CT4000

Pedestal Mount Concrete Preparation

Installation Guide

IMPORTANT SAFETY INSTRUCTIONS: SAVE THESE INSTRUCTIONS

WARNING:

1. Read and follow all warnings and instructions before installing and operating the ChargePoint® Charging Station. Install and operate only as instructed. Failure to do so may lead to death, injury, or property damage, and will void the Limited Warranty.

2. Only use licensed professionals to install your ChargePoint charging station and adhere to all national and local building codes and standards. Before installing the ChargePoint® charging station, consult with a licensed contractor, such as a licensed electrician, and use a trained installation expert to ensure compliance with local building and electrical codes and standards, climate conditions, safety standards, and all applicable codes and ordinances. Inspect the charging station for proper installation before use.

3. Always ground the ChargePoint charging station. Failure to ground the charging station can lead to risk of electrocution or fire. The charging station must be connected to a grounded, metal, permanent wiring system, or an equipment grounding conductor shall be run with circuit conductors and connected to the equipment grounding terminal or lead on the Electric Vehicle Supply Equipment (EVSE). Connections to the EVSE shall comply with all applicable codes and ordinances.

4. Install the ChargePoint charging station on a concrete pad using a ChargePoint approved method. Failure to install on a surface that can support the full weight of the charging station can result in death, personal injury, or property damage. Inspect the charging station for proper installation before use.

5. This charging station is not suitable for use in or around hazardous locations, such as near flammable, explosive, or combustible materials.

6. Do not use this product if the enclosure, EV cable, or the EV connector is broken, cracked, open, or shows any other indication of damage.

7. Do not put fingers into the electric vehicle connector.

8. Use 75°C or 90°C wire copper conductors only.

Important: Under no circumstances will compliance with the information in this manual relieve the user of his/her responsibility to comply with all applicable codes or safety standards. This document describes the most commonly-used installation and mounting scenarios. If situations arise in which it is not possible to perform an installation following the procedures provided in this document, contact ChargePoint, Inc. **ChargePoint, Inc. is not responsible for any damages that may result from custom installations that are not described in this document or for any failure to adhere to installation recommendations.**

Product Disposal

To comply with Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE), devices marked with this symbol may not be disposed of as part of unsorted domestic waste inside the European Union. Enquire with local authorities regarding proper disposal. Product materials are recyclable as marked.

No Accuracy Guarantee

Commercially reasonable efforts were made to ensure that the specifications and other information in this manual are accurate and complete at the time of its publication. However, the specifications and other information in this manual are subject to change at any time without prior notice.

Copyright and Trademarks

Symbols Used in This Document

This guide and product use the following symbols:

DANGER: Risk of electric shock.

WARNING: Risk of personal harm or death.

CAUTION: Risk of equipment or property damage.

Important: Crucial step for installation success.

Read the manual for instructions.

Ground/protective earth.

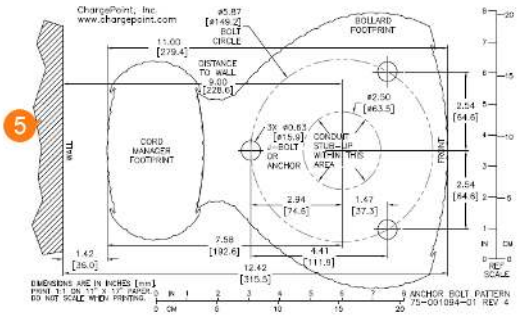
Concrete Mount Kit

The ChargePoint charging station pedestal mount can be installed either into new concrete or onto an existing concrete surface (on an intermediate floor only). The kit components you need to use, the tools required, and the installation steps vary depending on the type of installation: installation on new concrete or installation on existing concrete.

WARNING:
Do not use expanding anchor bolts.
Do not install the CT4000 on an asphalt surface.

ChargePoint offers an optional CT4000 Concrete Mount Kit for purchase. The kit contains all parts needed to install the CT4000 pedestal mount into new or existing concrete.

	Kit Contents
1	9 galvanized washers
2	3 hot-dipped galvanized threaded bolts
3	1 plastic bolt installation template
4	12 hex nuts
5	CT4000 installation template with CMK footprint



Note: The Concrete Mount Kit contains 12 hex nuts and 9 galvanized washers. You need only 6 of each for installation on existing concrete pad.

