Construction Signoff Form

Express Distro Power Link 2000, North America Region

This form ensures the site for your ChargePoint® solution has been prepared as specified, by you or by your chosen contractor, before beginning installation. Submit this completed form and the required photos to installdispatch@chargepoint.com. Detailed datasheets, site design guides, and installation guides defining ChargePoint product specifications are available at ChargePoint Product Reference Documents.

IMPORTANT: All installations must comply with local and regional code. ChargePoint provides concrete pad guidance applicable for most sites in the Site Design Guide; however, pad sizes for a given site might be smaller or larger due to site conditions. Ensure site drawings have been completed and approved by a structural engineer for the site.

IMPORTANT: If the installer arrives to the installation site and finds any signoff items incomplete, you will incur a separate re-dispatch fee.

Project Identification

Project Information
Sales order number / case number:

Site Information	**Contractor Information**
Site address:	Company name:
	Site lead name:
Number of stations to be installed:	Site lead job title:
Contact name:	Site lead email:
Contact phone:	Site lead phone:
Contact email:	Date work began:

Station	Serial Number	Station	Serial Number
1.		6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

Required Construction Photos

Take the following photos for each station location throughout the site construction process.

> **IMPORTANT:** Submit the photos by email to installdispatch@chargepoint.com. Include the case number or sales order number in the email subject line.

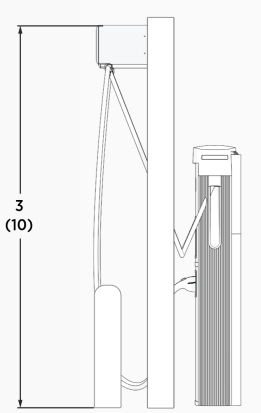
Required Construction Photos	Photo Submitted
1. Of completed trenching with conduit (or ducting) laid in place (if applicable).	◯ Yes ◯ No
2. Prior to concrete pour, if a Concrete Mounting Template (CMT) is used: • Of the CMT in place and held at the proper height to prevent movement during the concrete pour. • Of all anchor bolts correctly inserted into the CMT. • Of conduit stub-ups (if used) correctly inserted into the CMT.	◯ Yes ◯ No
3. Of completed concrete pad with anchor bolts and conduit stub-ups (if used).	◯ Yes ◯ No
4. Of the overall space around each mounting location, showing all service clearances are available.	◯ Yes ◯ No
5. Of all signage and parking guides as required by site drawings and local code.	◯ Yes ◯ No
6. Of the Power Link 2000 positioned such that the front of the station is facing the intended direction (e.g. toward the vehicle).	◯ Yes ◯ No

Civil Work Checklist

Complete the following civil work checklist for each station location across the site.

Civil Work, Power Link 2000, Pedestal-Mount

	Indicate Yes or No Add Comments
1. Confirm the concrete pad was designed, installed, and approved as follows: **(a)** If pad was newly poured: • The pad was designed and installed based on one of the conservative stability specifications listed in the *Express Distro Power Link 2000 Site Design Guide*, in accordance with site-specific wind, seismic, and soil conditions. -or- • The pad was designed by a structural engineer based on site-specific conditions and based on the structural parameters listed in the *Express Distro Power Link 2000 Site Design Guide*. **(b)** If using existing concrete surface: • The pad was inspected and approved by a structural engineer based on the structural parameters listed in the *Express Distro Power Link 2000 Site Design Guide*.	◯ Yes ◯ No
2. If Concrete Mount Template (CMT) is used, confirm that it is embedded 51 mm (2 in) below the finished concrete surface and level with the concrete pad surface. Confirm the CMT is oriented correctly, with the "Parking Front" marking facing the intended direction of the station's front face.	◯ Yes ◯ No
3. Confirm the finished mounting surface is smooth and does not exceed a slope of 20 mm per meter (0.25 in per ft).	◯ Yes ◯ No
4. Confirm that any site slopes, walls, or fences do not trap water around the station installation site.	◯ Yes ◯ No
5. If using an existing concrete pad with Power Link 2000 Surface Conduit Entry Kit (SCEK), confirm the SCEK is ready for installation.	◯ Yes ◯ No
6. If Power Link 2000 shall use the overhead Cable Management Kit (CMK), the pole or structure that supports the overhead CMK meets the following specifications: • The pole has a structural capacity of 1780 N (400 lbf) and is designed or verified by a structural engineer per local codes. • The pole is high enough to mount the overhead CMK at an optimum height of 3 m (10 ft) for maximum cable reach.	◯ Yes ◯ No

	Indicate Yes or No Add Comments
• Unless the pole needs to be at a certain location for a specific vehicle inlet, the pole's mounting bolts are located such that the overhead CMK, when mounted onto the pole, comes at the center of the parking space and aligns with the front of the bollards. **NOTE:** Images are not to scale. Measurements appear in metric units (m) followed by imperial equivalents (ft).  	
7. All signage, parking spot striping, and "EV" markings are completed per site drawings and local code.	◯ Yes ◯ No
8. If the installation site is located at parking spaces reserved for people with limited mobility, confirm the Power Link 2000 shall not be installed on a raised concrete pad.	◯ Yes ◯ No

Civil Work, Power Link 2000, Wall or Overhead-Mount

	Indicate Yes or No Add Comments
1. Confirm the wall or overhead structure wall or overhead structure has a structural capacity of 1780 N (400 lbf) in addition to product weight and it is designed or verified by a structural engineer per local codes.	◯ Yes ◯ No
2. Confirm the wall is smooth and plumb. Confirm the wall height is sufficient to mount the Power Link 2000 at the specified height.	◯ Yes ◯ No

