



MASTER AGREEMENT CONTRACT

DATE: 7/30/2020

MASTER AGREEMENT CONTRACT #: Enter Contract Number

CONTRACTED SERVICE: EV Charging Stations, Final Installation and Maintenance

START DATE: 8/1/2020

END DATE: 7/31/2025

This Contract, is between the following Department of the State of Maine and Provider:

State of Maine DEPARTMENT

Department of Administrative and Financial Services

Address: 9 State House Station, Cross Office Building

City: Augusta

State: ME

Zip Code: 04333-0009

PROVIDER

CD, LLC dba Carbon Day Automotive

Address: 763 Bunker Court

City: Riverwoods

State: IL

Zip Code: 60015

Provider's Vendor Customer #: VS0000023877

Each signatory below represents that the person has the requisite authority to enter into this Contract. The parties sign and cause this Contract to be executed.

Department of Administrative and Financial Services

DocuSigned by:

Jaime C. Schorr

6D6437754DD0459

Jaime Schorr, Chief Procurement Officer

Date 8/18/2020

CD, LLC dba Carbon Day Automotive

DocuSigned by:

Erik Hultman

0CC654F069FF425

Erik Hultman, National Sales Manager

Date 8/18/2020

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

RIDERS

<input checked="" type="checkbox"/>	The following riders are hereby incorporated into this Contract and made part of it by reference: (check all that apply)
<input checked="" type="checkbox"/>	Rider A – Scope of Work / Description of Commodity / Contract Pricing
<input checked="" type="checkbox"/>	Rider B – Terms and Conditions
<input type="checkbox"/>	Rider C - Exceptions
<input checked="" type="checkbox"/>	Rider D – Make Ready Requirements
<input checked="" type="checkbox"/>	Rider E – ChargePoint CT4000 Site Guide
<input checked="" type="checkbox"/>	Rider F – ChargePoint Equipment Specifications
<input checked="" type="checkbox"/>	Rider G – Identification of Country in Which Contracted Work will be Performed
<input checked="" type="checkbox"/>	Rider H – ChargePoint Network and Information Security
<input checked="" type="checkbox"/>	Rider I – Municipality / Political Subdivision Participation

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

RIDER A

SCOPE OF WORK / DESCRIPTION OF COMMODITY / CONTRACT PRICING

This master agreement contract is the direct results of State of Maine RFP 202003048

Carbon Day Automotive "Provider" will supply **Level 2 Networked Electric Vehicle Charging Stations** including networking, operation, maintenance and warranty. Provider will be the single point managerial- level contact for the State of Maine to coordinate all requirements. Provider is the point of contact for any problems/questions that may arise during the contract period. Provider is available for research information, and deliver special reports as needed or directed by the State of Maine related to the equipment, products, and services associated with electric vehicle charging stations.

Provider's Single Point Contact Person:

Name: Erik Hultman
Title: National Sales manager
Address: 163 S. Wheeling Road
Wheeling, IL 60090
Email: Erik@carboday.com
Phone: 847-971-8884

Carbon Day Automotive, through ChargePoint, shall provide installation and station activation to a made ready site. They will be responsible for all operations and maintenance with ChargePoint support and ChargePoint Assure program.

Sub-contractor: ChargePoint, Inc., 240 East Hacienda Avenue, Campbell, CA 95008, Phone: 1-408-841- 4500. Carbon Day Automotive reserves the right to select additional ChargePoint certified installers as needed.

Licensure/Certification: All ChargePoint installers are certified through the ChargePoint Installation Training Program consisting of a series of online courses that take an installer from site assessment all the way through power-up and pinpointing. All installers receive a certificate of completion upon successful completion of the training.

Dual Port Charging Equipment**ChargePoint CT4021 Dual Pedestal Mounted Charger****ChargePoint CT4023 Dual Wall Mounted Charger**Equipment Specifications/Configuration

1. Hard wired Level 2 EV 208/240 – Electrical Input Wiring-Standard 5-wire with SAE J1772 standard – all CT4000 models offer SAE J1772 plugs
2. Cable length 18 ft. – Functional Interfaces charging cable length 18'
3. Able to charge all EVs produced by multiple manufacturers – The J1772 is a universal plug that allows all vehicles, including Tesla with an adapter, to use a ChargePoint station.
4. Weather proof – Safety and Operational ratings – Operating Temperature and Humidity -22F to 122F
5. Each charging station must be new, not refurbished or remanufactured
6. Incorporates a cord management system and complies with NEC Article 625 as it applies to cord management- Functional Interfaces Overhead Cable System included with CT4000 Safety and Operational Rating
7. Complies with NEC and FCC regulations - Safety and Connectivity Features Safety Compliance complies with UL and NEC

STATE OF MAINE | MASTER AGREEMENT CONTRACT**MA 18P 200730-004**

8. Access is not limited by requiring membership – ChargePoint does not require membership to use its station. You can easily start a session with your free ChargePoint card that comes with each GM, Nissan, VW and BMW, using the ChargePoint mobile app, with an RFID credit card or by calling driver support at 888-758-4389. The 888 number is listed on each ChargePoint station.
9. Over-current protection - Safety and Connectivity Features – Surge Protection
10. LCD Display is daylight readable with auto brightness control.
11. Point of sale functionality – The 5.7"LCD display allows station owners to deliver advertising messages. In addition, on station branding is available.

Site Validation

On-Site Validation of cellular coverage, electrical capacity, transformers, panels, breakers, wiring and station installation will be done by ChargePoint. Cost is included in annual service fees.

Order/Delivery/Setup of Equipment

1. Agencies will issue delivery orders (DO) against this master agreement for the purchase of chargers.
2. Provider will place the order with ChargePoint for equipment the same day the DO is received.
3. ChargePoint will process the order and ship within 5 business days. The station(s) will be shipped to address provided by agency and included on the DO.
4. The ordering agency and Carbon Day Automotive will receive copies of the Shipping Orders when the stations are shipped.
5. Provider will then verify, with the using agency, when the made ready site (See Appendix D for Made Ready Requirements) will be completed, to ensure the ChargePoint certified installer is scheduled to complete installation. Provider will coordinate installation with ChargePoint certified installer and notify the agency.
6. The ChargePoint certified installer will install each station to the made ready site within 5 to 7 business day after receipt of equipment. At that time, they will also complete on station activation.
7. Provider will then notify ChargePoint to complete station activation and set up any pricing policy that the ordering agency requires. This should be completed within one (1) business day.

Operation and Maintenance (5-Years)

The provider, with ChargePoint support and ChargePoint Assure program, will be responsible for all operation and maintenance including:

1. Operate and maintain all Level 2 charging stations for the Period of Performance July 1, 2020 to June 30, 2025.
2. The Assure program, ensures that all parts and labor are performed, on site if necessary, to correct any defect in the material or workmanship.
3. Perform triage with respect to any station that may be defective.
4. The public charging stations will be listed on the ChargePoint web site with availability and cost of station usage. It will also be listed on the PlugShare.com website.
5. Station management will be notified on-line when there is an interruption of service. In addition, drivers will know on their mobile app by color coding if the station is- (1) available (green), (2) in use (blue) or (3) interruption of service (black) prior to plugging in their vehicle.
6. The Wi-Fi cloud plan notifies customer support immediately of any station problems. If onsite repairs are needed, they will be completed within two business days from the delivery of any parts.
7. Only labor coverage is included for accidental damage, wear and tear, vandalism (excluding graffiti) and snowplow damages.

Networked Services 5-Years

All ChargePoint stations are cellularly connected using Sprint, AT&T and Verizon to allow the station owner to control station usage, limit hours and do multi-tier driver pricing. Daily, weekly, monthly and custom usage reports include: energy, GHG savings, stations, ports, sessions, number of API calls, revenue, peak daily occupancy, session length histogram, unique drivers, wait time and session detail table to name some of the available reports.

STATE OF MAINE | MASTER AGREEMENT CONTRACT**MA 18P 200730-004**

1. Network fees to be paid on an annual basis.
2. Includes customer billing system and remittance system agreeable to the State of Maine. The State of Maine must set up a ChargePoint Organization for use with ChargePoint stations and their billing system and remittance program.
3. Includes access by station Administrators to review, monitor charger usage and prepare reporting. The ChargePoint Sessions Detail Table allows unlimited station administrators to review station usage.
4. ChargePoint reporting features include detailed usage tracking, station configurations, and total KWH and other appropriate usage data.
5. ChargePoint has an embedded flexible payment collection system.
6. ChargePoint software service plan allows over the air software updates to support all EV models and station networking upgrades.
7. Station details visibility on app and browser map including AFDC. ChargePoint stations are listed on all electric vehicle charger maps. In addition, the ChargePoint app lets driver know of station availability, cost to use the station and other stations in the area including competitive stations.
8. Waitlist feature and push-notifications station alerts notify drivers when their reserved station is available. Station owner controls the length of time that Waitlist is set for.
9. ChargePoint has 24/7 365 driver support to assist with station activation and collection via credit card.
10. Station owner support is available 8:00 AM to 7:00 PM EST Monday through Friday.

Charging Fees Payment Options

ChargePoint has an approved joint venture with WEX Card. ChargePoint supports WEX, allowing fleet vehicle drivers to pay for electric fueling using a payment card associated with the ChargePoint account. ChargePoint offers flexible billing and remittance options for station owners, in which different groups of stations can have their collected station fees deposited into different accounts.

ChargePoint offers a variety of payment options. For fleet they currently can connect with WEX and Voyager. For the general public they can use ChargePoint card or contactless credit cards. In addition, the driver can call the 24/7 365 ChargePoint driver support to activate the station with their credit card. Tap-to-Pay using NFC capabilities of smartphones (Google Pay, Apple Pay and Pay Pal) are supported by ChargePoint stations.

Electricity Reimbursement Process

1. Stations are purchased by agency who pays for electricity.
2. Agency pays for electricity used at charging station(s).
3. Agency will set up an account with ChargePoint under the State of Maine umbrella to manage their stations and fees.
4. Agency will set rates to charge customers for the use of their chargers.
5. Charging station users will pay for charges using options listed in Charging Fees Payment Options.
6. ChargePoint will collect the fees and keep 10% of the charges as a processing fee.
7. The remaining money can be deposited into a bank account or can be paid in the form of a check to the agency.

