

MANUAL FOR CURBSIDE ELECTRIC VEHICLE CHARGING CORDS CROSSING THE PUBLIC RIGHT-OF-WAY

BACKGROUND

This Manual illustrates how to safely cover and use a charging cord crossing a sidewalk or public right-of-way for the purpose of providing power to charge an electric vehicle (EV)¹ parked curbside.

APPLICABILITY

This Manual is meant to assist you in using a curbside charging cord to charge your EV on a public street. If you have off-street parking available, you should use that for charging your EV rather than the street. This Manual is intended for properties with an adjacent sidewalk and available on-street parking.

ENFORCEMENT

Failure to comply with this guidance may result in the removal of the charging cord equipment and imposition of fines under Wilmington City Code Section 42-247.

INSURANCE

Residents should consult with their insurance providers to ensure that their homeowners and/or tenant liability coverage captures this circumstance with a suggested limit of \$1 million. Residents should inquire about adding or modifying the definition of "insured" and "Electric vehicle charging system" to their policy. Suggested definitions are below.

¹ "Insured" is extended to include the association of property owners or landlord named in the Schedule above, with respect to: Personal Liability and Medical Payments To Others; but only with respect to "bodily injury" or "property damage" arising out of the installation, maintenance or use of the "electric vehicle charging system" installed in a location that is provided for the exclusive use of an "insured".

GENERAL PROVISIONS:

- Residents are not guaranteed a reserved parking space and cannot use signage or other means to reserve a parking space.
- Use only a Level 1 (110-120 VAC) charging cord.
- **Level 2 (208-240 VAC) charging cords may not cross over the public right-of-way.**
- The EV charging cord shall cross perpendicular to the sidewalk to minimize obstacles to mobility.
- When not charging an EV, a charging cord shall be removed from the public space and out of sight unless an overnight charge is not complete, in which case, the cord must be removed no later than 8:00 am if it is not still charging an EV.
- All local parking regulations, both temporary and permanent, remain unchanged and shall be followed.
- Cords must comply with all relevant sections of the National Electric Code.
- Residents must use an electric outlet associated with their utility account.
- All equipment must be listed and installed per manufacturer's instructions.
- Flexible charging cables must be suitable for the conditions of use and location.
- Flexible cables shall be suitably rated for equipment ampacity and continuous power output.
- The rating of any cord and plug connected utilization equipment not fastened in place shall not exceed 80% of the branch circuit ampere rating.
- Contact a local electrician with any questions.

¹ EV includes battery electric vehicles (BEVs) and plug-in hybrid electric vehicles (PHEVs)

CHARGING CORD COVERS

Charging cords must be covered by a highly visible, stable, and secure low-angle cable ramp while charging. A cover should remain highly visible at night; therefore, residents are encouraged to use reflective tape or colors that contrast with adjacent walking surfaces.

Height lower than 1/2 inch

If the total height of the equipment (both cord and ramp) does not exceed 1/2 inch, the following requirements apply:

- The ramp shall cover the charging cord completely across the sidewalk and can be no less than 4 feet in length;
- The ramp shall be no steeper than a 50% grade or 1:2 gradient.

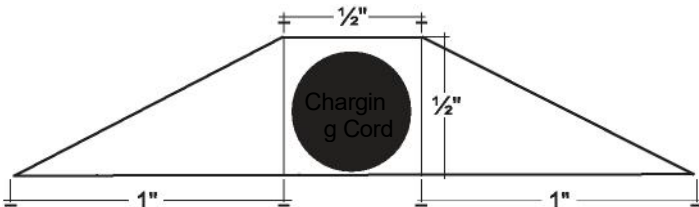


FIGURE 1. CROSS-SECTION OF RAMP REQUIREMENTS FOR UP TO 1/2 INCH

This diagram complies with the change-in-level and ramp requirements of the Americans With Disabilities Act (ADA). Deviations from this plan must comply with these provisions.

Height exceeding 1/2 inch

If the total height of the equipment (both cord and ramp) exceeds 1/2 inch in height, the following requirements apply:

- The ramp shall be no steeper than an 8.3% grade or 1:12 gradient;
- A 3 feet x 5 feet clear landing on the sidewalk must be on either side of the ramp;
- The ramp shall cover the entire width of the sidewalk and can be no less than 4 feet wide;
- A 5 feet x 4 feet or greater landing platform shall be at the top of the ramp;
- The landing must be flat, with no more than a 2% slope (1:50 gradient) in any direction; and
- Perpendicular to the direction of travel, the ramp cannot have a cross slope exceeding a 2% grade (1:50 gradient).

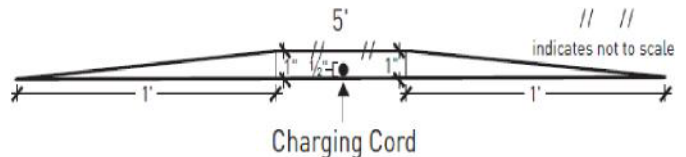
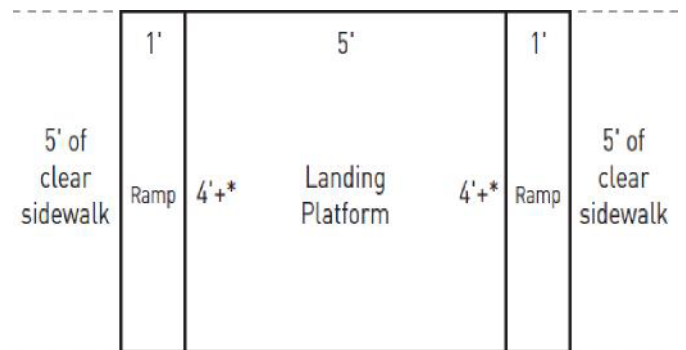


FIGURE 2. CROSS-SECTION OF RAMP REQUIREMENTS FOR OVER 1/2 INCH HEIGHT. EXAMPLE BASED ON A TOTAL HEIGHT OF 1 INCH



*Shall be the width of the sidewalk and no less than 4 feet.

FIGURE 3. OVERHEAD VIEW DIAGRAM OF A RAMP FOR HEIGHTS OVER 1/2 INCH