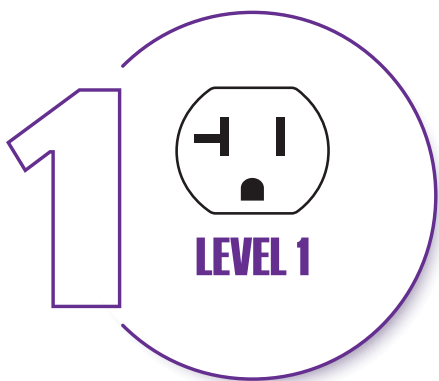




# EV Readiness Toolkit for Multifamily Properties

Resources for organizations that want to provide EV charging stations for their residents.





# Charging Station Lingo

EVSE — Electric Vehicle Service Equipment; the charging station and all its components

Level 1 — A wall plug and the cord that comes with the car, or a portable charging station that plugs into a wall outlet. Level 1 gives 4-6 miles of range per hour of charging.

Level 2 — A charging station mounted on the wall or on a pedestal and connected to the electrical supply. Level 2 gives 12-24 miles of range per hour of charging.

DCFC — Direct Current Fast Charger is a charging station mounted on a pedestal and a high-voltage power supply. DCFC can fully charge an empty battery in an hour or less.

Smart Charging – An EVSE that is connected to a network and can communicate

Dwell Time — The length of time a car sits still before moving to a different destination

Ports — The number of handles or connectors on a charging station

Infrastructure — Includes all the equipment needed to bring electricity from the utility to the building's electrical panel and then to the charging station.

## Survey Questions

Do you own a plug-in hybrid electric vehicle (PHEV) or battery-electric vehicle (EV)?

- No
- Yes What model? \_\_\_\_\_

If you answered no, would you consider buying or leasing a PHEV or EV? If so, when?

- This year
- Next year
- Within two years
- Longer than two years
- Not considering a PHEV or EV

If you drive to work or school, what's your typical commute distance (one-way)?

- Less than 10 miles
- 10-25 miles
- 26-50 miles
- More than 50 miles

Does your work or school have a charging station that you could use?

- No
- Yes
- Not sure

Would you consider a charging station at this property an amenity?

- No
- Yes
- Not sure

If we installed charging stations for residents to use, would you be willing to pay for the electricity to charge your car? (Charging a car costs about \$7 to "fill the tank.")

- Yes, a flat monthly fee added to my rent or HOA fees
- Yes, through a credit card or phone app
- No
- Other: \_\_\_\_\_

What type of charging would work for your schedule?

- Overnight charging that starts at 9:00 pm and finishes by early morning
- Evening charging that starts around 6:00 pm and finishes by midnight
- Morning charging that starts around 5:00 am and finishes mid-morning
- Charging at a central location and takes about 30 minutes

## Policies

Written policies ensure that everyone has the same understanding about responsibilities and communication. These can be as simple as a one-page agreement that all EV drivers sign or included in a rental or HOA agreement. You might not need all these policies. Choose which you'll address.