Data Reporting

ChargePoint stations offer reporting which can be run as a daily, weekly, monthly, yearly and a custom time frame report. Included in the reports are:

1. Session Details Table – this offers charging data including date and time (start and stop) and accurate utilization rate
2. The Energy report shows total kWh and total kWh draw
3. The Revenue report will show total dollars collected from drivers as a total amount or an individual station report.
4. Drivers will know on their mobile app by color coding if the station is available (green), in use (blue) or interruption of service (black) prior to plugging in their vehicle.

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

5. A report called Number of AP calls will have equipment down time as well as notifications forwarded to the station administrator.

Equipment Contracted Pricing**ChargePoint CT4021 Dual Pedestal Mounted Charger (2 plugs)**

<i>Equipment</i>	\$5,195
<i>Installation</i>	\$1,200
<i>Activation</i>	\$174.50
<i>*Site Validation</i>	\$0
Total Purchase Cost	\$6,569.50

<i>Network Services</i>	\$658/year/charger, billed annually
<i>Operation & Maintenance Services</i>	\$599/year/charger, billed annually
**Yearly Services Fees	\$1,257

ChargePoint CT4023 Dual Wall Mounted Charger (2 plugs)

<i>Equipment</i>	\$5,100
<i>Installation</i>	\$1,200
<i>Activation</i>	\$174.50
<i>*Site Validation</i>	\$0
Total Purchase Cost	\$6,474.50

<i>Network Services</i>	\$658/year/charger, billed annually
<i>Operation & Maintenance Services</i>	\$599/year/charger, billed annually
**Yearly Services Fees	\$1,257

Optional Equipment: CT4000 Power Management Kit \$50/charger

This option is available for both models and would only be necessary if the station is installed with only one 40Amp circuit versus the traditional two (2) 40Amp circuits.

- * Site Validation is included with Carbon Day Automotive Yearly Service Fees.
 ** Service Costs may be adjusted if ChargePoint price increase.

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

**RIDER B
TERMS AND CONDITIONS**

1. INVOICES AND PAYMENT: Department will pay the Provider as follows: Payment terms are net 30 days from the date the State receives an error-free invoice with all necessary and complete supporting documents. Provider shall submit detailed invoices, itemizing all work performed during the invoice period, including the dates of service, rates of pay, hours of work performed, and any other information and/or documentation appropriate and sufficient to substantiate the amount invoiced for payment by the State. All invoices must include the Department and Advantage Contract numbers for this contract.
2. BENEFITS AND DEDUCTIONS. If the Provider is an individual, the Provider understands and agrees that he/she is an independent contractor for whom no Federal or State Income Tax will be deducted by the Department, and for whom no retirement benefits, survivor benefit insurance, group life insurance, vacation and sick leave, and similar benefits available to State employees will accrue. The Provider further understands that annual information returns, as required by the Internal Revenue Code or State of Maine Income Tax Law, will be filed by the State Controller with the Internal Revenue Service and the State of Maine Bureau of Revenue Services, copies of which will be furnished to the Provider for his/her Income Tax records.
3. INDEPENDENT CAPACITY. In the performance of this Contract, the parties hereto agree that the Provider, and any agents and employees of the Provider, shall act in the capacity of an independent contractor and not as officers or employees or agents of the State.
4. DEPARTMENT'S REPRESENTATIVE. The Contract Administrator shall be the Department's representative during the period of this Contract. He/she has authority to curtail services if necessary to ensure proper execution. He/she shall certify to the Department when payments under the Contract are due and the amounts to be paid. He/she shall make decisions on all claims of the Provider, subject to the approval of the Commissioner of the Department.
5. CHANGES IN THE WORK. The Department may order changes in the work, the Contract Amount being adjusted accordingly. Any monetary adjustment or any substantive change in the work shall be in the form of an amendment, signed by both parties and approved by the State Purchases Review Committee. Said amendment must be effective prior to execution of the work.
6. SUB-AGREEMENTS. Unless provided for in this Contract, no arrangement shall be made by the Provider with any other party for furnishing any of the services herein contracted for without the consent and approval of the Contract Administrator. Any sub-agreement hereunder Entered into subsequent to the execution of this Contract must be annotated "approved" by the Contract Administrator before it is reimbursable hereunder. This provision will not be taken as requiring the approval of contracts of employment between the Provider and its employees assigned for services thereunder.
7. SUBLETTING, ASSIGNMENT OR TRANSFER. The Provider shall not sublet, sell, transfer, assign or otherwise dispose of this Contract or any portion thereof, or of its right, title or interest therein, without written request to and written consent of the Contract Administrator. No subcontracts or transfer of Contract shall in any case release the Provider of its liability under this Contract.
8. EQUAL EMPLOYMENT OPPORTUNITY. During the performance of this Contract, the Provider agrees as follows:
 - a. The Provider shall not discriminate against any employee or applicant for employment relating to this Contract because of race, color, religious creed, sex, national origin, ancestry, age, physical or

STATE OF MAINE | MASTER AGREEMENT CONTRACT**MA 18P 200730-004**

mental disability, or sexual orientation, unless related to a bona fide occupational qualification. The Provider shall take affirmative action to ensure that applicants are employed and employees are treated during employment, without regard to their race, color, religion, sex, age, national origin, physical or mental disability, or sexual orientation.

Such action shall include but not be limited to the following: employment, upgrading, demotions, or transfers; recruitment or recruitment advertising; layoffs or terminations; rates of pay or other forms of compensation; and selection for training including apprenticeship. The Provider agrees to post in conspicuous places available to employees and applicants for employment notices setting forth the provisions of this nondiscrimination clause.

- b. The Provider shall, in all solicitations or advertising for employees placed by or on behalf of the Provider relating to this Contract, state that all qualified applicants shall receive consideration for employment without regard to race, color, religious creed, sex, national origin, ancestry, age, physical or mental disability, or sexual orientation.
 - c. The Provider shall send to each labor union or representative of the workers with which it has a collective bargaining Contract, or other Contract or understanding, whereby it is furnished with labor for the performance of this Contract a notice to be provided by the contracting agency, advising the said labor union or workers' representative of the Provider's commitment under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
 - d. The Provider shall inform the contracting Department's Equal Employment Opportunity Coordinator of any discrimination complaints brought to an external regulatory body (Maine Human Rights Commission, EEOC, Office of Civil Rights) against their agency by any individual as well as any lawsuit regarding alleged discriminatory practice.
 - e. The Provider shall comply with all aspects of the Americans with Disabilities Act (ADA) in employment and in the provision of service to include accessibility and reasonable accommodations for employees and clients.
 - f. Providers and subcontractors with Contracts in excess of \$50,000 shall also pursue in good faith affirmative action programs, which programs must conform with applicable state and federal laws, rules and regulations.
 - g. The Provider shall cause the foregoing provisions to be inserted in any subcontract for any work covered by this Contract so that such provisions shall be binding upon each subcontractor, provided that the foregoing provisions shall not apply to contracts or subcontracts for standard commercial supplies or raw materials.
9. EMPLOYMENT AND PERSONNEL. The Provider shall not engage on a full-time, part-time or other basis during the period of this Contract, any (a) state employee or (b) any former state employee who participated in any way in the solicitation, award or administration of this Agreement. This restriction shall not apply to regularly retired employees or any employee who has out of state employment for a period of twelve (12) months.
10. WARRANTY. The Provider warrants that it has not employed or contracted with any company or person, other than for assistance with the normal study and preparation of a proposal, to solicit or secure this Contract and that it has not paid, or agreed to pay, any company or person, other than a bona fide employee working solely for the Provider, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon, or resulting from the award for making this Contract.

STATE OF MAINE | MASTER AGREEMENT CONTRACT**MA 18P 200730-004**

For breach or violation of this warranty, the Department shall have the right to annul this Contract without liability or, in its discretion to otherwise recover the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

11. ACCESS TO RECORDS. As a condition of accepting an Contract for services under this section, a Provider must agree to treat all records, other than proprietary information, relating to personal services work performed under the Contract as public records under the freedom of access laws to the same extent as if the work were performed directly by the Department or agency. For the purposes of this subsection, "proprietary information" means information that is a trade secret or commercial or financial information, the disclosure of which would impair the competitive position of the Provider and would make available information not otherwise publicly available. Information relating to wages and benefits of the employees performing the personal services work under the Contract and information concerning employee and Contract oversight and accountability procedures and systems are not proprietary information. The Provider shall maintain all books, documents, payrolls, papers, accounting records and other evidence pertaining to this Contract and make such materials available at its offices at all reasonable times during the period of this Contract and for such subsequent period as specified under Maine Uniform Accounting and Auditing Practices for Community Agencies (MAAP) rules. The Provider shall allow inspection of pertinent documents by the Department or any authorized representative of the State of Maine or Federal Government, and shall furnish copies thereof, if requested. This subsection applies to contracts, contract extensions and contract amendments executed on or after October 1, 2009.
12. TERMINATION. (a) The performance of work under the Contract may be terminated by the Department whenever for any reason the Contract Administrator shall determine that such termination is in the best interest of the Department. Any such termination shall be effected by delivery to the Provider of a Notice of Termination specifying the date on which such termination becomes effective. Upon such termination, the Department shall pay the Provider for work performed by the Provider prior to the date of Notice of Termination. (b) Either party may terminate this Agreement for cause by providing a written notice of termination stating the reason for the termination. Upon receipt of the notice of termination, the defaulting party shall have fifteen (15) business days to cure the default. If the default is of such a nature that it cannot be cured within fifteen (15) business days, the defaulting party shall have such additional time, as the parties may agree to, to cure the default, provided the defaulting party has taken steps to cure the default with the initial 15 days.
13. GOVERNMENTAL REQUIREMENTS. The Provider warrants and represents that it will comply with all governmental ordinances, laws and regulations.
14. GOVERNING LAW. This Contract shall be governed in all respects by the laws, statutes, and regulations of the United States of America and of the State of Maine. Any legal proceeding against the State regarding this Contract shall be brought in State of Maine administrative or judicial forums. The Provider consents to personal jurisdiction in the State of Maine.
15. STATE HELD HARMLESS. The Provider shall indemnify and hold harmless the Department and its officers, agents, and employees from and against any and all third party claims, liabilities, and costs, including reasonable attorney fees, for any or all injuries to persons or property or claims for money damages, including claims for violation of intellectual property rights, arising from the negligent acts or omissions of the Provider, its employees or agents, officers or Subcontractors in the performance of work under this Agreement; provided, however, the Provider shall not be liable for claims arising out of the negligent acts or omissions of the Department, or for actions taken in reasonable reliance on written instructions of the Department.

