



Electric Vehicle Charging

Contractor Playbook



Identifying the right EV charging station by application

Start with identifying the customer:

RESIDENTIAL

- Homeowner / EV Driver
- MDU / Condominium complex

WOULD THEY LIKE TO SCHEDULE CHARGING SESSIONS DURING OFF-PEAK HOURS, REMOTELY START/STOP CHARGING, VIEW CHARGING STATUS/ FAULT NOTIFICATIONS, AND MORE?

Are they an existing My Leviton user?

YES

SMART HOME MY LEVITON COMPATIBILITY (EV32W, EV48W, EV80W)



NO

STANDARD (EV320, EV480, EV800)



REMINDER: There are other Leviton solutions that can monitor energy, including energy management solutions or smart load centers. See "Upsell" section for more details.

COMMERCIAL

- Business owner
- Retail
- Office buildings
- Health care facilities
- Dealerships

PUBLIC

- Municipality
- Government
- Parking Garages / lots
- Fleet

IF THE APPLICATION IS COMMERCIAL OR PUBLIC, YOU MAY NEED TO ASK A FEW MORE QUESTIONS TO DETERMINE IF THE **STANDARD OR PRO SERIES** IS THE APPROPRIATE RECOMMENDATION.

Do they want to generate revenue, remotely control access, set pricing, monitor status, generate usage reports, and more?

NO

STANDARD (EV320, EV480, EV800)



YES

PRO MANAGEMENT SOFTWARE VIA 4G

Do they want an LCD Screen to view Charging Data?

YES



EV48S OR EV80S CHARGING STATIONS

NO



EV48G OR EV80G CHARGING STATIONS

EV Charging Accessories

REMINDER: ONCE YOU HAVE IDENTIFIED THE APPROPRIATE CHARGING STATION, THERE ARE ACCESSORIES YOU CAN RECOMMEND.

EPED1	Single mount pedestal – ideal for residential applications, single use parking spaces, etc.
EPED2	Dual mount front/back pedestal – ideal for head-to-head parking spaces, etc.
EPCM1-OF3 EPCM2-OF3 EPCM3-OF3	Dual mount side/side pedestal with retractable cord management – ideal for side-to-side parking spaces, where they don't want the cord to touch the floor, etc.
EHOOK	Wall hook for cable management – ideal for residential applications, as an attachment to EPED1/2 pedestals, etc.
EBASE	Electric Vehicle Charging Station Foundation



Speeds Installations and Creates EV-Ready Infrastructure

EBASE
✓

EPCM1-OF3 >
EPCM2-OF3
EPCM3-OF3

Which EV charging solution is right for you?

CHECK OUT OUR EV CHARGING SELECTOR



Tips to help make the sale

TURN YOUR LOCATION INTO A DESTINATION



Why should your customers want EV Charging?

- It will put their business on the map!
 - With public charging stations, more drivers will see the stations
 - Plus, more time waiting to charge is more time these people spend at your business
- It will make them more attractive to employees
 - The recruiting market is tight – attract and retain talent with the option of free EV charging
- Generate revenue from the charging stations
 - If they are using a networked charging station, they can charge a fee to use the station
- Establish yourself as an environmentally friendly business

Ask your customer - does your local, state, or federal government offer EV incentives, such as

- Tax credits?
- Tax breaks?
- Reduced utility rates?
- Rebates?
- HOV lanes?
- Purchase grants?
- Reminder: Check Leviton.com/evrebates for custom state PDFs



If they are not ready for EV Charging yet, remind them of EV-Ready codes (see EV-Ready section)

Upsell upsell upsell!

Leviton is one of the only manufacturers to provide the entire EV infrastructure, including power, safety, protection and energy management

Each product is a gateway to a much larger Leviton conversation.



**CHECK OUT OUR
EV INFRASTRUCTURE**

EV Charging

We are the brand that goes BEYOND the charger

Load Centers

Gateway to smart home solutions, decora smart, etc.

All things Meters!

Gateway to commercial buildings, schools, hospitals, etc.