Installation into New Concrete

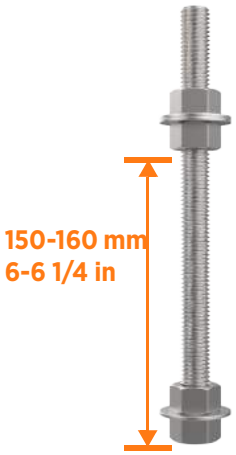
Before casting new concrete, review the site for suitability to install a CT4000. The CT4000 requires space behind the power stub-up for the Cable Management Kit (CMK). To ensure adequate clearance, refer to the illustrations below and to the CT4000 Installation Template (75-001094-01) included in the Concrete Mount Kit.

Note: If the original copy of the installation template is lost, a new one can be printed at: https://chargepoint.box.com/v/CT4000-bpt-enus. Ensure the PDF version of the mounting template is accurate by printing at 100% scale on 11x17 paper and verifying at least one dimension.

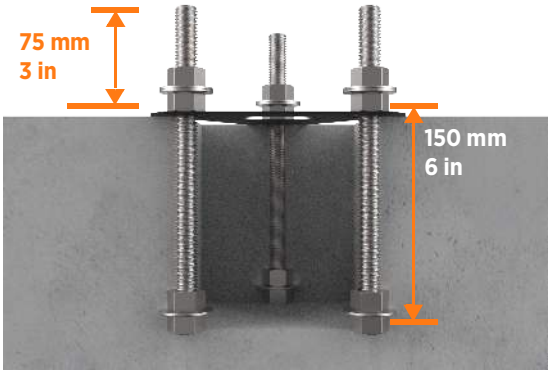
- Always check applicable codes to ensure compliance. You may need to adjust these instructions to comply with codes that apply at your installation location.
- The concrete block must measure at least 610 mm (24 in) on all sides.
- The bolt threads must extend 75 mm (3 in) above the concrete.
- The conduit must extend 305 to 610 mm (12 to 24 in) above the concrete.

Installation Instructions

1. Install two nuts, with two washers captured between them, onto each of the three bolts. Lock them together so the lower end of the upper nut is located 150 to 160 mm (6 to 6-1/4 in) from one end of the bolt. This sets the length of the exposed threads.
2. Place the plastic bolt installation template over the three bolts. This ensures the relative position of the bolts and that the flange of the pole fits over the bolts.
3. On the opposite end of each bolt, install a nut, a washer, and a nut. Lock the two nuts together so that the lower nut aligns to the bottom of the bolt. This provides retention for the bolt in the concrete.



4. Immediately after pouring the concrete, push the bolts into the concrete 150 mm (6 in) deep.
   - Ensure correct alignment, with the two bolts facing forward and the third bolt to the rear.
   - Ensure that the top 75 mm (3 in) of the bolts remains exposed.



Important: Rotate the bolts as you insert them. This allows the concrete to fully coat the threads of the bolts, reducing the amount of trapped air.

Note: The plastic bolt installation template can be left in place.

5. Use a bubble level to ensure the bolts are plumb.
6. When the concrete is fully set, remove the upper nuts and the washers to install the pedestal's mounting post.

You are now ready to install the CT4000 pedestal mount charging station.

Installing on Existing Concrete

Review the site for suitability to install a CT4000. The CT4000 requires space behind the power stub-up for the Cable Management Kit (CMK). To ensure adequate clearance, refer to the CT4000 Installation Template (75-001094-01) included in the installation kit.

Minimum Requirements

- Always check local codes to ensure compliance. You may need to adjust these instructions to comply with codes that apply at your installation location.
- Review the dimensions of the existing concrete slab. To safely mount a CT4000 charging station, the concrete must be at least 150 mm (6 in) thick. At this thickness, all of the CT4000 mounting bolts must be positioned at least 380 mm (15 in) from the front edge, at least 300 mm (12 in) from the side edges, and at least 150 mm (6 in) from the rear edge of the concrete slab.
- If an existing charging station is already in place at the installation site, turn off all power to the station and disassemble according to the original manufacturer's instructions. Cut away any existing bolts or non-power conduit stub-up to ground level. You may need to plug cut-away conduits at the slab end, and disconnect wiring at the other end.