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

16. NOTICE OF CLAIMS. The Provider shall give the Contract Administrator immediate notice in writing of any legal action or suit filed that is related in any way to the Contract or which may affect the performance of duties under the Contract, and prompt notice of any claim made against the Provider by any subcontractor which may result in litigation related in any way to the Contract or which may affect the performance of duties under the Contract.
17. APPROVAL. This Contract must have the approval of the State Controller and the State Purchases Review Committee before it can be considered a valid, enforceable document.
18. INSURANCE. The Provider shall keep in force a liability policy issued by a company fully licensed or designated as an eligible surplus line insurer to do business in this State by the Maine Department of Professional & Financial Regulation, Bureau of Insurance, which policy includes the activity to be covered by this Contract with adequate liability coverage to protect itself and the Department from suits. Providers insured through a "risk retention group" insurer prior to July 1, 1991, may continue under that arrangement. Prior to or upon execution of this Contract, the Provider shall furnish the Department with written or photocopied verification of the existence of such liability insurance policy.
19. NON-APPROPRIATION. Notwithstanding any other provision of this Contract, if the State does not receive sufficient funds to fund this Contract and other obligations of the State, if funds are de-appropriated, or if the State does not receive legal authority to expend funds from the Maine State Legislature or Maine courts, then the State is not obligated to make payment under this Contract.
20. SEVERABILITY. The invalidity or unenforceability of any particular provision, or part thereof, of this Contract shall not affect the remainder of said provision or any other provisions, and this Contract shall be construed in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
21. ORDER OF PRECEDENCE. In the event of a conflict between the documents comprising this Agreement, the Order of Precedence shall be:
- Rider C Exceptions
 - Rider B Terms and Conditions
 - Rider A Scope of Work
 - Payment Rider
 - Rider D Included at Department's Discretion
 - Rider E Included at Department's Discretion
 - Rider F Included at Department's Discretion
 - Rider G Identification of Country in which contracted work will be performed
 - Business Associate Agreement included at Department's Discretion
 - Other Included at Department's Discretion
22. FORCE MAJEURE. The performance of an obligation by either party shall be excused in the event that performance of that obligation is prevented by an act of God, act of war, riot, fire, explosion, flood or other catastrophe, sabotage, severe shortage of fuel, power or raw materials, change in law, court order, national defense requirement, or strike or labor dispute, provided that any such event and the delay caused thereby is beyond the control of, and could not reasonably be avoided by, that party.
23. SET-OFF RIGHTS. The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off

STATE OF MAINE | MASTER AGREEMENT CONTRACT**MA 18P 200730-004**

any monies due to the Provider under this Contract up to any amounts due and owing to the State with regard to this Contract, any other Contract, any other Contract with any State department or agency, including any Contract for a term commencing prior to the term of this Contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Controller.

24. ENTIRE CONTRACT. This document contains the entire Contract of the parties, and neither party shall be bound by any statement or representation not contained herein. No waiver shall be deemed to have been made by any of the parties unless expressed in writing and signed by the waiving party. The parties expressly agree that they shall not assert in any action relating to the Contract that any implied waiver occurred between the parties, which is not expressed in writing. The failure of any party to insist in any one or more instances upon strict performance of any of the terms or provisions of the Contract, or to exercise an option or election under the Contract, shall not be construed as a waiver or relinquishment for the future of such terms, provisions, option or election, but the same shall continue in full force and effect, and no waiver by any party of any one or more of its rights or remedies under the Contract shall be deemed to be a waiver of any prior or subsequent rights or remedy under the Contract or at law.
25. AMENDMENT: No changes, modifications, or amendments in the terms and conditions of this Contract shall be effective unless reduced to writing, numbered and signed by the duly authorized representative of the State and Provider.
26. DEBARMENT, PERFORMANCE, AND NON-COLLUSION CERTIFICATION: By signing this Contract, the Provider certifies to the best of Provider's knowledge and belief that the aforementioned organization, its principals and any subcontractors named in this Contract:
- a. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from bidding or working on contracts issued by any governmental agency.
 - b. Have not within three years of submitting the proposal for this contract been convicted of or had a civil judgment rendered against them for:
 - i. Fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state or local government transaction or contract.
 - ii. Violating Federal or State antitrust statutes or committing embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - iii. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
 - iv. Have not within a three (3) year period preceding this proposal had one or more federal, state or local government transactions terminated for cause or default.
 - c. Have not Entered into a prior understanding, agreement, or connection with any corporation, firm, or person submitting a response for the same materials, supplies, equipment, or services and this proposal is in all respects fair and without collusion or fraud. The above-mentioned entities understand and agree that collusive bidding is a violation of state and federal law and can result in fines, prison sentences, and civil damage awards.

RIDER D

MAKE READY REQUIREMENTS

Sites will be ready for charger installation with all make ready work completed by the state. State electricians and/or contracted electricians will supply 7.2kW (240VAC@30A)X2 for each dual plug station. Standard conduit is 3/4" and oversized conduit for future installation is 1-1/4"-2". The required power cable must be run. The concrete pad should be 24"X24"X24". In addition, the bollard mounting kit that is included in the bid, will need to be installed. Verification of cellular coverage is required. If an octopus meter is being used to register cellular readings, they should be between -55 to -99. When the ChargePoint certified installer is to complete station installation and activation they will bolt down the station and connect to ChargePoint cellular coverage. Station installation information for the CT4000 can be found at

<https://www.chargepoint.com/products/guides>



CT4000

Networked Charging Station

Site Design 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 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 hazardous locations.**
- 6. This device should be supervised when used around children.**
- 7. Do not put fingers into the electric vehicle connector.**
- 8. Do not use this product if the flexible power cord or EV cable is frayed, has broken insulation, or any other signs of damage.**
- 9. Do not use this product if the enclosure or the EV connector is broken, cracked, open, or shows any other indication of damage.**
- 10. 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

Follow proper disposal methods according to local authorities. Re-using, recycling, or correctly processing obsolete devices is an important contribution to environmental protection. 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.

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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.



Contents

- 1 Site Design Guidelines 1**
 - Initial Site Guidelines 1
 - Charging Station Placement 2
- 2 Civil and Mechanical Design 5**
 - Wall Mount Stations 5
 - Pedestal Mount Stations 6
 - Drainage 9
 - Clearances 9
 - Accessibility 10
- 3 Electrical Design 11**
 - Upstream Components 11
 - Conduit 12
 - Wiring Requirements 12
 - Wiring Diagram 13
 - Grounding Requirements 15
 - Cellular Connectivity 18
- 4 CT4000 Pedestal Mount Concrete Preparation 19**
 - Concrete Mount Kit 19
 - Installation into New Concrete 19
 - Installing on Existing Concrete 21



Site Design Guidelines 1

This document describes how to design a project site for the ChargePoint® CT4000 networked charging station for electric vehicles. This includes guidelines and best practices for electrical infrastructure and capacity planning, construction and concrete work required prior to installation of charging stations, and cellular signal requirements.

For full specifications and certifications for CT4000 charging stations, refer to the *CT4000 Data Sheet* found online at: chargepoint.com/products/guides.

Initial Site Guidelines

ChargePoint recommends that you plan to install charging stations for 5-10% of parking spaces at commercial buildings, or 10-20% for high EV adoption areas like California. Designing electrical infrastructure to support current and future needs for EV charging helps avoid costly upgrades later as demands for EV charging grows.

Electrical Requirements

An onsite evaluation is needed to determine conduit and wiring requirements from the panel to the proposed parking spaces, construction and concrete requirements for mounting the charging stations, as well as to measure cellular signal levels and identify suitable locations for any necessary cellular signal booster equipment.

Review the *CT4000 Data Sheet* at chargepoint.com/products/guides.

Each Level 2 charging port requires:

- a dedicated single-phase electrical circuit (32 A at 208/240 V).
- a new dual pole breaker 40 A circuit breaker at the electrical panel. (Used breakers can damage equipment and cause a fire risk.)
- Conductor wiring sized in accordance with the National Electric Code requirement for 125% capacity for continuous load for all branch circuits from panel to stations via raceway or conduit.

Consequently, a CT4000 charging station with two charge ports requires two circuits and two new dual pole 40 A circuit breakers. If power capacity is limited at a site or to reduce costs for electrical infrastructure, consider ChargePoint Power Management options for power sharing at the circuit level, panel level, transformer, or site level.

Cellular Connectivity

The CT4000 charging station needs strong cellular connectivity to allow ChargePoint to communicate with the station. A connection is needed for station owners and operators to access these features:

- User authentication, access control, and billing
- Energy usage reporting
- Charging station utilization and charging session details for analytical reporting
- Real-time charging status to drivers using the ChargePoint mobile app or web portal
- Ability for drivers to use the ChargePoint mobile app and Tap to Charge, Apple Pay, or Android Pay on their smartphone to start and stop sessions
- Text or email notifications to drivers when vehicle battery is full or stops charging
- Notifications to drivers prior to pricing increases for overstay of parking at EV spots
- Station fault alarms and remote diagnostic capability
- Over-the-air software upgrades for new station features or enhancements

If you have preexisting infrastructure or are using your own preferred electrical contractor to prepare your site, a Site Validation by a ChargePoint Operations and Maintenance (O&M) partner is required to certify compliance with electrical specification requirements, and to ensure everything was prepared to ChargePoint specifications.



Important: Always check local codes or consult an engineer to ensure the site is prepared in compliance with all applicable regulations. Local authorities might not allow a unit to operate if it is not installed to code.

Charging Station Placement

To help minimize costs, choose station locations that are as close as possible to the available electrical infrastructure. Selecting these types of locations helps minimize long conduit and wire runs, as well as any trenching work.



WARNING: The ChargePoint Charging Station must be installed on a level concrete base or attached to a flat wall. Asphalt cannot support the full weight of the Charging Station. Failure to install the ChargePoint Charging Station on a level concrete base or a flat wall may cause the Charging Station to tip over, resulting in death, personal injury, or property damage.

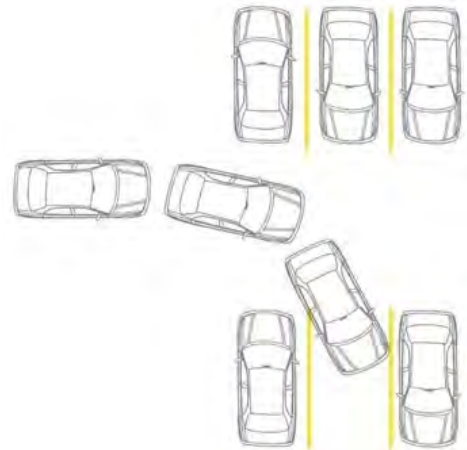
Layout Considerations

- Identify station locations for EV charging spots.
- To help minimize costs, choose station locations that are as close as possible to the available electrical infrastructure.
- Consider locations where it will be easy to add future stations.