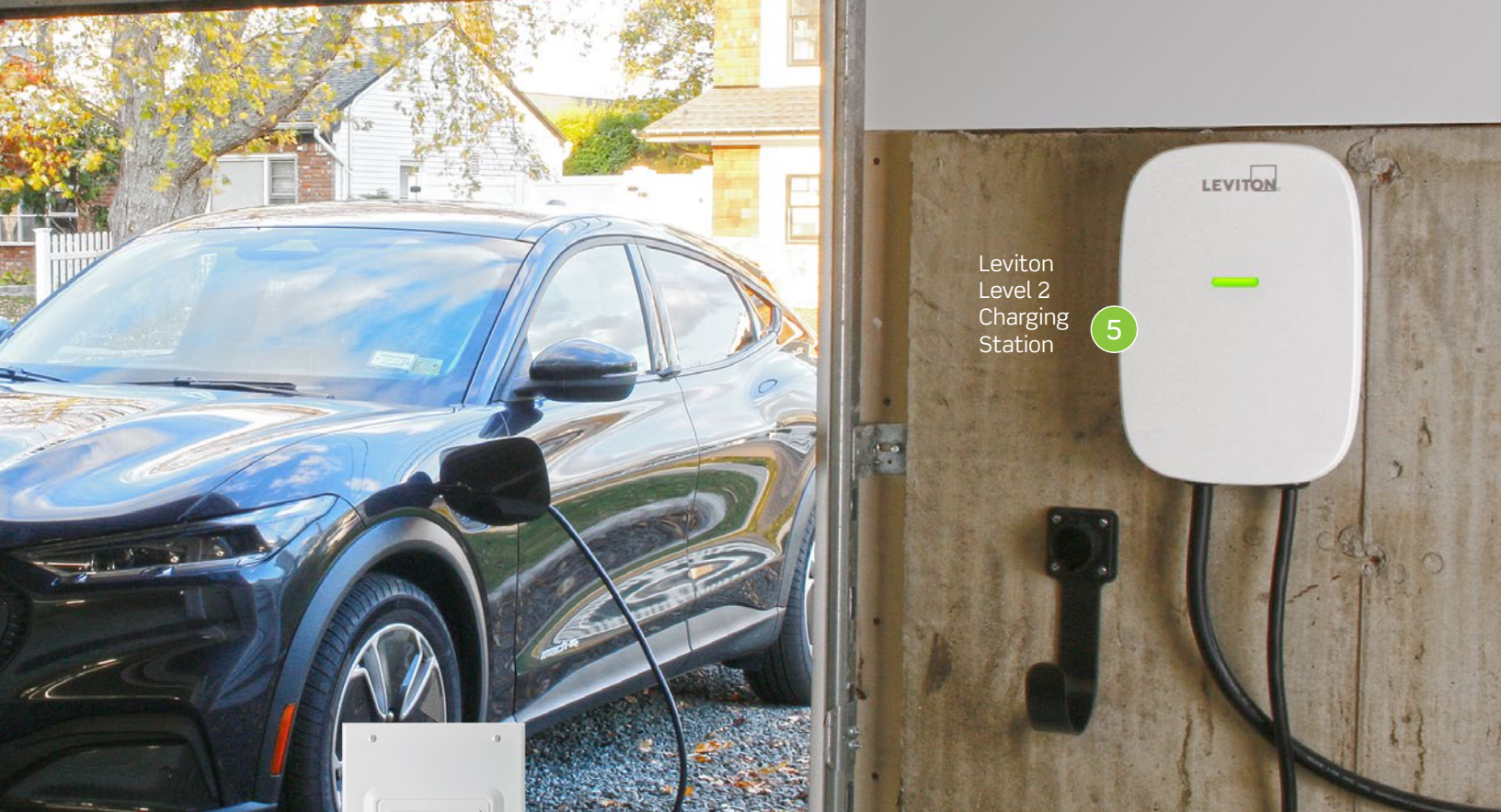
Switches

Gateway to food & beverage/industrial applications



Surge Protection

Gateway to residential & commercial conversations



Leviton Level 2 Charging Station

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Leviton Load Center

2



Leviton Submeter

3

Leviton Surge Protective Panel



4

1 Dedicated 240 Volt line

Residential Homeowners

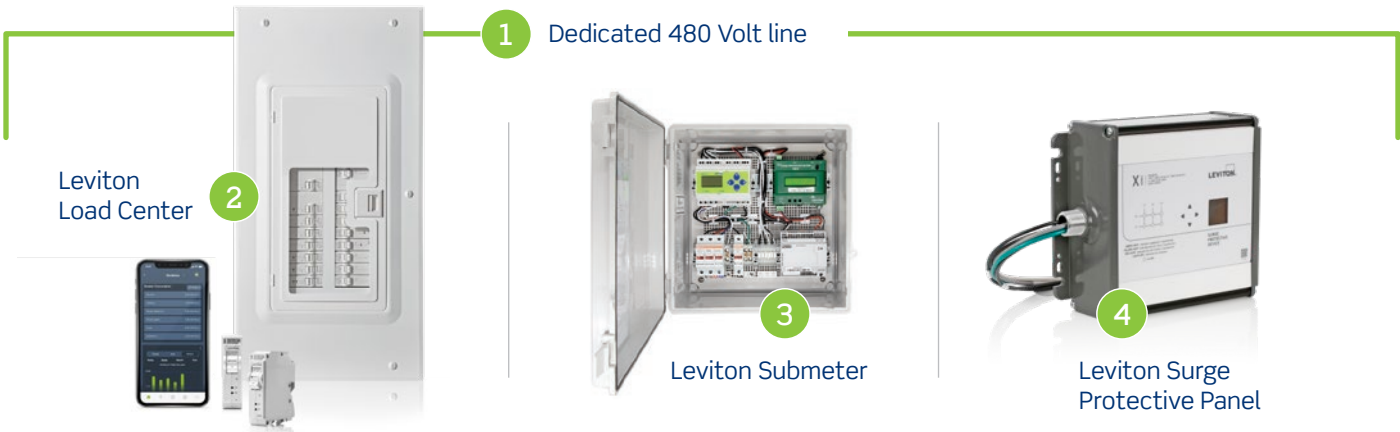
1. A dedicated 240 Volt line is required for each EV charger (unless chargers have load sharing capabilities)
2. A minimum 40 Amp, two-pole circuit breaker is required to meet the loads associated with Level 2 charging devices rated 30 to 32A. A minimum 60 Amp, two-pole circuit breaker is required to meet the loads associated with Level 2 charging devices rated 48 Amp. A minimum 100 Amp, two-pole circuit breaker is required to meet the loads associated with Level 2 charging devices rated 80 Amp.
3. Install a submeter downstream to track electric and energy usage
4. Mount a surge protective panel to the load side of your service panel to protect against residual surges
5. Install your Leviton EV charger

No EV yet? Make your home EV-Ready!

Designate enough capacity on your panel for a dedicated branch circuit. Install your conduit linking the panel to the future location of the EV charger. This will make retrofitting easy, and less costly!

Multiple Dwelling Units (MDUs)

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3. Install a submeter downstream to track electric and energy usage
4. Mount a surge protective panel to the load side of your service panel to protect against residual surges
5. A local safety disconnect may also be installed by the EV charger. Note that some local/state ordinances require that for EVSE rated more than 60 Amps and 150 Volts to ground, a means of disconnect must be installed in a readily accessible location and within sight of the EV charging station
