVSE) at an EV Ready Space. An EVCS space may be used to satisfy EV Ready space requirements. EVSE shall be installed in accordance with the California Electrical Code, Article 625.

- **‘Level 2 EV Capable.’** A parking space provided with electrical infrastructure that meets the following requirements:
 - Conduit that links a listed electrical panel with sufficient capacity to a junction box or receptacle located within three (3) feet of a parking space.
 - The conduit shall be designed to provide at least 8.3 kVa (208/240 volt, 40-ampere) per parking space. Conduit shall have a minimum nominal trade size of 1 inch inside diameter and may be sized for multiple circuits as allowed by California Electrical Code. Conduit shall be installed at a minimum in spaces that will be inaccessible after construction, either trenched underground or where penetrations to walls, floors, or other partitions would otherwise be required for future installation of branch circuits, and such additional elements deemed necessary by the Building Official. Construction documents shall indicate future completion of conduit from the panel to the parking space, via the installed inaccessible conduit.
 - The electrical panel shall reserve a space for a 40-ampere overcurrent protective device space(s) for EV charging, labeled in the panel directory as “EV CAPABLE.”
 - Electrical load calculations shall demonstrate that the electrical panel service capacity and electrical system, including any on-site distribution transformer(s), have sufficient capacity to simultaneously charge all EVs at all required EV spaces at a minimum of 40 amperes.
 - The parking space shall contain signage with at least a 12” font adjacent to the parking space indicating the space is EV Capable.
- **‘Level 2 EV Ready.’** A parking space that is served by a complete electric circuit with the following requirements:
 - A minimum of 8.3 kVa (208/240 Volt, 40-ampere) capacity wiring.
 - A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking space. If Electric Vehicle Supply Equipment (EVSE) is provided the minimum capacity of the EVSE shall be 30-ampere.
- **‘Low Power Level 2 EV Ready.’** A parking space that is served by a complete electric circuit with the following requirements:
 - A minimum of 4.1 kVa (208/240 Volt, 20-ampere) capacity wiring.
 - A receptacle labeled “Electric Vehicle Outlet” or electric vehicle supply equipment located within three (3) feet of the parking space. If EVSE is provided the minimum capacity of the EVSE shall be 16-ampere.
 - Conduit oversized to accommodate future ‘Level 2 EV Ready’ (208/240 Volt, 40-ampere) at each parking space.

PART 3: EXCEPTIONS FOR NON-RESIDENTIAL BUILDINGS

The building may be exempt from the EV Charging Readiness requirements under the following conditions:

1. If there is no local utility power supply, or the local utility is unable to supply adequate power.
2. If a building permit applicant provides documentation detailing that the increased cost of utility service or on-site transformer capacity would exceed an average of \$4,500 per parking space, the applicant shall provide EV infrastructure up to a level that would not exceed this cost for utility service or on-site transformer capacity.
3. Spaces accessible only by automated mechanical car parking systems are excepted from providing EV charging infrastructure.

4. One Direct Current Fast Charging (DCFC) station may be substituted for up to five (5) EVCS to meet the EV charging readiness requirements. Where ALMS serve DCFC stations, the power demand from the DCFC shall be prioritized above Level 2 spaces.
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PART 4: SIGNATURE LINE

This form has been completed by: _____

Signature

Date