- Consider how easily drivers can find the stations they need to access.
- Identify suitable locations with smooth, plumb surfaces for wall mount stations or suitable floor surfaces for pedestal mount stations.
- Determine raceway or conduit runs for electrical wiring from the electrical panel. Consider a layout to minimize linear conduit costs to all proposed EV parking spaces. If possible, avoid or minimize trenching requirements, especially more costly trenching to run conduit under asphalt surfaces.
- Consider ADA compliance. The charging station should not block ramps or pathways and the bottom of the screen cannot be more than 48 inches above the level of the parking stall.
- Choose adjacent parking spaces in an area with adequate lighting.
- For stall parking, ChargePoint prefers using perpendicular parking stalls to better accommodate EVs with front and rear charge ports.

Note: While ChargePoint tests charging stations with a majority of upcoming vehicles, ChargePoint cannot guarantee the port locations of future vehicles and cannot warrant the configurations proposed will work for all vehicles.

- Use dual-port pedestal mount stations where possible in open areas for adjacent parking or adjoining parking spaces.
- Consider protective bollards and wheel blocks where appropriate, especially for open tandem parking spaces.



Electrical Considerations

- Evaluate existing electrical infrastructure to determine if the existing utility service and electrical panel capacity is sufficient. Ensure the electrical wiring, overcurrent circuit protection, and metering (if required) is in place by reviewing the data sheet, as well as the wiring diagram and grounding requirements in this document.
- Ensure the electrical wiring, overcurrent circuit protection, and metering (if required) is in place by reviewing the data sheet, as well as the wiring diagram and grounding requirements in this document.
- Ensure that you use 16 mm² (6 AWG) or 10 mm² (8 AWG) wire to the station. If you will be feeding the station with larger wire (like 25 mm² (4 AWG)), you will need to splice the wire for 16 mm² (6 AWG) or 10 mm² (8 AWG). For each charging port, only three wires are required: L1, L2, and Ground. For dual port stations, only five wires are required as both ports share the same Ground wire.

Note: Neutral must be bonded to Ground upstream at the transformer or panel for each separately derived system.

- Identify costs for any necessary upgrades and/or a new dedicated electrical panel. Size all conduit and electrical wiring in accordance with the National Electric Code requirements.

ChargePoint recommends using a certified electrician to evaluate available capacity and identify any upgrades that may be required.

- If a dedicated EV electrical panel is required, choose a panel location in close proximity to the existing electrical supply.

Additional Considerations

- Determine appropriate mounting type: wall mount vs. pedestal mount.
- Use dual-port pedestal mount stations where possible in open areas for adjacent or tandem parking spots. Establish the quantity of each type of charging station in the initial order.
- Measure cellular signal levels using professional cellular test equipment to ensure adequate cellular coverage at the station installation location. To ensure adequate signal strength in underground or enclosed parking structures, cellular repeaters may be required. Use an indoor antenna located near EV parking spaces and an outdoor antenna typically located at the garage entrance ceiling or on the rooftop where cellular signals are best.
- Determine cost budget options for electrical infrastructure to satisfy current needs and future needs. Prioritize charging stations locations based upon immediate and future needs, construction timelines, and costs.

Plan for the Future

Keep in mind not only current EV charging needs, but future needs as EV adoption grows.

- Consider running raceway or conduit to all planned EV parking spots, but pulling electrical wiring from the panel to meet current needs.
- Consider installing a dedicated electrical panel for EV charging, then leverage ChargePoint Power Management to efficiently use available power at a site to support more EV charging ports than would otherwise be possible without power management.

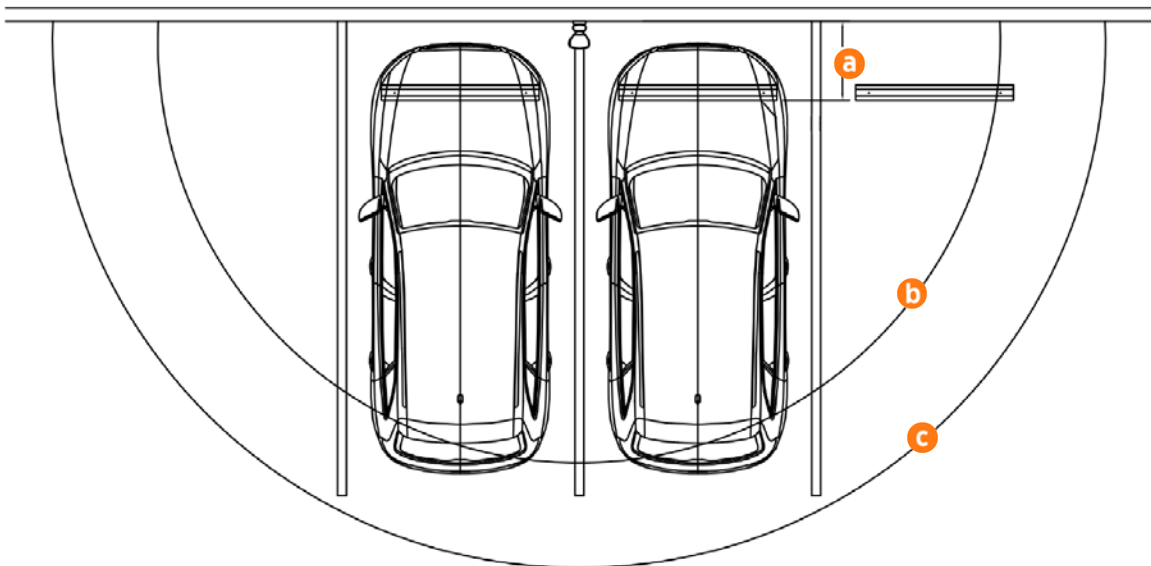
Civil and Mechanical Design 2

Use the guidance below to design the civil and mechanical aspects of the site.

The station can be installed attached to a wall, or on a concrete pedestal. The pedestal can be a newly poured pad or an existing concrete surface.

Wall Mount Stations

For wall mounted stations, the wall must be smooth, stable, and plumb. The minimum height of the wall must be 1250 mm (49 in). Place wheel stops (a) 90 mm (3 ft) from the wall. The arc shows the usable reach of the two charging cable lengths available, 5.5 m (18 ft) (b) and 7 m (23 ft) (c).



Important: Ensure the wall supports the station. If mounting to a hollow wall, bridge at least two studs using a 41 mm (1-5/8 in) channel strut.



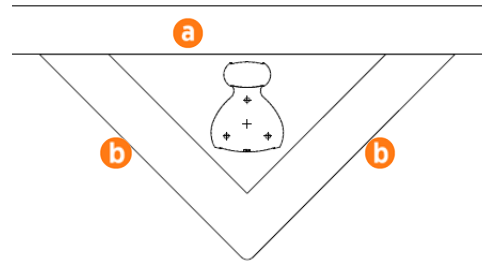
WARNING: If not installed correctly, the ChargePoint® Charging Station may pose a fall hazard, leading to death, personal injury, or property damage. Always use the provided Concrete Mounting Template or a ChargePoint-approved surface mounting solution to install the ChargePoint® Charging Station and install in accordance with applicable codes and standards using licensed professionals. Non-approved installation methods are performed at the risk of the contractor and void the Limited Warranty.

Pedestal Mount Stations

For newly poured pedestal mounted installations, the mounting surface must be smooth and cannot exceed a slope of 6 mm per 300 mm (0.25 in per ft). The concrete base must measure at least 600 mm (2 ft) on all sides. For installations in existing concrete, epoxy anchors can be used. Consult a civil engineer to ensure sufficient volume and strength of concrete.

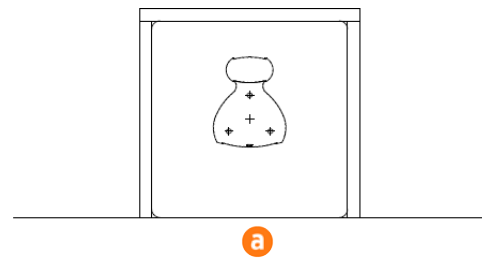
There are three basic pedestal base designs:

- In front of a curb (a)
900 mm (3 ft) x 2 (b)
Area: 0.42 m² (4.5 ft²)
Volume: 0.26 m³ (9 ft³)

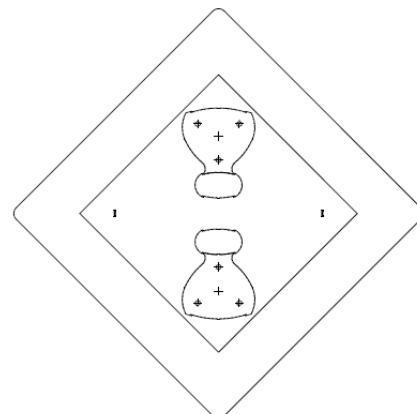


- Behind a curb (a) in a planter or berm
600 mm (2 ft) on each side
Area: 0.37 m² (4 ft²)
Volume: 0.23 m³ (8 ft³)

Note: Use a retaining wall as needed to prevent dirt from accumulating on the pad.