6. Install your Leviton EV charger. Depending on the location of install, Leviton's pedestal can mount up to 2 chargers
7. Include any signage required by local code including parking spaces and charger area





Leviton Level 2 Charging Station with RFID Access

4



6

Leviton Load Center

2



Leviton Surge Protective Panel



3



4

Leviton Safety Disconnect Switch

1

Dedicated 240 Volt line

Public Charging

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Site Assessment and Planning the Layout

Involves a complete audit of the electrical system, including...

- Load calculations
- Considering the location of installation
- Planning the infrastructure in terms of site prep: boring holes, trenching, concrete pouring, etc.
 - Many public stations are cellular and are to be installed in a place with adequate cellular reception
 - There are workarounds available, like cellular repeaters in underground parking locations
- Identifying key factors including
 - Property layout
 - Number of stations/parking spots needed
 - Distances to electrical service
 - Will you need an external cabinet?
 - Is the station liquid coolant or air coolant?
 - Stations that use air coolant technology will require a larger perimeter around the charging station.
 - Physical barriers?
 - Measures to prevent vandalism (lighting, cameras, etc.)
 - Future-proofing, making other spots EV-ready
 - Etc.

WANT TO SELL MORE EV CHARGING PROJECTS?

JOIN THE EV-PRO

Check out page 11 for more information

Leviton devices have been a part of your design and build for years. Anything from switches to dimmers, GFCIs to load centers... all designed to make your install easier, safer, and more productive.

