

Cord Cover Program Extension Cord Guidance Document

You are responsible for complying with all relevant sections of the current Canadian Electrical Code and the Vancouver Electrical By-law 5563. This includes, but is not limited to, the use of a ground fault circuit interrupter (GFCI) receptacles for the electrical cord. The information on this page is offered for educational purposes. You are responsible for your actions.

Not All Extension Cords are Made Equal – Choosing the Right one

- Use extension cords that have one of the recognized Canadian certification marks such as CSA, cUL, or cETL, as cords without this certification may pose risks of shocks, burns, or fire and not authorized for use in Canada;
- Ensure the circuit that is feeding the car charger is of a Class-A GFCIs (Ground Fault Circuit Interrupters) outlet. GFCIs are devices that turn off circuits when electrical imbalances are detected, their prime function is to provide protection against hazardous electrical shocks;
- Use heavy duty cables with high enough gauge to handle the current;
- Even though they are less expensive, never expose indoor cords to the elements outdoors for long periods. They'll break down quicker when used outside, causing a risk of sparking or fire;
- Make sure that you use voltage and current that is compatible with your device;
- Never remove the third prong of a plug and never use a 3-prong to a 2-prong adapter.

Using your Extension Cord Safely

- Unroll cords completely before use to avoid overheating or damage;
- Keep cords at a safe distance from heat and water sources;
- Connecting several extension cords increases the risk of making them overheat, which causes the insulation coating to wear away, resulting in fire or electrocution risks;
- If you keep the cords connected for days or use ones with mismatched power outputs, you might run into safety problems such as risk of electrical shocks or fires;
- Use the shortest length of cord possible. To be on the safe side, never use an extension cord exceeding 30.5m/100 feet (preferably much shorter), assuming your vehicle manufacturer allows it;
- Do not place charging products near combustible or soft surfaces, which can trap heat and result in overheating or a fire. Only use approved cable management covers, do not run cords under rugs or mats, which pose fire risks;
- Check the cords for fraying to ensure they're in good condition. Fraying cords pose shock and fire risks and must be replaced immediately.

The information on page 1 of 4 of this document is offered for educational purposes. You are responsible for your actions.

Charging Cord Cover Specifications

Charging cords must be covered by a high-contrast, light-reflective, slip-resistant, stable, and secure low-angle cable ramp while charging. The City encourages licensees to opt for the lower-profile (less than 2 cm height) option whenever possible.

1. If the total height of the equipment (both cord and ramp) does not exceed 2 cm, the following requirements apply:
 - The ramp shall cover the entire width of the sidewalk and can be no less than 1.2 m wide;
 - The ramp shall be no steeper than a 50% grade or 1:2 gradient.

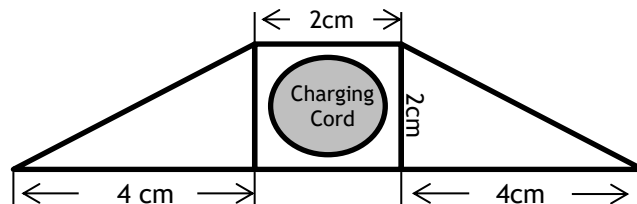


Figure 1 - Cross-section of ramp requirements for total heights up to 2 cm

2. If the total height of the equipment (both cord and ramp) exceeds 2 cm in height, the following requirements apply:
 - The ramp shall be no steeper than an 8.3% grade or 1:12 gradient (example shown in Figure 2);
 - A 1.5 m x 1.2 m or greater landing platform shall be at the top of the ramp;
 - The landing at the top of the ramp must be flat, with no more than a 2% slope (1:50 gradient) in any direction; and,
 - The ramp shall cover the entire width of the sidewalk and can be no less than 1.2 m wide (Figure 3);
 - A 1.5 m x 1.2 m clear landing on the sidewalk must be present on either side of the ramp;
 - Perpendicular to the direction of travel, the ramp cannot have a cross slope exceeding a 2% grade (1:50 gradient).