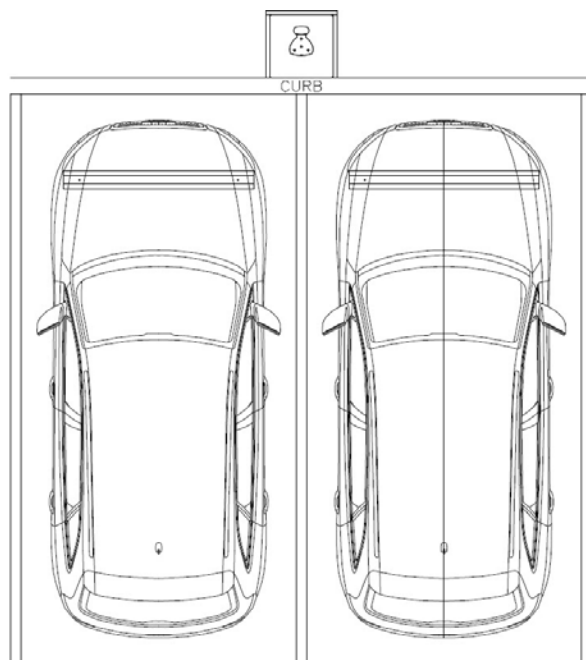


- Two stations back to back, centered between four spaces
900 mm (3 ft) on each side
Area: 0.84 m² (9 ft²)
Volume: 0.51 m³ (18 ft³)

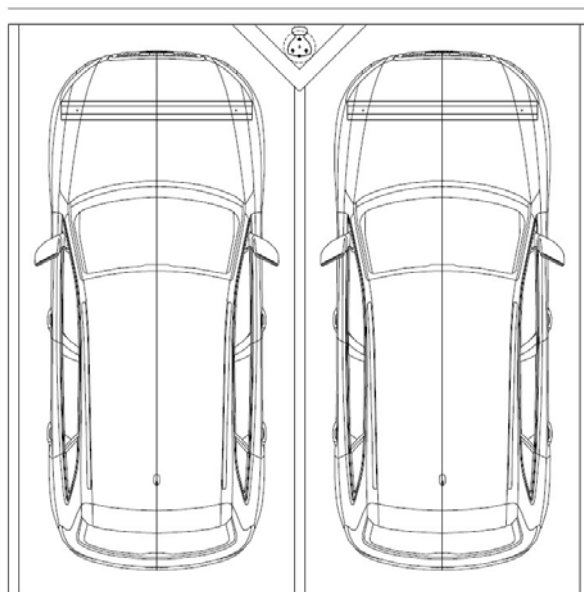


The pedestal base design can be configured in a variety of ways to serve different parking arrangements. Ensure a sufficient volume of concrete to provide anchoring for the charging station.

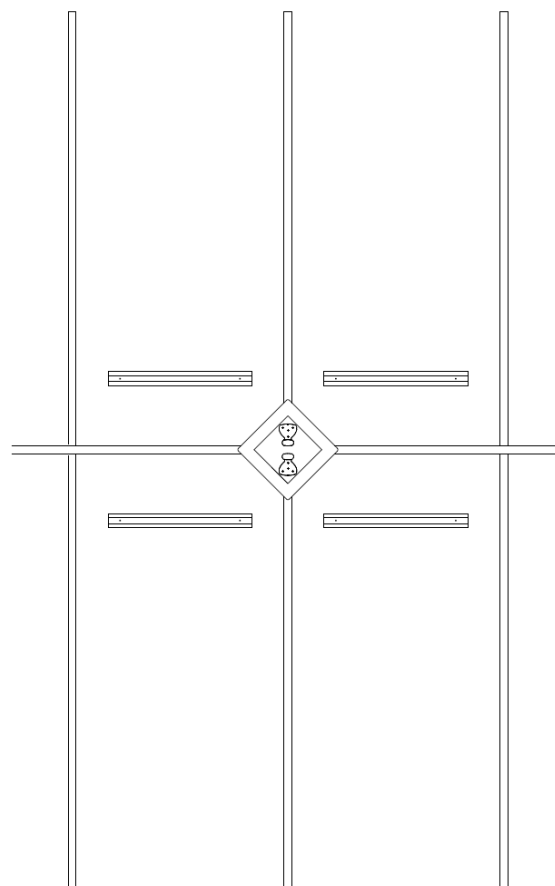
- Place the station in a planter or berm between spaces with wheel stops 900 mm (3 ft) from the front of each stall.



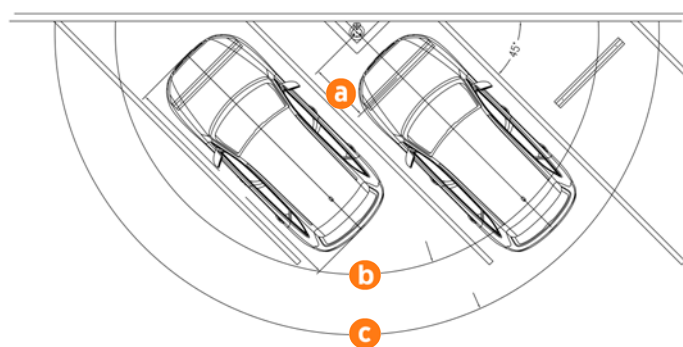
- Place the station against the curb between spaces with wheel stops 900 mm (3 ft) from the front of each stall. The base of the charging station can be flush with the parking spaces or at curb level.



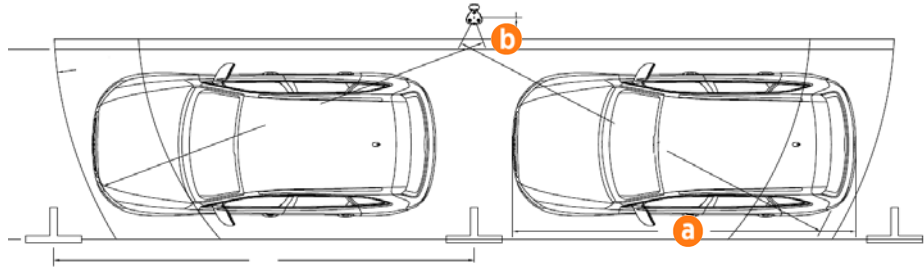
- Place two stations back to back centered on four spaces with wheel stops 900 mm (3 ft) from the front of each stall. The base of the charging station can be flush with the parking spaces or at curb level.



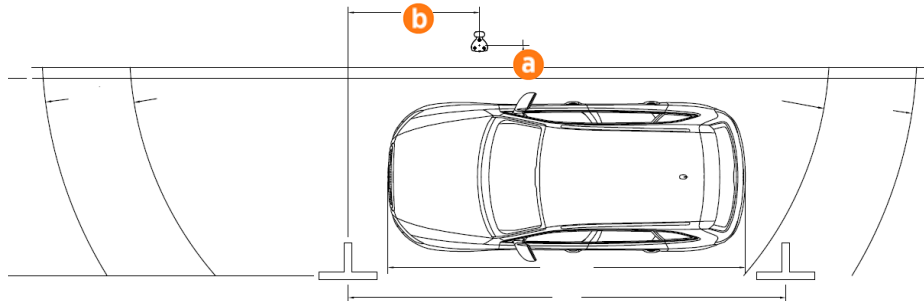
- Place a dual holster station centered on the right space. The charging cables reach two vehicles. Place a wheel stop (a) 1220 mm (4 ft) from the center of the charging station. The arc shows the usable reach of the two charging cable lengths available: 5.5 m (18 ft) (b) and 7 m (23 ft) (c). The 7 m (23 ft) cord option is recommended for this configuration. The base of the charging station can be flush with the parking spaces or at curb level. Be sure to install EV Charging Station signs on both spaces.



- Place a dual holster station centered between two parallel parking spaces (a), each 6 m (20 ft) long. Place the station (b) 450 mm (18 in) from the curb. A 7 m (23 ft) charging cable is recommended.



- Place a single holster station for a single parallel parking space 6 m (20 ft) long. Place the station (a) 450 mm (18 in) from the curb, and 1.8 m (6 ft) from the front of the parking space (b).



Drainage

Ensure any site slopes, walls, or fencing do not trap water around the charging station installation site. The system is only built to withstand water to the height of the conduit stub-up.



WARNING: Exposing the ChargePoint® Charging Station to water above the height of the conduit stub-up could create an electrocution, shock, or fire hazard. Cut power to the Charging Station if it has been exposed to standing water and contact ChargePoint before the Charging Station is powered on.

Clearances

For pedestal installations, the conduit stub up must be a minimum of 230 mm (9 in) from any obstructions to the rear. This includes other charging stations. Check applicable codes for any additional clearance requirements.

Accessibility

The CT4000 touchscreen and charging cables are centered at 1143 mm (45 in) to comply with American Disability Act (ADA) requirements. If your installation must comply with ADA standards, or the disability access regulations for other regions, consider this height when designing the height of the pad or when planning a wall-mounted installation. Also consider site design factors such as placement of pedestals or other vehicle obstacles. The placement must not obstruct ramps or pathways.

Electrical Design 3

The wall mount CPF50 installation uses surface mount wiring. The pedestal mount CT4000 installation requires service wiring installed underground. (If a site requires surface mounting, contact ChargePoint before beginning work, to obtain an approved installation method.) Conduit and wire size are determined based on the length of runs from the electrical panel to the station location. Service wiring must be run through conduit to comply with local electrical codes. Consult national and local codes or a project engineer to determine the grade, quality, and size of the conduit or cable. The CT4000 Concrete Mount Kit accommodates service wiring through the flare, conduit, or locally appropriate wiring method.

Note: All wiring and conduit is supplied by the contractor unless otherwise indicated.

Upstream Components

Charging stations are considered continuous load devices (EVs draw maximum load for long durations); therefore, electrical branch circuits to EV chargers must be sized at 125% of the load for North American installations, in accordance with National Electric Code (NEC) requirements. (For other regions, refer to local code.) This means that for a maximum 32 A load at 208/240 V output to an electric vehicle, 40 A breakers are required.

Wiring must be sized in accordance with NEC code for continuous load devices. Typically, 16 mm² or 10 mm² (6 AWG or 8 AWG) insulated electrical wiring is used, depending upon the distance between the electrical panel and the charging station. The terminal block accepts a maximum of 16 mm² (6 AWG) wire.

When planning multiple EV charging stations, it is best practice to segment non-continuous and continuous loads, with all branch circuits for EV charging on a dedicated electrical panel assembly with adequate circuit breakers. When sizing new electrical panels dedicated for EV charging, all branch circuits must support continuous load, and the panel rating must be sized for at least 125% of the total load on each leg of a 3-phase panel.



CAUTION: The CT4000 charging station is tested to IEC 61000-4-5, Level 5 (6 kV @ 3000 A) standards. In geographic areas that experience frequent thunderstorms, appropriate supplemental surge protection is recommended to guard against product damage.



Important: ChargePoint stations are UL 916 listed as Energy Management devices and are networked for real time communication to ensure they operate within the provisioned load allowance.

Conduit

The outer diameter of conduit must not exceed the sizes called out in the conduit layout drawing: 63 mm (2.5 in). Conduit stub-ups cannot extend higher than 660 mm (26 in).

For wall mounted stations, flex conduit must be used to bring the wire to the station.

Wiring Requirements

For full product specifications, refer to the [CT4000 Data Sheet](#). Using that data, ensure that the installation location is equipped with service wiring that supports the CT4000's power requirements:

- AC conductors (L1, L2)
- Ground conductor

When pulling electrical wiring via conduit for CT4000 pedestal mount, ensure at least 900 mm (3 ft) of coiled wire remains above conduit stub up.

