

Guide to EV Charging Requirements for Commercial New Construction

Massachusetts



Background

Commercial real estate developers in Massachusetts are typically required to make a minimum of 20%¹ of their project's total parking spaces *EV Ready*. In most MA communities, the energy codes specify this as 6.6 kW wired to within 6 feet of each parking space. The financial impact on a new construction project can be significant, stemming from increased electrical service connection costs, labor, and hardware needed to accommodate additional load. Fortunately, these costs and associated electric service requirements can be greatly reduced by considering EV charging early in the design process, taking advantage of energy code flexibility for load management, and utilizing utility incentive programs. When used correctly, these incentive programs can cover most, if not all, of the costs associated with EV charging while adding a desirable amenity to your property and saving future retrofit costs.

For more information about National Grid's EV Charging Program, please visit ngrid.com/ma-evcharging

¹ 2025 Updated Stretch/Specialized energy codes require 20% for Group R and B occupancies and 10% for all other occupancies; the 2025 Base Code requires 10% for all occupancies. Be sure to check the local requirements early in project planning.

How It Works²

2025 Stretch-Specialized Code – New Construction and Additions

- All commercial buildings are required to provide EV Ready parking to comply with section C405.
- At least 10% or 20% of parking spaces, depending on occupancy classification, must be located within six feet of a 40A wire or junction box AND each space must be capable of 6.6 kW or higher Level 2 charging.
- Projects that decide to install charging stations (EVSE) with Automatic Load Management Systems (ALMS) can significantly reduce power requirements at each space. For example, up to 10 spaces with EVSE may share a single 100A circuit cutting the electric service requirement by 75%, or 10 spaces can be served with 5x 40A spaces – reducing the service requirement by 50%.

2025 Base code

- At least 10 % of parking spaces with a cap of 16 spaces total

² Projects may also be eligible to substitute Direct Current Fast Charging (DCFC) stations or AC Level 1 (120V) charging for all or part of the AC Level 2 spaces required by code. For further information about building energy codes in Massachusetts, please refer to: <https://www.mass.gov/info-details/2025-massachusetts-building-energy-codes#links-to-code-documents>

Level 2					
Customer Segment Eligibility	Environmental Justice Community Criteria**	Level 2 Charger Rebates	Networking Rebates*	Utility-Side Infrastructure Incentives	Customer-Side Infrastructure Incentives
Public***	Located in EJC that meets income criteria	Up to 100% (ports 1-10) (cap up to \$3,900 per port)	\$480	Up to 100%	Up to 100% (per port cap: up to \$7,900 / \$10,000 if new service)
	Located in EJC that <u>does not</u> meet income criteria	Up to 75% (ports 1-10) (cap up to \$2,925 per port)			
	Not located in EJC	Up to 50% Municipal (ports 3-10) Non-municipal (ports 5-10) (cap up to \$1,950 per port)			
Workplace (non-public)	N/A	None offered	None offered		

*Up to \$120 per year, per shared port. Pro-rated if less than 4 years.

**National Grid is committed to ensuring all customers have access to clean transportation, and is offering higher levels of incentives.

Visit [Environmental Justice Communities \(EJC Map\)](#)

