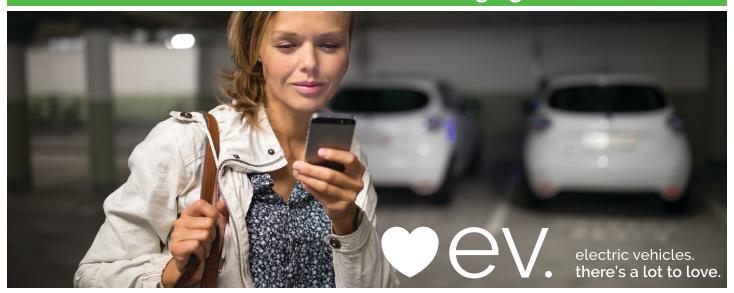
Electrician's Guide to Electric Vehicle Charging in Condominiums



The electric vehicle (EV) market is growing. Automakers are offering a variety of models, from sedans to SUVs, with new features at varying price points. As EVs meet more drivers' needs, demand climbs and so does the need for charging.

It's not only drivers from single-family homes who need to charge. EV drivers live in condos, too. Installing EV charging at condos requires some specific considerations.

Charging options

Eighty percent of charging takes place at home, but a common complaint from condo owners is that there is no place for them to charge at home where it is convenient.

While many condo owners park their vehicles in common areas, such as a shared parking structure, and own their parking spot, they don't own the building's electrical infrastructure. As a result, installing charging equipment requires approval from the homeowners' association (HOA). Additionally, a condo's existing electrical panel may not have enough capacity to serve the additional load required for EV charging. An electrical upgrade can be costly.

Options for installing EV chargers at condos include:

- Installation of chargers on the load side of the existing tenant meter. MGE does not allow splices in gang-meter stacks. Splices must be on load wires outside the stack.
- A new meter stack connected to the building's electricity supply. Each owner gets a second meter and from there, wires are run to parking stalls that need EV charging. Individual owners buy their individual chargers and pay a second meter charge. This strategy may be easier than running separate feeds from the electrical room.
- Installation of a charger on the metered house panel. Without individual meters, this option may impact the house meter's demand charge.



Charge@Home—another option for condo owners

Condos with attached garages like townhomes or duplexes may be eligible for MGE's Charge@Home program. This program makes it quick and easy for condo owners to charge EVs at home. With Charge@Home, MGE installs Level 2 (240-volt) chargers at participating customers' condos in exchange for a monthly fee of about \$20 (66 cents a day) plus the cost of electricity. Level 2 charging stations are up to nine times faster than using a standard electric outlet and offer more control over charging times. Visit mge.com/chargeathome.

Incorporate charging during construction

While retrofitting is possible, the most efficient and cost-effective approach to condo charging is planning ahead and installing necessary infrastructure during building construction. Consider these steps:

- Spend the time and money upfront to install a larger electric service that can handle increased load. This is much easier than replacing an older service. Most drivers want to install Level 2 (240-volt) stations for overnight charging.
- Before pouring the floor of the parking structure, run conduit for wires needed for charging underground to parking stalls. If this work is not done during construction, conduit may need to be run through concrete floors or on the ceiling of the parking structure.
- A dual-headed charger can feed two stalls. All parking stalls will not need EV charging. It's a good idea to plan for at least 10% of the stalls to have EV charging.
- Select stalls located close to the electrical room so running conduit is less costly.
- · Leave space for charging equipment.

In the city of Madison, please follow the Electric Vehicle Charging Station Requirements (mge.com/MadisonEV) for installed stations and EV-ready spaces.

For more information

Find more details about EVs and charging at mge.com/LovEV. If you have additional questions, please email MultiFamilyEV@mge.com.