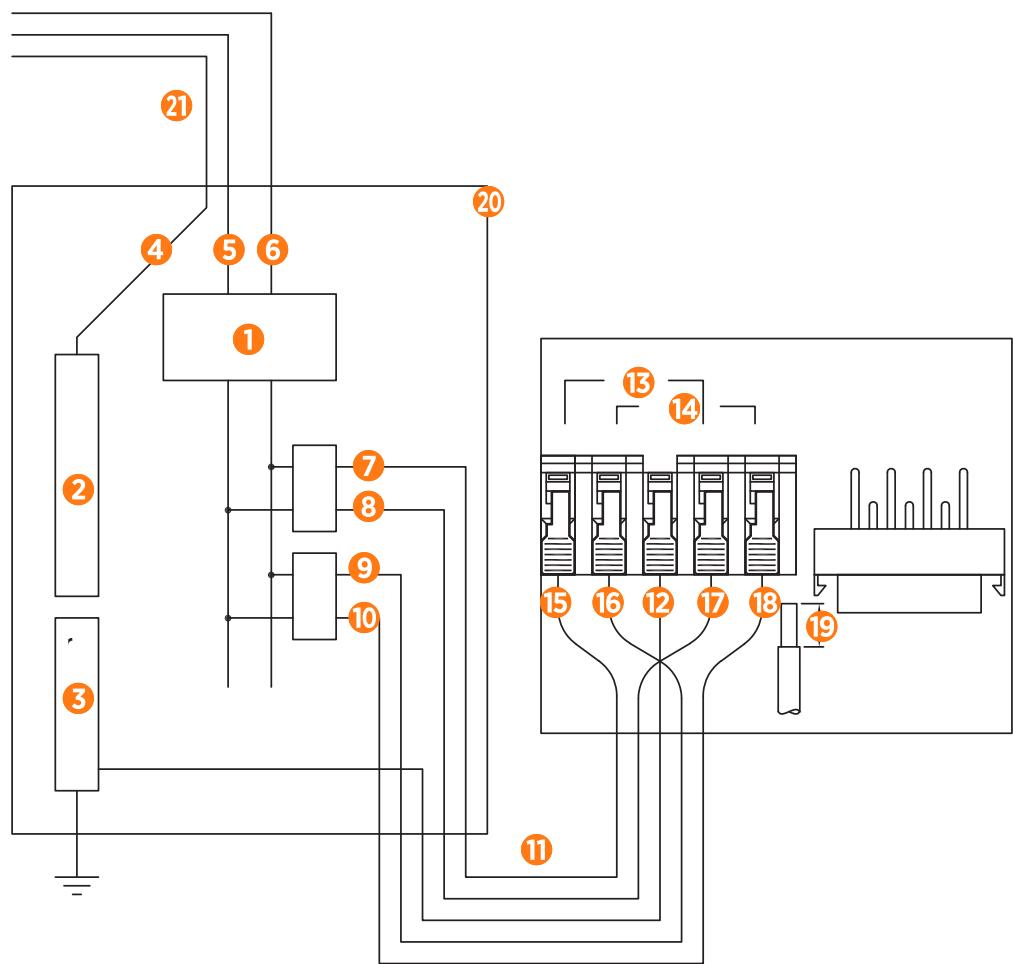
When pulling electrical for wall mounted stations, the conduit and wire must be brought to the location where the stations will be mounted. Flex conduit must be used to bring the wire to the station. Wiring is brought in via the bottom of the CT4000.



Important: The AC terminal blocks on the CT4000 accept a maximum size of 16 mm² (6 AWG) solid or stranded wires. If using a larger gauge wire to accommodate a long run, reduce the wire size at the disconnect.

Wiring Diagram

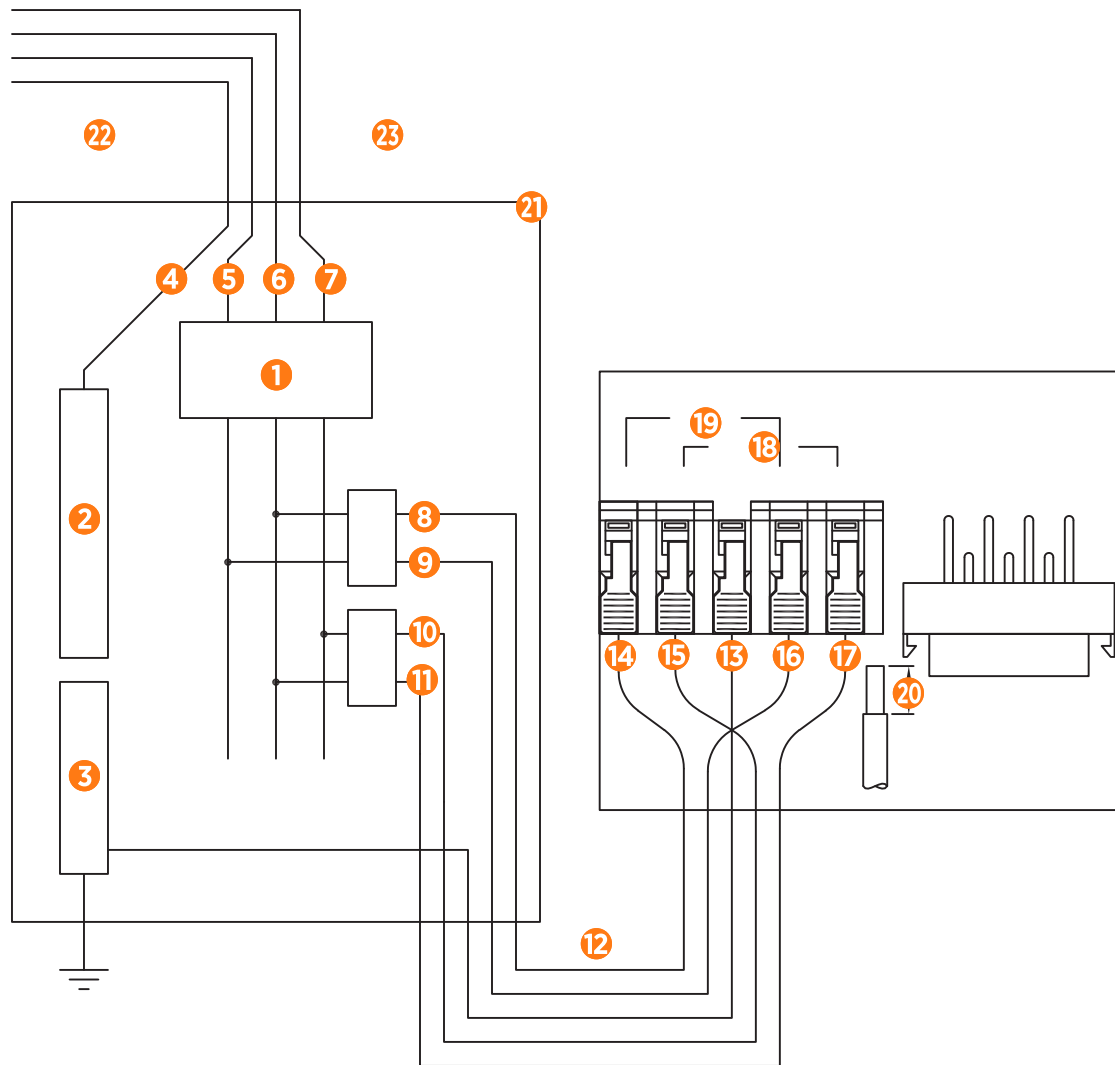
240 VAC Single Phase Panel



- | | | | |
|-----------------|--------------|--------------------------|-------------------------------|
| 1. Main Breaker | 7. Left L1 | 13. Terminal Block Left | 19. Strip wire 13 mm (1/2 in) |
| 2. Neutral Bus | 8. Left L2 | 14. Terminal Block Right | 20. Local Service or Subpanel |
| 3. Ground Bus | 9. Right L1 | 15. Left L1 | 21. 120/240 VAC 10 |
| 4. Neutral | 10. Right L2 | 16. Right L1 | Bonded Neutral Required |
| 5. L2 | 11. 240 VAC | 17. Left L2 | |
| 6. L1 | 12. Ground | 18. Right L2 | |

Left and right refers to the left and right ports on the charging station.

208 VAC Three Phase Panel



- | | | | |
|-----------------|--------------|-------------------------------|--------------------------|
| 1. Main Breaker | 8. Left L1 | 15. Right L1 | 22. 120/208 VAC 30 |
| 2. Neutral Bus | 9. Left L2 | 16. Left L2 | Bonded Neutral Required |
| 3. Ground Bus | 10. Right L1 | 17. Right L2 | 23. Each 40 A, 2-Pole |
| 4. Neutral | 11. Right L2 | 18. Terminal Block Right | breaker may be connected |
| 5. L3 | 12. 208 VAC | 19. Terminal Block Left | to any two lines. |
| 6. L2 | 13. Ground | 20. Strip wire 13 mm (1/2 in) | |
| 7. L1 | 14. Left L1 | 21. Local Service or Subpanel | |

Left and right refers to the left and right ports on the charging station.

Grounding Requirements

The CT4000 must be connected to a grounded, metal, permanent wiring system. An equipment-grounding conductor must be run with circuit conductors and connected to an equipment-grounding terminal or lead on the CT4000.

A grounding conductor that complies with applicable codes must be grounded to earth at the service equipment or, when supplied by a separate system, at the supply transformer.

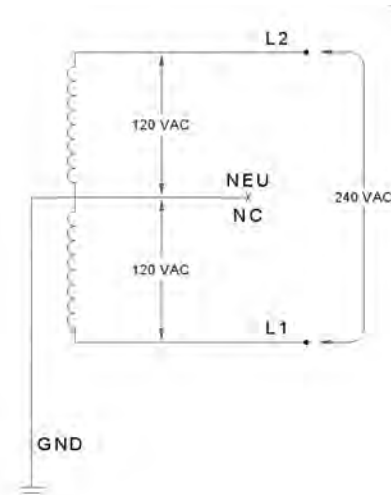
Ensure that a grounding conductor that complies with all applicable codes is properly grounded to earth at the service equipment or, when supplied by a separate system, at the supply transformer.

The voltage of either line, relative to ground, must not fall below 80 volts or a Floating Line Connection error occurs. Because the voltage of either line relative to ground must not be allowed to fluctuate, use only center-grounded systems. Neutral is not used to power the station but must be properly connected to ground, at the panel or transformer, to provide the necessary voltage reference relative to ground.