Tools Required

Electric hammer drill with 12 mm (1/2 in) or larger chuck.

Consumables Required

The following table lists and describes consumable items that you will need. The quantity listed in the table is based on installation of one charging station.

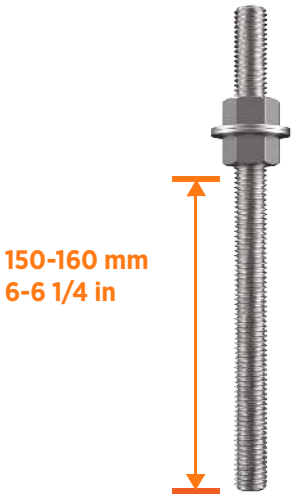
Note: The consumption rate of these products varies depending on conditions at the installation site.

Quantity	Description	Purpose
1	Epoxy adhesive for concrete such as Hilti RE-500.	Fill drilled holes.
1	Electrical cleaning and maintenance aerosol, any angle spray duster, 235 ml (8 oz), such as McMaster #7437K35	Clean drilled holes. **Note**: Compressed air will work.
1	Slow spiral round-shank masonry drill bit, 19 mm (3/4 in) diameter, 12.5 mm (1/2 in) shank, 254 mm (10 in) drill depth, 305 mm (12 in) length overall, such as McMaster #2960A22	Drill 19 mm (3/4 in) holes in concrete. **Note**: The holes must be at least 150 mm (6 in) deep.
1	Drill bit for concrete embedded rebar, round 19 mm (3/4 in) bit size, 12.5 mm (1/2 in) shank diameter, 305 mm (12 in) length overall, such as McMaster #28655A25	Drill 19 mm (3/4 in) hole through rebar.

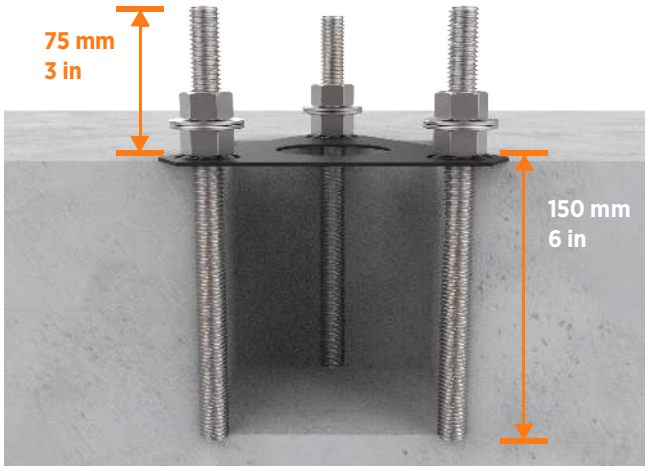
Quantity	Description	Purpose
1	Nylon loop handle brush, 19 mm (3/4 in) brush diameter, 75 mm (3 in) length brush, 216 mm (8 1/2 in) length overall, such as McMaster #7221T13	Clean drilled holes.
1	Push-on round cap, fits 16 mm (5/8 in) - 17.5 mm (11/16 in) OD, 1/2 in inside height, pack of 100, such as McMaster #9753K47	Keeps the epoxy inside the drilled holes in situations where the slab is only 150 mm (6 in) deep.

Installation Instructions

1. Install two nuts, with two washers captured between them. Lock them together so the lower end of the upper nut is located 150 to 160 mm (6 to 6 1/4 in) from the bottom of the bolt. This sets the length of the exposed threads.
2. Place the plastic bolt installation template to mark the hole locations.



3. Remove the template and drill three 19 mm (3/4 in) diameter holes 150 mm (6 in) deep into the concrete.
   - When locating the template, consider the charging station's total footprint.
   - It is important that the bolts are parallel after installation. Ensure the drill holes are plumb by using a level to check the angle of the drill after drilling 25 to 38 mm (1 to 1 1/2 in).
   - If installing over existing buried conduit, position the center of the template around the conduit stub-up.
   - You may need two drill bits: one for the concrete (with the pilot) and another for the rebar (without the pilot). Always start the hole using the standard drill bit, then switch to the rebar drill bit only if drilling through rebar.
4. Remove all dust from inside the drilled holes using compressed air, a vacuum, and/or a brush.
5. If the concrete slab is only 150 mm (6 in) deep, insert a plug (such as McMaster product



#9753K56) in each hole to keep the epoxy in place until it hardens. Place the plug over the long end of a bolt and then use the bolt to push the plug to the bottom of the hole.

