

ELECTRIC VEHICLE CHARGING CORD GUIDANCE FOR CROSSING THE PUBLIC RIGHT-OF-WAY

BACKGROUND

A growing number of District residents drive or are interested in driving an electric vehicle (EV) but struggle to find reliable charging solutions. This is especially true for residents without dedicated off-street parking. As such, to expand access to charging opportunities, these guidelines illustrate how to safely cover a charging cord crossing a sidewalk or public right-of-way for the purpose of providing a charge to a curbside vehicle.

APPLICABILITY

By following this guide, a public space permit is not required to charge an EV on the street. If a resident has off-street parking available, they should use that for charging rather than the street. DDOT has developed this guidance primarily for properties with an adjacent sidewalk and available on-street parking.

ENFORCEMENT

Failure to comply with this guidance may result in the removal of unsafe equipment and the collection of expenses incurred to restore public space pursuant to DC Code § 10-1181.02 and 24 DCMR § 1304.2.

INSURANCE

Residents should consult with their insurance providers to ensure that their homeowners / tenant liability coverage captures this circumstance with a suggested limit of \$1 million. Residents should inquire about adding or modifying the definition of "insured"¹ and "Electric vehicle charging system"² 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".

² "Electric vehicle charging system" means a device that is used to provide electricity to a plug-in electric vehicle or plug-in hybrid vehicle, is designed to ensure that a safe connection has been made between the electric grid and the vehicle and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage

GENERAL PROVISIONS:

- Residents are not guaranteed a reserved parking space and cannot use signage or other means to reserve a parking space.
- Use only Level 1 (110-120V) charging equipment. No Level 2 (240V) charging cords may cross 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, all equipment shall be removed from public space.
- All local parking regulations, both temporary and permanent, remain unchanged and shall be followed.
- Residents are responsible for complying with all relevant sections of the National Electric Code³.
- Residents must use an outlet associated with their utility account.
- All equipment must be listed and installed per manufacturer's instructions⁴.
- All flexible cable used shall be suitable for the conditions of use and location⁵.
- Flexible cables shall be suitably rated for equipment ampacity and power output⁶.
- The rating of any cord and plug connected utilization equipment not fastened in place shall not exceed 80% of the branch circuit ampere rating⁷.
- Residents are responsible for following all NFPA 70, National Electric Code regulations. Contact a local electrician with any questions.

and current level. An electric vehicle charging system may be wall-mounted or pedestal style and may provide multiple cords to connect with electric vehicles. An electric vehicle charging system must be certified by Underwriters Laboratories or an equivalent certification

³ Consult DCRA's website to determine the most current version of the NFPA 70, National Electric Code, the District has adopted.

<https://dcra.dc.gov/page/dc-construction-codes>

⁴ 2014 NFPA 70 110.3(B)

⁵ 2014 NFPA 70 400.4

⁶ 2014 NFPA 70 400.5

⁷ 2014 NFPA 70 210.23(A)(1)

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.

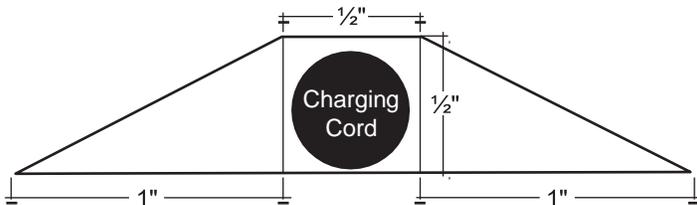


FIGURE 1. CROSS-SECTION OF RAMP REQUIREMENTS FOR UP TO 1/2 INCH

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. Please visit <https://www.access-board.gov/ada/guides/chapter-3-floor-and-ground-surfaces/> for more information.

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 ft x 5 ft 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 ft x 4 ft 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).

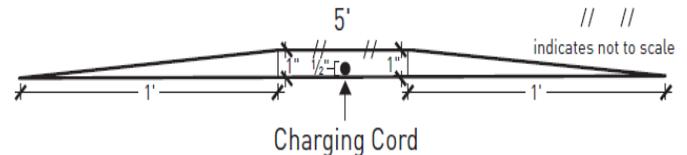
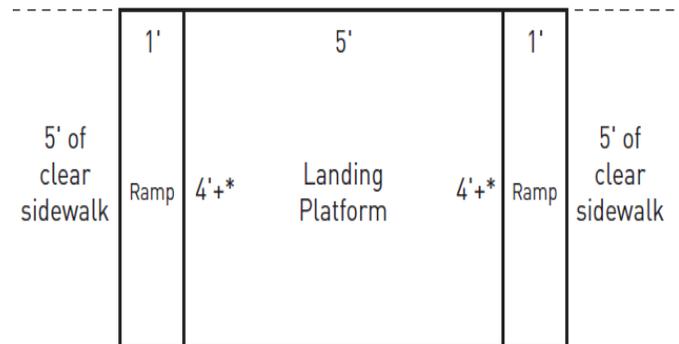


FIGURE 2. CROSS-SECTION OF RAMP REQUIREMENTS FOR OVER 1/2 INCH HEIGHT, EXAMPLE BASED ON A TOTAL HEIGHT OF 1 INCH



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

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