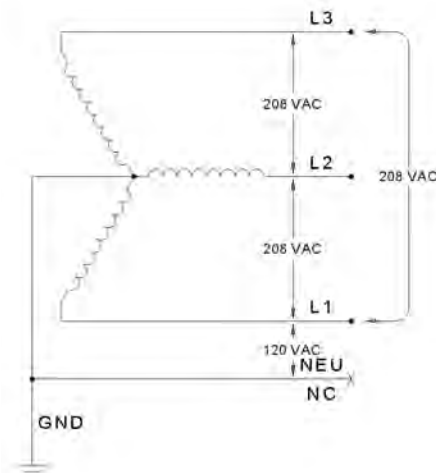
- In a Wye system, connect the station to any two lines, as shown.
- In a Delta system, connect the station to a center-tapped secondary only, where the center tap is bonded and the station is connected to the L1 and L3. This allows voltages to remain constant regardless of other loads that may be using the lines.

Connect To These Systems

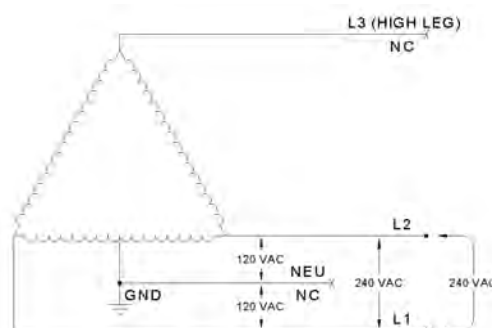
- 120/240 VAC, 10 Bonded Neutral
Station is connected to L1 and L2
Neutral is not used



- 120/208 VAC, 30 Wye Bonded Neutral
Station may be connected to any two lines
Neutral is not used

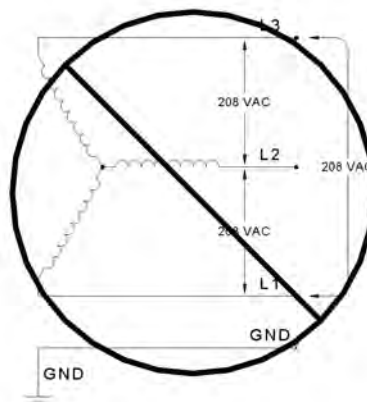


- 120/240 VAC, 30 Delta
Center tap grounded
Bonded neutral
Station must be connected to L1 and L2 only
Do not connect any part of the system to L3
Neutral is not used
Not recommended for new construction

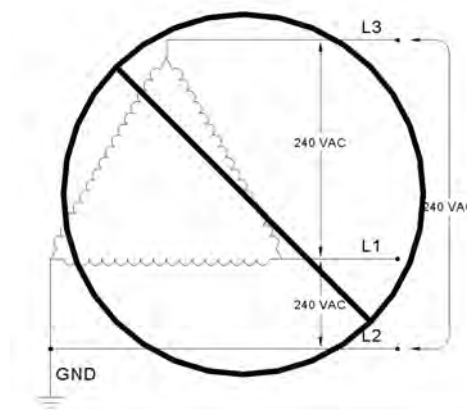


Do Not Connect to These Systems

- 120/208 VAC 3 phase Wye, ungrounded
Floating neutral
Voltage of either line to ground is undetermined
Neutral is not grounded



- 120/240 VAC 3 phase Delta, corner-grounded
Voltage of any line is not 120 V nominal relative to ground
- Any system where the center point of the AC power source is not grounded.



Cellular Connectivity

A consistently strong cellular signal is needed before installers can activate the station. Do not rely on cell phone applications to measure cellular signals when conducting site surveys. Take cellular readings at the exact location of each proposed EV charging station location.

Ensure the Reference Signal Receive Power (RSRP) is -100dBm or better. (Note that these numbers are all negative, so -80 dBm is stronger than -100 dBm, and -120 dBm is weaker.) Use a cellular signal detection device (such as an Octopus™ or Snyder-LTE Graphyte™ (USA) by Siretta) to take signal strength readings at the exact proposed Gateway location. If the test tool is capable of measuring the RSRQ value, ensure the value is higher than -10. (Again, where this is measured in negative numbers, so that -9 is higher than -10).

If the RSRP signal is below -100 dBm or the RSRQ value is below -10, take cellular readings at location where a cellular signal booster outdoor antenna will be installed to ensure enough signal exists to be boosted. Install repeaters to boost the strength of the cellular signals. Repeaters are often required when installing the charging station in an underground garage or enclosed parking structure. We recommend using a multi-carrier cellular repeater system. Here are some options for cellular signal boosters:

- WeBoost 4G-X for all carriers in North America, supports voice, 3G and 4G, max gain of 70 dB for up to 10,000 square feet of coverage area
- SureCall Fusion 5 for all carriers in North America, supports voice, 3G and 4G, average gain of 65 dB & max 72 db for up to 6,000 square feet of coverage area
- SureCall Force 5 for all carriers in North America for up to 20,000 square feet of coverage inside parking structure

Consult an expert in the cellular repeater industry for additional guidance. ChargePoint O&M partners can validate acceptable cellular signal strength at the site using a cellular strength reader.



CT4000 Pedestal Mount 4 Concrete Preparation

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.

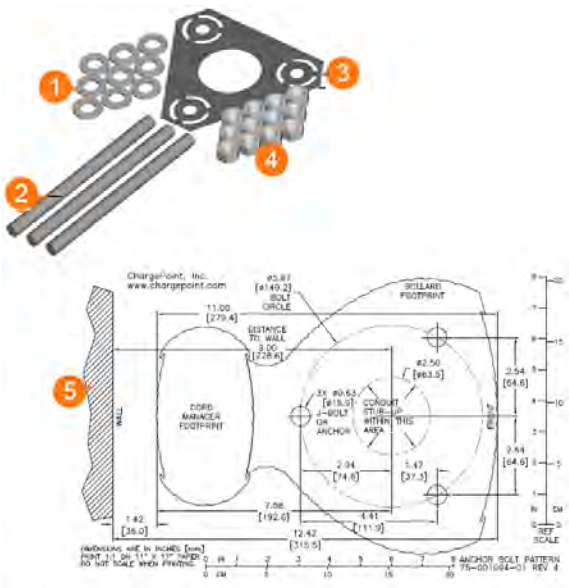
Do not install the CT4000 on an asphalt surface.

Concrete Mount Kit

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.

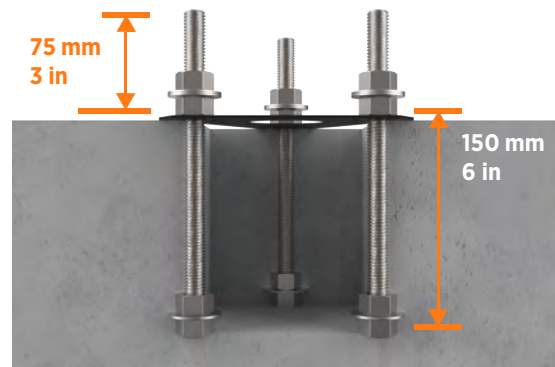
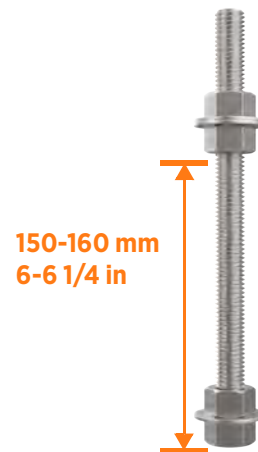
- Always check applicable codes to ensure compliance. You may need to adjust these instructions to comply with codes that apply at your installation location.
- The concrete block must measure at least 600 mm (2 ft) on all sides.
- The bolt threads must extend 75 mm (3 in) above the concrete.
- The conduit must extend 300 to 600 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.
 - Use a bubble level to ensure the bolts are plumb.



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. 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.

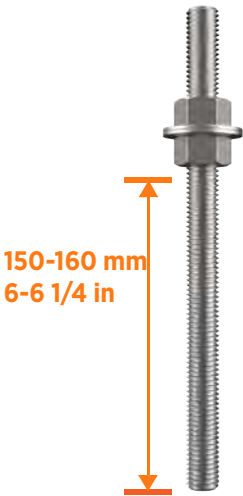
Note: The consumption rate of these products varies depending on conditions at the installation site.

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)	Clean drilled holes. Note: Compressed air will work.
1	Slow spiral round-shank masonry drill bit, 25 mm (1 in) diameter, 12.5 mm (1/2 in) shank, 255 mm (10 in) drill depth, 300 mm (12 in) length overall	Drill 25 mm (1 in) holes in concrete. Note: The holes must be at least 150 mm (6 in) deep.

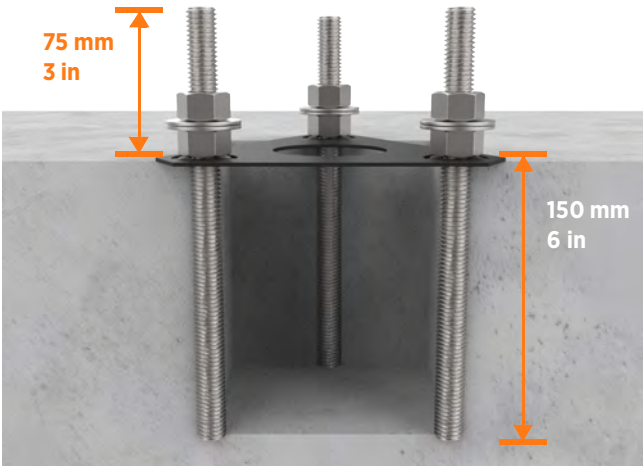
Quantity	Description	Purpose
1	Drill bit for concrete embedded rebar, round 25 mm (1 in) bit size, 12.5 mm (1/2 in) shank diameter, 300 mm (12 in) length overall	Drill 25 mm (1in) hole through rebar.
1	Nylon loop handle brush, 25 mm (1 in) brush diameter, 75 mm (3 in) length brush, 215 mm (8 1/2 in) length overall	Clean drilled holes.
3	Push-on round cap, fits 16 mm (5/8 in) - 17.5 mm (11/16 in) OD, 1/2 in inside height	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 25 mm (1 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.