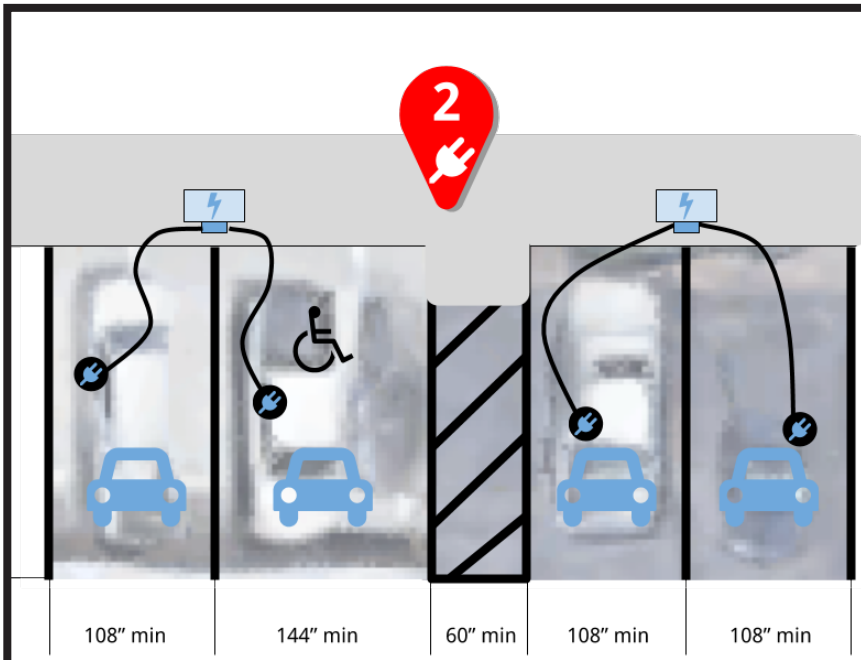
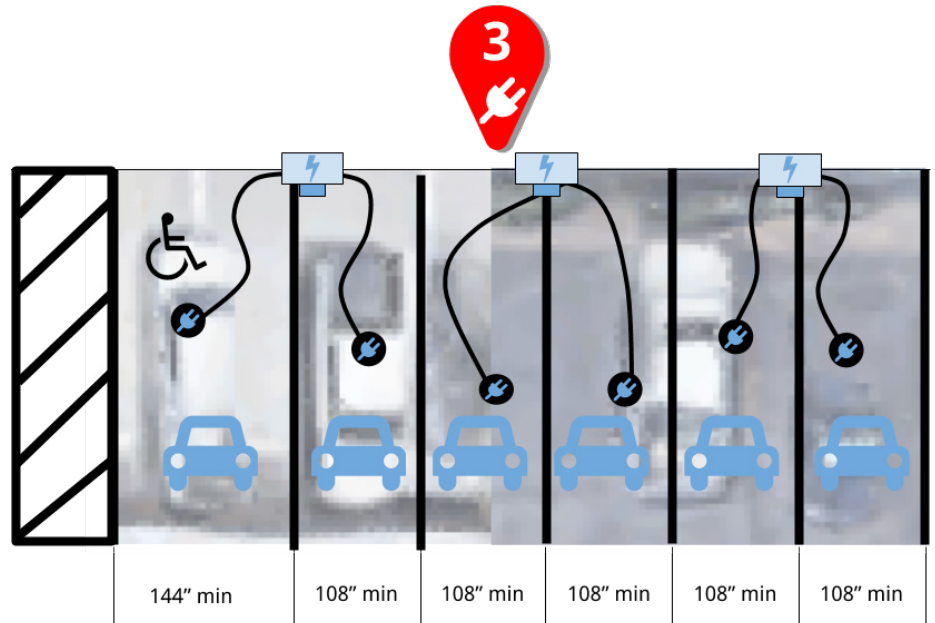
- Users' responsibility for safety, like making sure the cord isn't a tripping hazard and replacing the connector when done charging.
- The process for reporting a charging station that is visibly damaged or not working correctly.
- EV registration to have access to the charging station. Describe how drivers will register and with whom. Will you use issue parking permits to authorized vehicles?
- Times of day that charging stations are available to residents, which might be:
  - Always
  - Only during off-peak hours (mid-day and after 9:00pm)
  - Not during peak hours of 4:00pm to 9:00pm
- Are guests (or employees) limited to certain amount of time, like two hours? How will you handle guest cars that overstay the limits?
- Clear rules for sharing charging stations, which can include:
  - Requiring that EVs be actively charging at a charging station (and moved thereafter)
  - Stating if people are permitted to unplug each other's cars
- The process for filing a grievance that includes the arbitrator and the consequences for abusing the policies.
- If charging is free, is it part of an amenities package? Do you have similar amenities for residents who take action to reduce their emissions?
- If you charge for charging, who collects the fees and how are those fees used? For example, fees might be used for maintenance of the charging stations or additional charging stations.



## What you need to know about ADA

In parking lots with shared parking (spaces are not assigned to a person or a unit), one charging port must be adjacent to a van-accessible ADA parking spot. The images below show two options for ADA-compliant charging stations. Your project designer will make sure your charging stations meet the requirements, which includes an accessible route from the charging station to the building.

In this configuration, the charging stations are on the wall of a garage or in the parking space. These spaces will need to be longer than typical parking spaces. Make sure the driving lane behind the spaces is wide enough for maintenance vehicle, like a parking lot vacuum or a refuse truck.



In this configuration, the charging stations on the sidewalk. The cord will need to be long enough that a person in a mobility device could carry the cord when using the ramp. The sidewalk must be at least 48 inches of unimpeded space.

## Charging Station Planning Checklist

Your project designer will help you identify a location that is close to the electrical supply and meets all state and local design requirements. This checklist helps you identify what you should have ready to help plan for charging station project success.

- If you are a property manager, do you have permission from the property owner?
- Do rental agreements, covenants, and restrictions influence charging station location? For example, do CC&Rs allow installation on an exterior wall?
- Do you have assigned, deeded, or shared parking?
- Do you want the charging stations available to the public, employees, or only residents?
- How will a resident walk from an EV parking space to their residence?
- Does your electric panel have space to add a breaker? (If all the spaces are filled, an electrician can add a second panel.)
- Are the parking spaces somewhat close to the panel or an outdoor electrical supply?
- To run the electric wires from the panel to the charging station, will the electrician need to tunnel through concrete, walls, or grassy areas?
- For shared parking, will at least one charging port be adjacent to an ADA parking space?
- If a two-foot-square pedestal is installed, is the route from the parking spot to the door of the building at least 48-inches wide?
- Can maintenance vehicles navigate around the charging stations and EVs?
- When a car is charging, will the cord extend over a walkway and create a tripping hazard?
- Are the parking spaces in the line of sight of a building, the street, or a parking lot attendant?
- Are the parking spaces level and well-drained, or will drivers stand in a puddle after a storm?
- Would the screen of the charging station be in the direct path of the afternoon sun?

**Ready to power up your property?**  
**[Click here to start.](#)**

