

Installation Requirements for Electric Vehicle Charging Stations¹

The following table summarizes the EVSE installation requirements for Minnesota state agencies to comply with Americans with Disabilities Act (ADA) guidelines.²

Number of spaces	4% (e.g., 1 in 25 spaces) but no less than one of electric vehicle (EV) charging spaces, in any given parking facility, must be accessible compliant. These spaces are accessible electric vehicle (EV) charging spaces, not ADA parking spaces.
Parking stall	11 feet minimum wide by 18 feet minimum long.
Maneuvering clearance width	Minimum 36 inches wide, hash-marked, at the top of the parking space between the charging station and the vehicle.
Accessible route slope/cross slope	Accessible Route Slope and Cross Slope Maximum 1:20 (5 percent) running slope and 1:48 (2%) cross slope; Accessible vehicle spaces 1:48 (2%) in all directions.
Accessible ramps	A ramp or curb-cut must be accessible in order to establish an accessible route to and operation of charging station.
Side access aisle	Side access aisle of 60 inches minimum in width to allow space for wheelchair and equipment in and out of space. (When paired with an 11-foot wide accessible parking stall this is both van and car accessible).
Reach range	The front and side of the EVSE must have 48 inches of space to allow reach to all operable parts from a wheelchair.
Accessible controls	Operable with one hand and not requiring tight grasping, pinching, twisting of the wrist or force more than 5 pounds.
Cord Length / Cord Management system	Cord Length must be a minimum of 20 feet long. The EVSE must incorporate a cord management system or method to eliminate potential for cable entanglement, user injury or connector damage from lying on the ground.
Posted signage	“Accessible EV Charging Station” signs shall be centered at the head end of the parking space a maximum of 96 inches from the head of the spaces and be mounted 60 inches minimum and 66 inches maximum from the floor of the space. “Electric Vehicles only” stenciled graphics are required on each of the parking pad.

¹ Where compliance with the requirements of these guidelines is technically infeasible due to existing site constraints, installation of EV charging spaces shall provide accessibility to the maximum extent technically feasible.

² <https://www.access-board.gov/ada/guides>

Additional items for ADA Compliance of Level 2 EV charging stations:

Facility Accessibility	Must be connected by a minimum of 48-inch-wide accessible route in proximity (not necessarily adjacent) to the entrance of the building. If station is for multiple buildings, access must be to the nearest accessible walkway. Mobility hubs and gas stations where the sole function is to fuel the vehicle, stand-alone parking lots and stand-alone parking structures do not need to have an accessible route.
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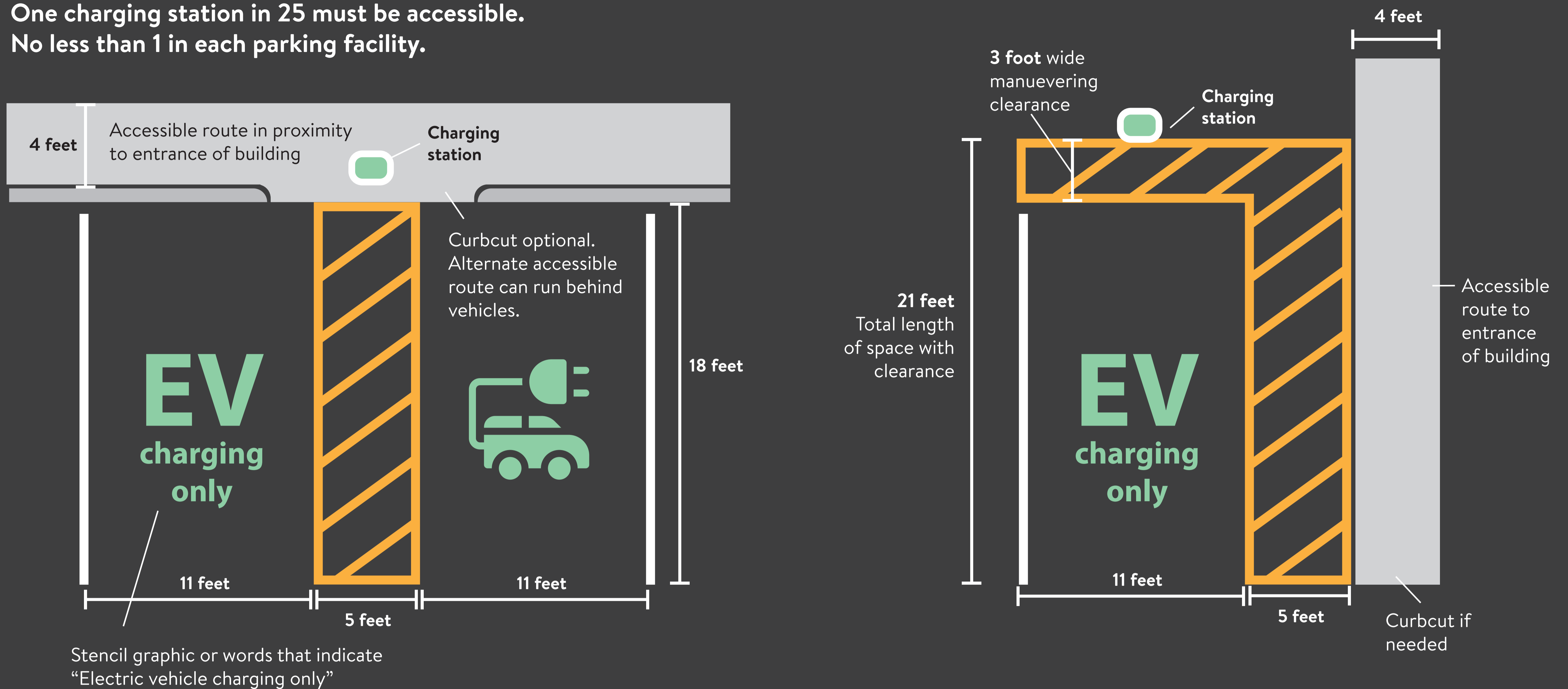
Additional non-ADA requirements for all Electric Vehicle charging stations:

Posted signage	“Charging station Electric Vehicles Only” signs shall be centered at the head end of the parking space a maximum of 96 inches from the head of the spaces and be mounted 60 inches minimum and 66 inches maximum from the floor of the space. “Electric Vehicles only” stenciled graphics are required on each of the parking pads.
Bollards	Install bollards that are 3-feet to 4-feet in height to protect the station equipment from accidental impact (if stand-alone charging station).
Payment options/card readers	If the stations require payment, they must be Payment Card Industry compliant to allow direct use of a credit or debit card at the station itself. Stations may also offer additional payment methods including subscription methods, smart cards, or smart phone applications.
Other considerations	Ensure that bollards, wheel stops and curbs do not obstruct the approach and use of charging station.

This document will be reviewed again by January 2023.

ADA requirements for electric vehicle charging stations

One charging station in 25 must be accessible.
No less than 1 in each parking facility.



ADA forward and side reach limits