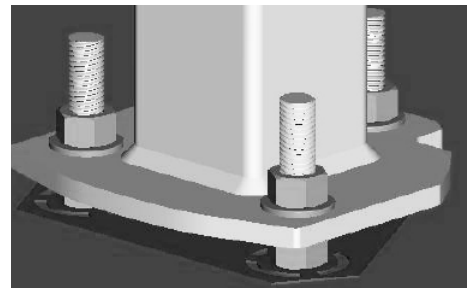
7. Place the plastic concrete bolt installation template over the holes. This ensures the relative position of the bolts and that the flange of the pole fits over the bolts.
8. Insert the bolts through the template, into the holes.



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 DIRECT, 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.



CAN ICES-3 (A)/NMB-3 (A)



CT4000 Family

ChargePoint® Charging Stations

The CT4000 is the latest generation of ChargePoint® charging stations. These easy-to-use stations provide corporations, municipalities and utilities industry leading EV charging solutions. Integrating design and functionality with superior reliability and durability, the CT4000 family of charging stations is ideal for workplace, commercial, or outdoor public charging.

The CT4000 is available in bollard and wall mount configurations for easy installation anywhere. The innovative power sharing feature of the CT4000 enables two charging ports to share a single circuit, allowing for sites with single port EV stations to upgrade to dual port stations without requiring additional electrical services. For new installations, the CT4000 requires half the electrical capacity and installation complexity of comparable dual port stations.

All CT4000 models offer one or two standard SAE J1772™ Level 2 charging ports, each supplying up to 7.2kW (208/240VAC @ 30A). The need for drivers to coil up the cord is eliminated with the self-retracting cord management system, ensuring that the cord is always off the ground when not in use.

ChargePoint Software Service Plans¹ let you control access, set pricing, display advertising, monitor status, and generate usage reports while ChargePoint provides 24/7/365 call center support to drivers so you don't have to.

LCD Display Allows for Customizable Video

- + Daylight readable, with auto brightness control
- + 640X480 resolution active matrix
- + Full motion 30fps video support
- + Download up to 60 seconds of full-motion, full-color video to any arbitrary group of stations as often as you like²
- + Brand your charging stations and communicate with drivers
- + Multiple language support allows drivers to select English, French or Spanish

Energy Measurement and Management

- + Real-time energy measurement
- + 15 minute interval recording
- + Time of day (TOD) pricing
- + Load shed by % of running average or to fixed power output

Hassle-Free Cord Management

- + Keep charging cords off the ground and out of drivers hands
- + Ultra-reliable second-generation gravity operated mechanism

¹ Sold separately

² Video service plan required

³ Dual port models only

Power Sharing³ (patent pending)

- + Share one 40A 208/240 circuit between two parking spaces
- + Single vehicle charges at full 6.2/7.2kW (30A @ 208/240V) and two vehicles simultaneously charge at 3.3/3.8kW (16A @ 208/240V) each

Multi-format RFID Card Reader

- + ISO 15693 , ISO 14443 and NFC
- + Accepts ChargePoint cards as well as Visa PayWave, MasterCard PayPass, American Express ExpressPay, and Discover Zip contactless credit cards. WEX cards can be connected to a ChargePoint card

The 5.7" LCD display provides full motion charging instructions in a clear and simple format. It also allows station owners to deliver advertising messaging.

Driver interaction is supported in any weather by five rugged, back-lit buttons with audio feedback.



CT4000 Family Specifications

Electrical Input	Single Port	Dual Port
AC Power Input Rating - Standard	208/240VAC 60Hz single phase @ 32A	208/240VAC 60Hz single phase @ 32A x 2
AC Power Input Rating - Power Sharing	n/a	208/240 VAC 60Hz single phase @ 32A
Input Power Connections - Standard	One 40A branch circuit.	Two independent 40A branch circuits.
Input Power Connections - Power Sharing	n/a	One 40A branch circuit
Required Service Panel Breaker - Standard	40A dual pole (non-GFCI type)	40A dual pole (non-GFCI type) x 2
Required Service Panel Breaker - Power Sharing	n/a	40A dual pole (non-GFCI type)
Service Panel GFCI	Do not provide external GFCI as it may conflict with internal GFCI (CCID)	
Wiring - Standard	3-wire (L1, L2, Earth)	5-wire (L1, L1, L2, L2, Earth)
Wiring - Power Sharing	n/a	3-wire (L1, L2, Earth)
Standby Power	15W typical (standby), 20W maximum (operation)	

Electrical Output

AC - Standard	7.2kW (240VAC @ 30A)	7.2kW (240VAC @ 30A) x 2
AC - Power Sharing	n/a	7.2kW (240VAC @ 30A) x 1 OR 3.8kW (240VAC @ 16A) x 2

Functional Interfaces

Connector(s) Type	SAE J1772™	SAE J1772™ x 2
Charging Cable Length	18' (5.5 meters)	18' (5.5 meters) x 2
Overhead Cable Management System	Yes	Yes
Card Reader	ISO 15693, 14443, NFC	
Locking Holster	Yes	Yes x 2

Safety and Connectivity Features

Ground Fault Detection	20mA CCID with auto retry	
Open Safety Ground Detection	Continuously monitors presence of safety (green wire) ground connection	
Plug-Out Detection	Power terminated per SAE J1772™ specifications	
Power Measurement Accuracy	+/- 2% from 2% to full scale (32A)	
Power Report/Store Interval	15 minute, aligned to hour	
Local Area Network	2.4 GHz Wi-Fi (802.11 b/g/n)	
Wide Area Network	3G GSM, 3G CDMA	

Safety and Operational Ratings

Enclosure Rating	Type 3R per UL 50E	
Safety Compliance	UL listed for USA and cUL certified for Canada; Complies with UL 2594, UL 2231-1, UL 2231-2, and NEC Article 625	
Surge Protection	6kV @ 3000A. In geographic areas subject to frequent thunder storms, supplemental surge protection at the service panel is recommended.	
EMC Compliance	FCC Part 15 Class A	
Operating Temperature	-22°F to 122°F (-30°C to +50°C)	
Operating Humidity	up to 85% @ +50°C (122°F) non-condensing	
Non-operating Humidity	up to 95% @ +50°C (122°F) non-condensing	
Terminal Block Temperature Rating	221°F (105°C)	
Maximum Charging Stations per 802.11 Radio Group	10. Each station must be located within 150 feet "line of sight" of a gateway station.	

ChargePoint, Inc. reserves the right to alter product offerings and specifications at any time without notice, and is not responsible for typographical or graphical errors that may appear in this document.

ChargePoint CT4000 Family



CT4021 Bollard charging station

Ordering Information

Specify model number followed by the applicable code(s).
The order code sequence is:

Model-Options-Warranty

Option		Order Code
Model	Single Port Bollard Mount	CT4011
	Dual Port Bollard Mount	CT4021
	Single Port Wall Mount	CT4013
	Dual Port Wall Mount	CT4023
Options	Integral Gateway Modem - USA	-GW1
	Integral Gateway Modem - Canada	-GW2
Warranty	Parts Only Extended Warranty – 2, 3, 4, or 5 year	CT4000-EWn*

* Substitute *n* for the duration of the warranty (2, 3, 4, or 5 year)

Order Code Examples

If ordering this:	The order code is:
Dual Port Bollard Mount USA Gateway Station	CT4021-GW1
Single Port Wall Mount Station with 5 Year Warranty	CT4013 CT4000-EW5
Dual Port Wall Mount Canada Gateway Station with 2 Year Warranty	CT4023-GW2 CT4000-EW2

For More Information

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Erik@carboday.com

ChargePoint. Access anywhere. Go everywhere.



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PN 73-001020-01 Rev 2

Listed by Underwriters
Laboratories Inc.

STATE OF MAINE | MASTER AGREEMENT CONTRACT

MA 18P 200730-004

RIDER G

IDENTIFICATION OF COUNTRY

IN WHICH CONTRACTED WORK WILL BE PERFORMED

Please identify the country in which the services purchased through this contract will be performed:

☒ **United States. Please identify state: Maine**

☐ **Other. Please identify country: Enter Country**

Notification of Changes to the Information

The Provider agrees to notify the Division of Procurement Services of any changes to the information provided above.



ChargePoint Network and Information Security

PCI Compliance

ChargePoint maintains PCI compliance and is audited on an annual basis by Coalfire, an independent 3rd party Qualified Security Assessor (QSA). Coalfire has more than 17 years' experience in IT security and compliance, serving thousands of client organizations across the United States and Europe. Their client list includes: 3M, AWS, Azure, Orion Health, Concur, InstaMed, and many more.

Information Security Policy

Our Information Security Policy is based on the PCI-DSS 3.2.1 information security standard. We review our policy at least annually. The PCI DSS standard requires a comprehensive information security policy that is used throughout the organization and is distributed to all system users, including contractors, vendors, and business partners. ChargePoint uses this chapter of its policies, Requirement 12, as a stand-alone security policy for that purpose, in addition to Requirement 12's other functions within the PCI standard.

ChargePoint believes that security measures taken should meet or exceed published standards, but that a public, precise description of measures is actually more likely to lead to a breach of cardholder data. ChargePoint strives to, and believes it does, meet or exceed the PCI-DSS standards, including those standards outside the realm of strict data security.

ChargePoint Services

ChargePoint provides services to thousands of customers through a cloud-based platform that is hosted at Amazon AWS. The IT infrastructure that AWS provides to its customers is designed and managed in alignment with security best practices and a variety of IT security standards, including: SOC 1/SSAE 16/ISAE 3402 (formerly SAS70), SOC2, SOC3, FISMA, DIACAP, and FedRAMP, DOD CSM Levels1-5, PCI DSS Level1, ISO 9001 / ISO27001, ITAR, FIPS140-2, and MTCS Level3.

The production environment at AWS is isolated from the ChargePoint corporate network. ChargePoint also has no connect to any of our partner networks. The charging stations all communicate over the cellular network, bypassing the need for any local IT connectivity. Access to the cloud-based platform is via standard web browser with no plugins required.

END OF DOCUMENT

RIDER I

**STATE OF MAINE
DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES
DIVISION OF PROCUREMENT SERVICES**

**MUNICIPALITY POLITICAL SUBDIVISION and SCHOOL DISTRICT PARTICIPATION
CERTIFICATION**

The Division of Procurement Services is committed to providing purchasing opportunities for **municipalities, political subdivisions and school districts** in Maine by allowing them access, through our vendors, to our contract pricing. A bidder's willingness to extend contract pricing to these entities will be taken into consideration in making awards.

CD, LLC dba Carbon Day Automotive will accept orders from political subdivisions and school districts in Maine at the prices quoted.