**THE GARAGE SHOULD
BE NO DIFFERENT.**



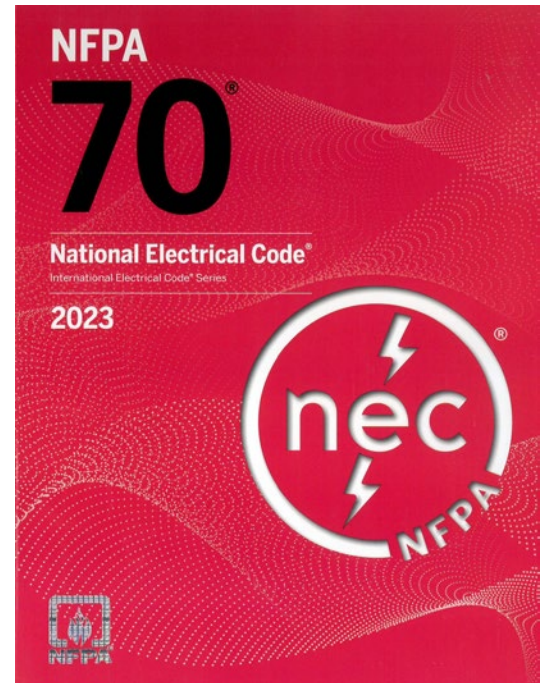
Consider the Code

A major code to consider is the NFPA 70 National Electrical Code (NEC), Article 625: Electric Vehicle Power Transfer System

“625.1 Scope. This article covers the electrical conductors and equipment connecting an electric vehicle to premises wiring for the purposes of charging, power export, or bidirectional current flow.”

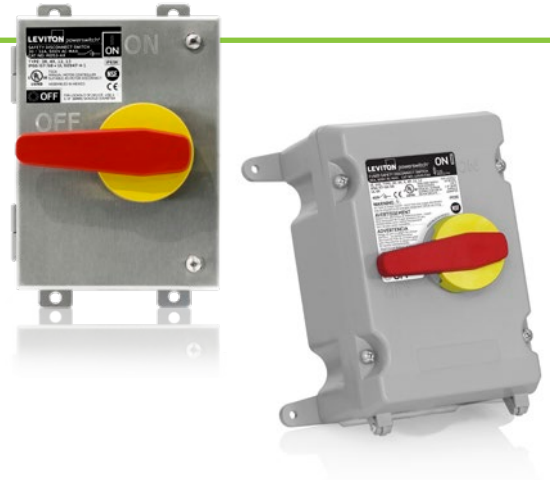
KEY SECTIONS:

- Definitions
- Equipment Construction
- Installation
- Wireless Power Transfer Equipment



EXAMPLES

Disconnecting Means. For electric vehicle supply equipment rated more than 60 amperes or more than 150 volts to ground, the disconnecting means shall be provided and installed in a readily accessible location. The disconnecting means shall be capable of being locked in the open position. The provision for locking or adding a lock to the disconnecting means shall be installed on or at the switch or circuit breaker used as the disconnecting means and shall remain in place with or without the lock installed. Portable means for adding a lock to the switch or circuit breaker shall not be permitted.



Overcurrent Protection. Overcurrent protection for feeders and branch circuits supplying electric vehicle supply equipment shall be sized for continuous duty and shall have a rating of not less than 125 percent of the maximum load of the electric vehicle supply equipment. Where noncontinuous loads are supplied from the same feeder or branch circuit, the overcurrent device shall have a rating of not less than the sum of the noncontinuous loads plus 125 percent of the continuous loads.

Training

Interested in a LIVE Training with a Leviton EV Charging Expert?

WE'VE GOT YOU COVERED!

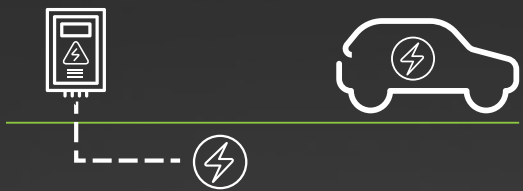


Not ready for EV yet? Make the space EV-Ready

EV-Ready building codes establish EV infrastructure requirements (i.e. electrical capacity, pre-wiring, etc.) to make possible the future installation of EV charging stations

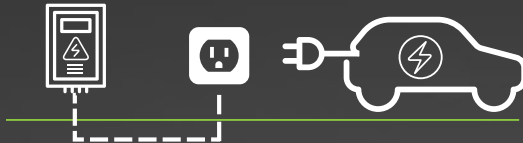
- Studies have shown that EV-Ready charging infrastructure is significantly less expensive to install during new construction than it is for a building retrofit
- Many local and state governments are beginning to adopt EV-Ready building codes, including **California, Colorado, Georgia, Hawaii, Maryland, New York, Oregon, Utah, and Washington**