6. Fill each hole with epoxy to about 65 to 75 mm (2 1/2 to 3 in) below the top. Continue immediately to the next step because the epoxy sets quickly.

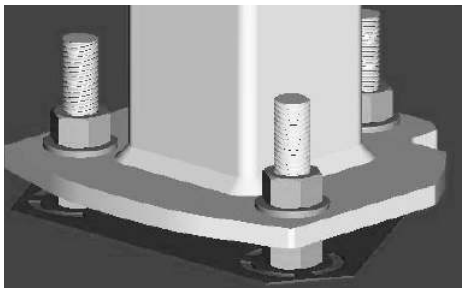
   Note: Inserting the threaded bolts displaces the epoxy, causing it to fill the holes to the grade level. If the epoxy is below grade level after the next step, add more epoxy.

7. Place the plastic concrete bolt installation template over the holes. This ensures the relative position of the bolts and that the flange of the pole fits over the bolts.
8. Insert the bolts through the template, into the holes.

Important: Rotate the bolts as you insert them. This allows the epoxy to fully coat the threads of the bolts, reducing the amount of trapped air.

Note: The installation template can be left in place.

9. If needed, top the holes with epoxy to grade level.
10. Use a bubble level to ensure the bolts are plumb.
11. Allow the epoxy to cure (depending on cure times recommended by the epoxy manufacturer) before removing the top nuts and washers.
12. Allow the epoxy to fully cure (depending on cure times recommended by the epoxy manufacturer) before applying torque to the nuts.



You are now ready to install the CT4000 pedestal mount charging station.

Warranty Information and Disclaimer

The Warranty you received with your Charging Station is subject to certain exceptions and exclusions. For example, your use of, or modification to, the ChargePoint® Charging Station in a manner in which the ChargePoint® Charging Station is not intended to be used or modified will void the limited warranty. You should review your warranty and become familiar with the terms thereof. Other than any such limited warranty, the ChargePoint products are provided "AS IS," and ChargePoint, Inc. and its distributors expressly disclaim all implied warranties, including any warranty of design, merchantability, fitness for a particular purposes and non-infringement, to the maximum extent permitted by law.

Limitation of Liability

CHARGEPOINT IS NOT LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOST BUSINESS, LOST DATA, LOSS OF USE, OR COST OF COVER INCURRED BY YOU ARISING OUT OF OR RELATED TO YOUR PURCHASE OR USE OF, OR INABILITY TO USE, THE CHARGING STATION, UNDER ANY THEORY OF LIABILITY, WHETHER IN AN ACTION IN CONTRACT, STRICT LIABILITY, TORT (INCLUDING NEGLIGENCE) OR OTHER LEGAL OR EQUITABLE THEORY, EVEN IF CHARGEPOINT KNEW OR SHOULD HAVE KNOWN OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY EVENT, THE CUMULATIVE LIABILITY OF CHARGEPOINT FOR ALL CLAIMS WHATSOEVER RELATED TO THE CHARGING STATION WILL NOT EXCEED THE PRICE YOU PAID FOR THE CHARGING STATION. THE LIMITATIONS SET FORTH HEREIN ARE INTENDED TO LIMIT THE LIABILITY OF CHARGEPOINT AND SHALL APPLY NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case, you will be required to correct the interference at your own expense.

Important: Changes or modifications to this product not authorized by ChargePoint, Inc., could affect the EMC compliance and revoke your authority to operate this product.

Exposure to Radio Frequency Energy: The radiated power output of the 802.11 b/g/n radio and cellular modem (optional) in this device is below the FCC radio frequency exposure limits for uncontrolled equipment. The antenna of this product, used under normal conditions, is at least 20 cm away from the body of the user. This device must not be co-located or operated with any other antenna or transmitter by the manufacturer, subject to the conditions of the FCC Grant.

FCC/IC Compliance Labels:

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