

 Building Division	EVSE INSPECTION Electric Vehicle Supply Equipment City of Palo Alto Building Inspection Division 285 Hamilton Ave. Inspection Request: 650 329-2496 IVR Inspection #101	Revision Date:09/18/13
		General Requirements for: Residential
		Codes Enforced: 2010 CEC, 2008 NEC
		The information provided in this document is general and intended as a guide only. Each project is unique and additional requirements may be enforced as deemed appropriate.

TORQUE REQUIREMENTS

- All associated EVSE breakers must be verified for proper torque.
- Torque all connections per manufacturer's listing. (Electrical contractor to be onsite with torque wrench and torque screwdriver of the audible type. (Ratcheting). (CEC 110.3 (b))
- Secure lugs with channel locks to hold lug in place when applying the proper torque.
- Verify all torque connections. (For example: Polaris connectors in junction boxes)

TOOLS REQUIRED FOR INSPECTION:

Torque screw driver
Torque wrench (and associated sockets)
Square tip and standard/slot tip (extra long/deep)
Channellocks
Phase tape
Ladder (as required)

☒ **INSPECTION** (General requirements for residential projects)

*A representative from the installing contractor must be onsite. The representative must have an understanding of the project and be able to perform all requirements of this checklist.

- ☐ Verify installation matches the approved set of plans. If not, a revision is required.
- ☐ Provide working clearances at all electrical equipment. (36" deep x 30" wide x 6'6" high) *CEC 110.26*
- ☐ All new and existing circuit breakers shall be listed to be used with panel (usually the same manufacturer).
- ☐ All new and existing circuits must be labeled.
- ☐ Verify load calculations attached to the job copy.
- ☐ **Gas meter clearances:** There shall be no electrical equipment, conduit, conductors 10' above the gas meter or within 18" of the service riser. (WGW Standard GD - 02)
- ☐ **Verify grounding electrode system:** For new buildings and remodels that have at least 20' of new foundation the CPA Building Division requires the primary

electrode be a 20' of # 4 rebar OR 20' of minimum 4 AWG bare copper wire placed 3" from the bottom of the footing (if no footing, use (2) 8' long by 5/8" ground rods spaced a minimum of 6' apart). In addition to the primary grounding electrode a metal water pipe supplemental electrode is required and must be connected with a minimum 4 AWG copper wire and connected at the exterior hose bib where the water service enters the building. CEC 250.52 ***Note: For sizing the GEC for services over 200 AMP's refer to NEC/CEC Table 250.66***

- ☐ **Supports:** EMT, IMC, and RMC shall be securely fastened in place at least every 10' and within 3' of each outlet box, junction box, device box, cabinet, conduit body or other termination. *CEC 342.30 (A), 344.30 (A), 358.30 (A)*
- ☐ A disconnect is required a minimum 10' away at each charging station location. (Exception: Single Family Residence < 60amps) A phenolic plaque with red background and white letter stating "**Emergency Power Off – Electric Vehicle Charging Station**" must be installed on each disconnect. (Red background, white lettering, minimum 3/8" lettering, all capital letter
- ☐ Where EVES are not mounted on a wall, they must be mounted on metal post.