Types of EV-Ready Building Codes



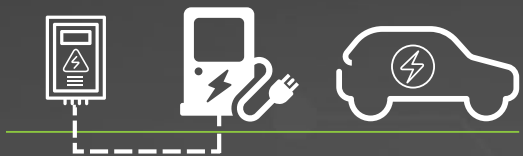
EV-Capable

Install electrical panel capacity with a dedicated branch circuit and a continuous raceway from the panel to the future EV parking spot; makes the infrastructure capable of adding EV Charging



EV-Ready Outlet

Install electrical panel capacity and raceway with conduit to terminate in a junction box or 240-volt charging outlet (typical clothing dryer outlet); makes the infrastructure ready for EV Charging

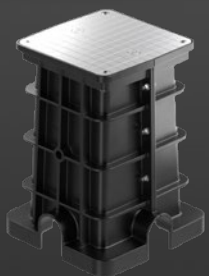


EV-Installed

Install a minimum number of Level 2 EV charging stations

Note: building codes and requirements may vary state-by-state, including other equipment and circuit protection

THE FUTURE IS ELECTRIC... ARE YOU PREPARED?



Create EV-Ready Infrastructure

- For locations that have EV-Ready or EV-Capable building codes and requirements but are not presently ready for EV charging solutions, the foundation acts as a preventive measure against future infrastructure disruptions
- Contractors simply install the foundation and transition when desired by mounting an EV charging pedestal



THE FUTURE IS ELECTRIC

BE THE GO-TO CONTRACTOR FOR ALL THINGS EV!



JOIN THE EV-Pro

EV-Pro Contractor Certification is a FREE program from Leviton designed to make your business stand out from the competition by giving you access to the knowledge and resources needed to become a recognized expert Electric Vehicle Supply Equipment installer.

YOU GET ACCESS TO:

- Certification courses on our ez-learn™ platform
- Unique EV-Pro certification number
- Digital marketing assets
- Co-branded collateral
- Show and event listings
- Information on the very latest code updates
- EV rebates and incentives you can share with your customers

On top of all these benefits, we'll send business your way by adding you to our exclusive listing of Recommended Contractors.

SIGN UP NOW!



When your customers make an investment in Electric Vehicle charging, it's about more than just the equipment. It's about trust. Get certified by Leviton, the brand known for quality, safety, and longevity.

JOIN THE EV-PRO TEAM TODAY!

LEVITON.COM/EVPRO


LEVITON[®]
EV-Pro

Leviton Contractor Certification Program



Ordering Information

EV Series Chargers

Description	Series Type	Cat. No.
32 Amp, 208/240 VAC, 7.6 kW, 18' Cable, Optional RFID	Standard	EV320
48 Amp, 208/240 VAC, 11.6 kW, 18' Cable, Optional RFID		EV480
80 Amp, 208/240 VAC, 19.2 kW, 18' Cable, Optional RFID		EV800
32 Amp, 208/240 VAC, 7.6 kW, 18' Cable, Optional RFID, Wi-Fi	Smart Home 	EV32W
48 Amp, 208/240 VAC, 11.6 kW, 18' Cable, Optional RFID, Wi-Fi		EV48W
80 Amp, 208/240 VAC, 19.2 kW, 18' Cable, Optional RFID, Wi-Fi		EV80W
48 Amp, 208/240 VAC, 11.6 kW, 18' Cable, Optional RFID, With 4G and LCD Screen	Pro	EV48S
48 Amp, 208/240 VAC, 11.6 kW, 18' Cable, Optional RFID, With 4G		EV48G
80 Amp, 208/240 VAC, 19.2 kW, 18' Cable, Optional RFID, With 4G and LCD Screen		EV80S
80 Amp, 208/240 VAC, 19.2 kW, 18' Cable, Optional RFID, With 4G		EV80G



EV Charging Accessories

Description	Cat. No.
Single Mount Pedestal	EPED1
Dual Mount Pedestal, Front/Back	EPED2
Dual Mount Pedestal, Side/Side with Retractable Cord Management (Includes pedestal body, mounting template and cord management system; all 3 must be purchased together)	EPCM1-OF3 EPCM2-OF3 EPCM3-OF3
Additional RFID Card	ERFID
Wall Hook for Cable Management	EHOOK
Electric Vehicle Charging Station Foundation	EBASE



Visit our Website at:
leviton.com/EVcharging
 email: evrgreen@leviton.com

Leviton Manufacturing Co., Inc.
 201 N Service Rd, Melville, NY 11747
 Telephone: 1-800-323-8920 • FAX: 1-800-832-9538
 Tech Line: 1-800-824-3005 (M-F 8AM-10PM; Sat 9AM-7PM; Sun 9AM-5PM)

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