



City of Watsonville

Celebrating 150 Years

CHECKLIST FOR RESIDENTIAL ELECTRICAL VEHICLE CHARGING STATIONS

All forms available at <https://cityofwatsonville.org/400/Permit-Applications-Forms>

- Completed Building Permit Application
- Electrical Load Calculations (if required)
- Equipment Manufacturer's Installation Instructions

For Electronic Submittals:

- PDF files of all required forms
- Submit files by email to: building.permits@cityofwatsonville.org

REQUIREMENTS:

Equipment Output Power (Continuous Load):

240v: 40amp (NEMA 14-50) 240v: 30amp (hardwired only) 240v: 24amp (14-30, L6-30) 240v: 16amp (6-20)

120v 16amp (5-20) 12amp (5-15) Other:

Equipment overcurrent protection rating:

50amp 40amp 30amp 20 amp 15 amp Other:

Existing electrical service:

100amp 125amp 150amp Other:

Branch circuit distance:

<100 feet >100 feet

Conductor size:

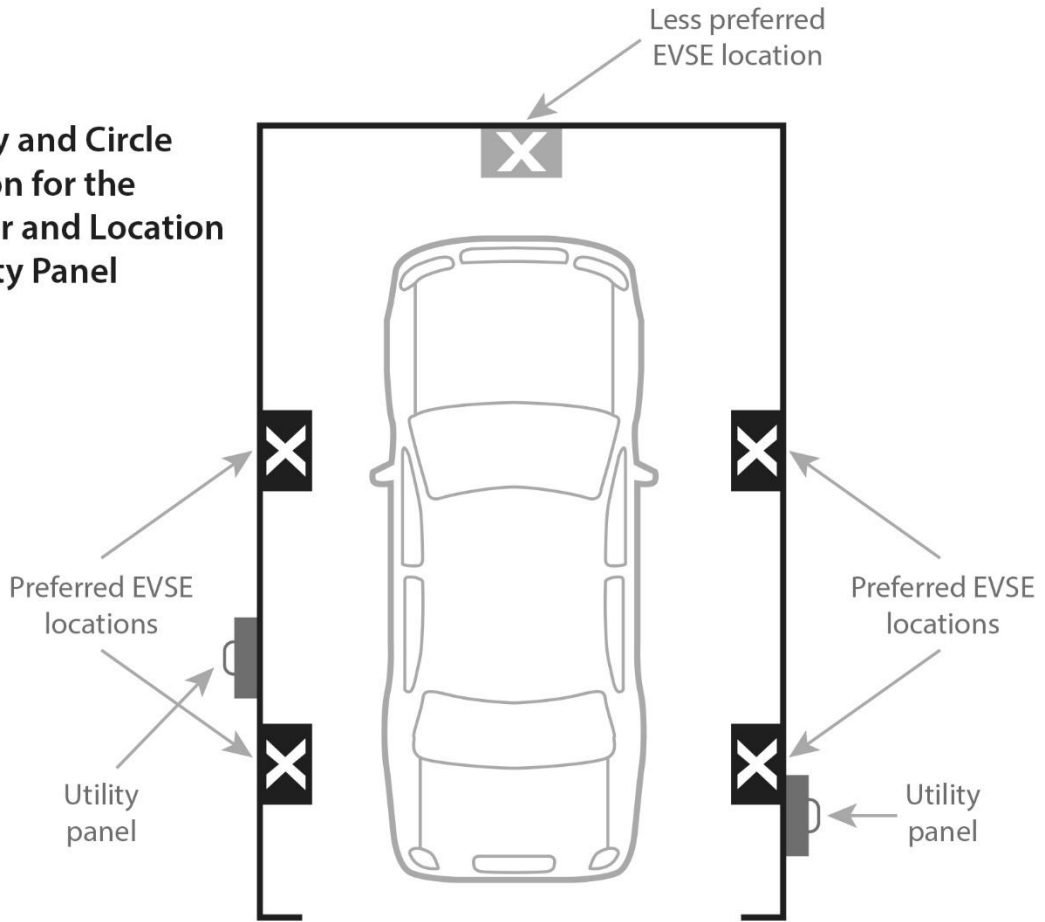
#14 Cu #12 Cu #10 Cu #8 Cu #6 Cu Other:

Size of EV Charger Circuit Breaker	Required minimum size of conductors (THHN wire)	Conduit Type and Size*		
		Electrical Metallic Tubing (EMT)	Rigid Nonmetallic Conduit – Schedule 40 (RNC)	Flexible Metal Conduit (FMC)
20 amp	#12	1/2 "	1/2 "	1/2 "
30 amp	#12	1/2 "	1/2 "	1/2 "
40 amp	#10	1/2 "	1/2 "	1/2 "
50 amp	#8	3/4 "	3/4 "	3/4 "
60 amp	#6	3/4 "	3/4 "	3/4 "
70 amp	#6	3/4 "	3/4 "	3/4 "

*Based on 4 wires in the conduit (2-current carrying conductors, 1-grounded conductor, 1-equipment ground).

Identify location of electric vehicle charging station and utility panel in diagram on next page:

**Identify and Circle
Location for the
Charger and Location
of Utility Panel**





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CHECKLIST FOR COMMERCIAL ELECTRICAL VEHICLE CHARGING STATIONS

All forms available at <https://cityofwatsonville.org/400/Permit-Applications-Forms>

- Completed Building Permit Application
- 3 copies of site plan
- 3 copies of electrical plan
- Equipment Manufacturer's Installation Instructions

For Electronic Submittals:

- PDF files of forms and plans listed
- Email all PDF files to building.permits@cityofwatsonville.org

REQUIREMENTS:

Site Plan:

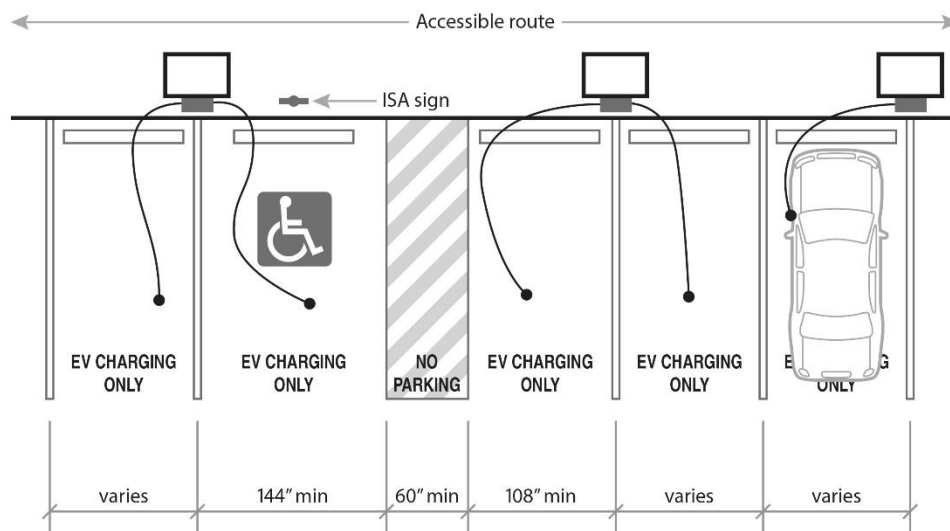
- Building footprints and landscaped areas
- Parking and circulation areas
- Show locations of any existing and all proposed EV stations, panels, and other service equipment

Electrical Plan:

- Electrical and equipment layout
- Single line diagram
- Electrical Load Calculations (Existing + New) and Panel schedule
- All plans must demonstrate compliance with accessibility provisions (see below)

Total Number Of EVCS At Facility	Minimum Number (by type) Of EVCS Required		
	Van Accessible	Standard Accessible	Ambulatory
1-4	1	0	0
5-25	1	1	0
26-50	1	1	1
>50	See CBC Table 11B-228.3.2.1		

Example of Non-Residential EVSE Configuration



ISA required for installations of 5 or more EVSEs