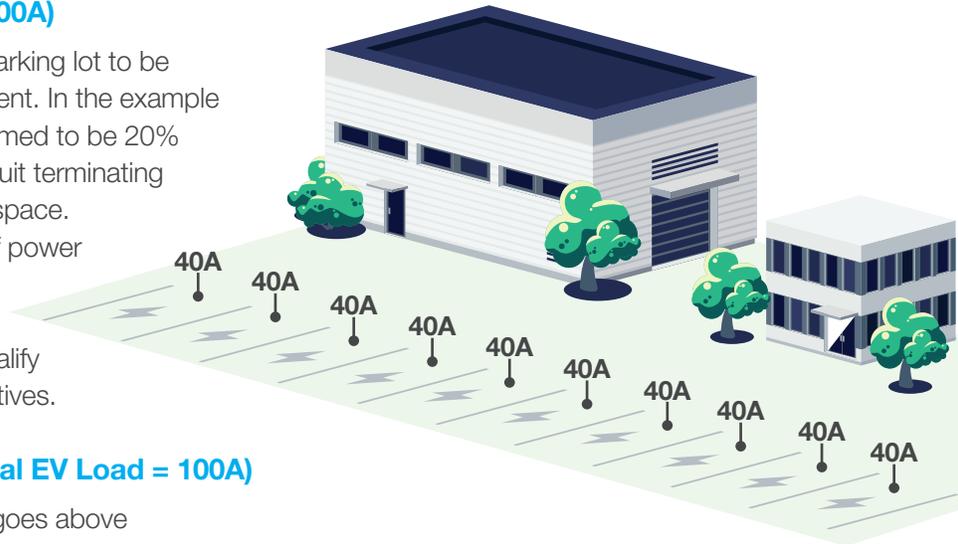
Guide to EV Charging Requirements for Commercial New Construction *(continued)*

Massachusetts

Example

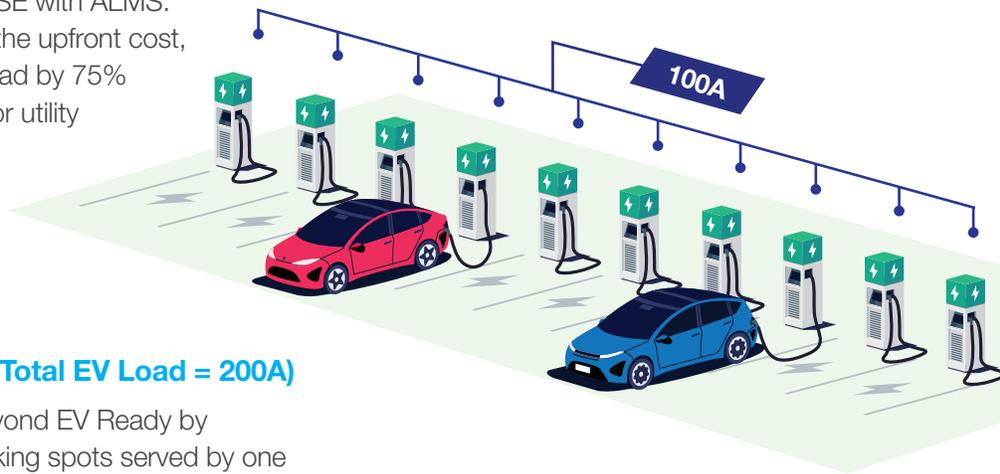
Scenario 1: EV Ready (Total EV Load = 400A)

This scenario shows a property designing its parking lot to be EV Ready, the minimum energy code requirement. In the example diagram to the right, each parking space (assumed to be 20% of the overall spaces) has a dedicated 40A circuit terminating at a junction box within 6 feet of each parking space. Each space would have the required 6.6 kW of power from a 40A breaker. The total load for this example would be 400A, and because EVSE is not installed, this project would not qualify for National Grid's EV Charging Program incentives.



Scenario 2: EVSE Installed w/ ALMS (Total EV Load = 100A)

This scenario illustrates the same building but goes above and beyond EV Ready by incorporating EVSE with ALMS. While installing EVSE may slightly increase the upfront cost, it allows the developer to reduce total EV load by 75% to 100A and the project becomes eligible for utility incentives. These incentives typically cover most of the costs associated with the entire installation, so developers can boost property value and deliver amenities that attract and retain tenants.



Scenario 3: EVSE Installed w/ ALMS (Total EV Load = 200A)

This final scenario also goes above and beyond EV Ready by adding EVSEs, with each group of two parking spots served by one 40A breaker. This scenario would lower the load by 50% as opposed to the 75% in scenario two, but it utilizes simpler automated load management systems and does not require running 100A wiring to each spot. Due to its simplicity and the load saved, this is a common choice among developers.

