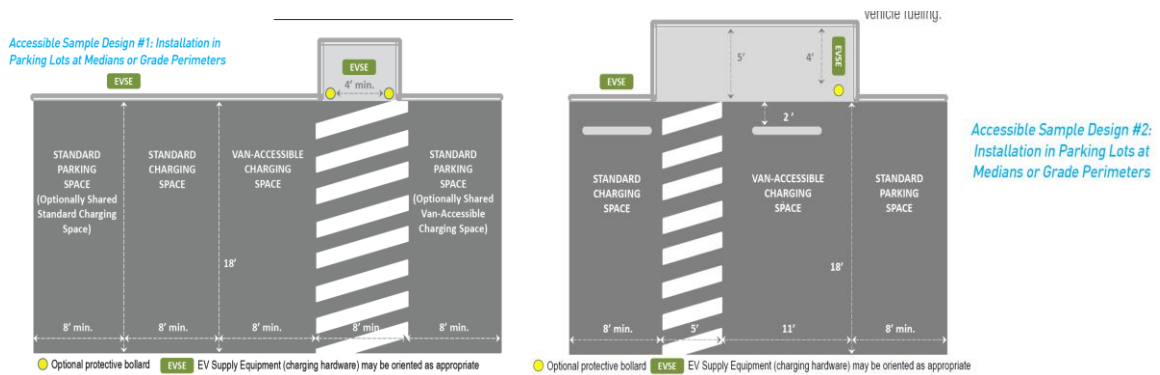


# Accessible Electric Vehicle (EV) Charging Station Guideline for Catawba County

This guideline is intended for public or private entities installing EV charging stations for public use in Catawba County. (NCDOT identifies the primary purpose of EV charging spaces as fueling instead of parking)

1. EV charging stations are considered a “separate parking facility” and are required to meet the provisions of NCBC 1106.1 for the number of accessible parking spaces and 1106.5 for the number of van-accessible parking spaces. (one van accessible parking space is required for the first 25 standard charging spaces)
2. The size of a EV van-accessible charging space is either 8’ wide with an 8’ wide access aisle OR 11’ wide with a 5’ wide access aisle meeting ICC A117.1 section 502.



3. The maximum slope at an EV accessible charging space and access aisle is 2% in all directions meeting ICC A117.1 section 502.5
4. An accessible route is required from the access aisle to the EV supply equipment and to the charging port on the vehicle per NCBC 1104.2 (the charging cords are not allowed to run across any general use sidewalks or walkways)
5. An accessible route meeting NCBC 1104 and ICC A117.1 section 402 & 403 (4’ wide, a maximum 5% running slope and 2% cross-slope) is required from the accessible EV charging space access aisle to the accessible building on site. (if there is no building associated to the EV charging space an accessible route must be provided to the accessible pedestrian entrance of the parking facility).
6. A clear floor space meeting ICC A117.1 section 305 is required at the EV supply equipment.
7. The EV supply equipment is required to meet accessible reach ranges (generally 15” minimum to 48” maximum AFG) and operable parts (no tight grasping, pinching or twisting) requirements per ICC A117.1 section 308 & 309
8. Bollards, wheel stops or curbs installed to protect EV supply equipment from impact (NEC 110.27) must be placed as to not obstruct the use of the EV supply equipment or maneuvering spaces.
9. A plan submittal should include a site plan with details showing all of the above and;
  - (a) Parking space design meeting ICC A117.1 section 502

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- (b) Accessible routes meeting NCBC 1104 and ICC A117.1 sections 402 & 403
- (c) Ramps and/or curb cut details if applicable meeting ICC A117.1 section 405 and/or 406

Note 1: An EV accessible charging space is considered an accessible priority space that is permitted to be used a standard charging space when the all other spaces are in use. As such any parking signage should state “Accessible Priority” at the space.

Note 2: It is permitted to install a charging station at an existing-marked accessible space in an existing parking facility that is made to meet the accessible charging space requirements as outlined above, in lieu of adding one. Signage at a space like this should state “Accessible Parking. EV Charging Optional”.

Note 3: Charging stations may also have local zoning or other agency requirements.

Note 4: Charging stations added to an existing parking facility are considered new construction not an alteration.

\*This guideline is not intended to be all inclusive of the requirements for EV charging stations\*