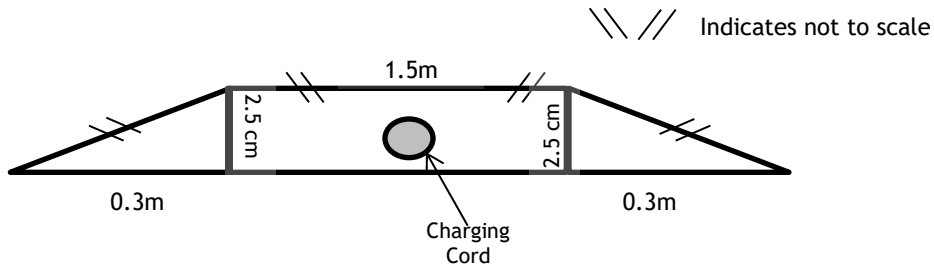
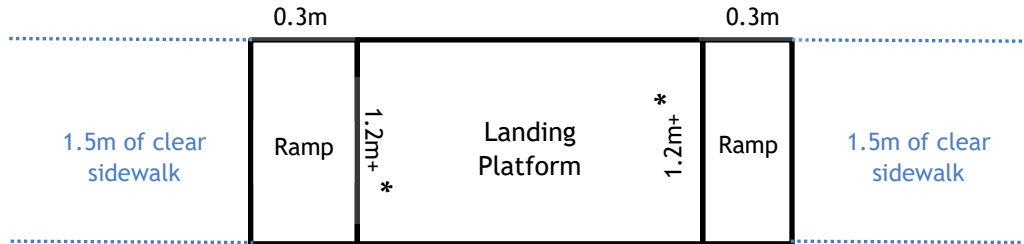


Figure 2 - Cross-section of ramp requirements for total height greater than 2cm; example based on total height of 2.5 cm



* shall be the width of the sidewalk and no less than 1.2m

Figure 3 - Overhead diagram of ramp requirements for total height greater than 2cm

Additional Requirements and Conditions

- The cover must be constructed so as to protect the charging cable from crushing or other damage. It is your responsibility to maintain the cable in a safe condition and protect it from physical damage;
- Adherence to these specifications do not provide any guarantee of access to any on-street parking space;
- Use of signage or other means to reserve a parking space in front of your residence is prohibited
- Use only Level 1 (120V) charging equipment. No Level 2 (240V) charging cords may cross the public right-of-way;
- The EV charging cord and ramp shall cross perpendicular to the sidewalk to minimize obstacles to mobility;
- When not connected to an EV, all equipment shall be removed and stored on private property;
- All local parking regulations, both temporary and permanent, remain unchanged and shall be followed;

- All snow and ice clearing by-laws continue to apply, and cords and covers must be placed directly onto the sidewalk surface;
- You are responsible for complying with all relevant sections of the current Canadian Electrical Code and the Vancouver Electrical By-law 5563. This includes, but is not limited to, the use of a ground fault circuit interrupter (GFCI) receptacle for the electrical cord;
- You should use an outlet linked to your utility bill; or have permission from the utility account holder that you may use their outlet for the purpose of charging an electric vehicle, per the conditions of the license agreement;
- The City recommends that tenants wishing to obtain a license and follow these specifications obtain permission from their landlord.

ENFORCEMENT

Failure to comply with these specifications may result in the removal of equipment and the collection of expenses incurred to restore public space in the manner provided by law.



ELECTRIC VEHICLE CHARGING CORD GUIDANCE FOR CROSSING THE PUBLIC RIGHT-OF-WAY (GROUND FLOOR RESIDENTIAL USE)

Last Revised 10/1/19

BACKGROUND

A growing number of Seattle residents drive or are interested in driving an electric vehicle (EV)¹ but struggle to find reliable charging solutions. This is especially true for residents without dedicated off-street parking. We are working to increase EV charging access to help meet our climate action and vehicle electrification goals.² To assist you, we provide guidance for on-street Level 1 (110-120V) charging in single-family and multi-family zones.³ We continue to explore additional, longer term EV charging solutions for single-family, multi-family, and mixed use zones.

APPLICABILITY

By following this guide, a Street Use permit is not required to charge an EV on the street. If you have off-street parking available you should use that spot for charging rather than the street. This guidance applies to ground floor residential uses in single-family and multi-family zones. We have developed this guidance for properties with an adjacent sidewalk.

Charging Cord Covers

Charging cords must be covered by a highly visible, stable, and secure low-angle cable ramp while charging.

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; and
- The ramp shall be no steeper than a 50% grade or 1:2 gradient.

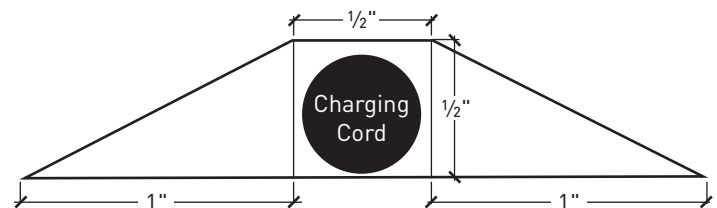


FIGURE 1. CROSS-SECTION OF RAMP REQUIREMENTS FOR UP TO 1/2 INCH

¹An Electric Vehicle is a vehicle that operates, either partially or exclusively, on electrical energy from an off-board source that is stored on-board for motive purposes.

²www.seattle.gov/environment/climate-change/drive-clean-seattle

³This Client Assistance Memorandum (CAM) should not be used as a substitute for codes and regulations. Users are responsible for compliance with all code and rule requirements, whether or not described in this CAM, including the Americans With Disabilities Act accessibility guidelines.

If the total height of the equipment (both cord and ramp) exceeds ½ inch in height, the following requirements apply:

- The ramp shall be no steeper than an 8.3% grade or 1:12 gradient;
- A 3 foot x 5 foot 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 foot x 4 foot 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).

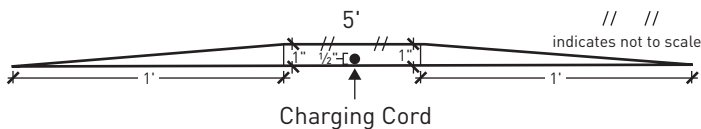
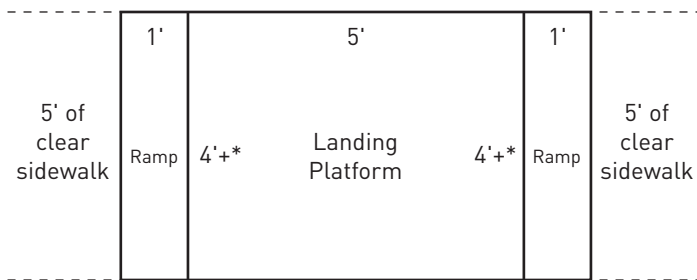


FIGURE 2. CROSS-SECTION OF RAMP REQUIREMENTS FOR OVER ½ INCH HEIGHT, EXAMPLE BASED ON A TOTAL HEIGHT OF 1 INCH



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

FIGURE 3. OVERHEAD DIAGRAM OF A RAMP FOR HEIGHTS OVER ½ INCH

Additionally:

- You are not guaranteed a reserved parking space. You cannot use signage or other means to reserve the parking space in front of your residence.
- 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.
- All local parking regulations, both temporary and permanent, remain unchanged and shall be followed.
- You are responsible for complying with all relevant sections of the National Electric Code.
- You shall use an outlet linked to your utility bill.

ENFORCEMENT

Per the SMC 15.04.072, failure to comply with this guidance may result in the removal of equipment and the collection of expenses incurred to restore public space in the manner provided by law.

Access to Information

Client Assistance Memos are available online at: www.seattle.gov/transportation/document-library/client-assistance-memos. Paper copies of these documents are available at our Permit Services Counter located on the 23rd floor of the Seattle Municipal Tower at 700 5th Avenue in downtown Seattle; phone number (206) 684-5253.