	Indicate Yes or No Add Comments
3. For Overhead-Mount, confirm the maximum height of the mounting bracket is 6096 mm (240 in) above the finished floor.	◯ Yes ◯ No

Civil Work, Power Link 2000, All Mount Types

	Indicate Yes or No Add Comments
1. Confirm the wire run length between Power Link 2000 and its supplying power cabinet does not exceed 200 m (656 ft).	◯ Yes ◯ No

Anchor Bolt Verification - Pedestal-Mount

Power Link 2000 mounts over anchor bolts embedded in a concrete pad. The anchor bolts must align with the anchor bolt hole pattern shown below. The figure below shows a top-down views of the cabinet bottom plate and the corresponding anchor bolt hole locations. Measurements appear in metric units (mm) followed by imperial equivalents (inches).

Verify the following:

	Indicate Yes or No Add Comments
1. There are four anchor bolts present.	◯ Yes ◯ No
2. All anchor bolts are M16 threaded, ASTM F1554 Grade 55, and hot-dip galvanized.	◯ Yes ◯ No
3. Anchor bolt pattern and spacing match the pattern shown above.	◯ Yes ◯ No
4. Anchor bolts are vertically plumb, with no visible lean, tilt, or misalignment.	◯ Yes ◯ No
5. 76 mm (3 in) of each anchor bolt extends above the finished mounting surface.	◯ Yes ◯ No
6. If using an existing concrete pad, verify the following: • Anchor bolts are installed with 229 mm (9 in) embedment and 76 mm (3 in) exposed length above the concrete surface. • Anchor bolts are installed using an epoxy anchor adhesive with minimum properties of 11.7 MPa bond strength, 82.7 MPa compressive strength, and 49.3 MPa tensile strength (for example, Hilti HIT-RE 500 V3 [normal cure] or Hilti HIT-HY 200-A [fast cure]).	◯ Yes ◯ No

Anchor Bolt Verification - Overhead-Mount

The overhead-mount Power Link 2000 mounts onto a wall or an overhead structure (such as a gantry) using a bracket that attaches to its back. The figure below shows the corresponding anchor bolt hole locations. Measurements appear in metric units (mm) followed by imperial equivalents (inches).

Verify the following:

	Indicate Yes or No Add Comments
1. There are six mounting attachment points present.	◯ Yes ◯ No
2. Mounting attachment point pattern and spacing match the pattern shown above.	◯ Yes ◯ No
3. The mounting attachment points are compatible with M8 mounting hardware.	◯ Yes ◯ No

Conduit/Duct Verification - Pedestal-Mount

The concrete mount template (CMT) positions the anchor bolts and wire entry points as shown below.

(a) M16 anchor bolt (x4)

(b) Breakaway tabs for conduits or armored cables.

(c) Conduits for DC power path input wires (sample conduit configuration shown).

(d) Conduits for 48 V DC and Ethernet wires (sample conduit configuration shown).

Verify the following:

	Indicate Yes or No Add Comments
1. For installations using a CMT, confirm the conduits are correctly positioned through the CMT.	◯ Yes ◯ No
2. In all cases, verify that the conduit or duct layout is correctly oriented relative to the intended front side of the cabinet.	◯ Yes ◯ No

IMPORTANT: The following table provides the maximum size and quantity of conduits that can be installed for a pedestal-mount Power Link 2000 configured for wire entry via conduit stub-ups. The actual conduit size and quantity must be chosen based on site specific wiring requirements.

Conduits For	Conduit Quantity x Trade Size
DC power path input wires	2 x 4 inch max. or 4 x 3 inch max. or 6 x 2 inch max.
48 DC wires and Ethernet cable	2 x 1 inch (*)
Optional features (Ethernet to USB or soft shutdown switch)	2 x 3/4 inch max.

NOTE: (*) 48 V DC and Ethernet wires travel in the same conduit. 1 inch conduit size is required. The quantity of conduit will depend on configuration.

IMPORTANT: The following table provides the maximum size and quantity of conduits that can be installed for a pedestal-mount Power Link 2000 configured for wire entry via the Surface Conduit Entry (SCE) kit. The actual conduit size and quantity must be chosen based on site specific wiring requirements.

Conduits For	Conduit Quantity x Trade Size
DC power path input wires	2 x 3 inch max.
48 DC wires and Ethernet cable	2 x 1 inch (*)
Optional features (Ethernet to USB or soft shutdown switch)	2 x 3/4 inch max.

NOTE: (*) 48 V DC and Ethernet wires travel in the same conduit. 1 inch conduit size is required. The quantity of conduit will depend on configuration.

If DC power path input wires are pulled during site make-ready, there must be a minimum conductor length of 1320 mm (52 in) from the finished mounting surface.

Verify the following:

	Indicate Yes or No Add Comments
1. Conduits meet the specifications given above.	◯ Yes ◯ No
2. If pulled through conduit, confirm the DC power path wires extend at least 1320 mm (52 in) beyond the finished mounting surface.	◯ Yes ◯ No
3. Conduit stub-ups are cut to a height of 102–160 mm (4–6.25 in) above the finished mounting surface.	◯ Yes ◯ No

Conduit/Duct Verification - Wall or Overhead-mount

IMPORTANT: The following table provides the maximum size and quantity of conduits that can be installed for a wall or overhead-mount Power Link 2000. The actual conduit size and quantity must be chosen based on site specific wiring requirements.

Conduits For	Conduit Quantity x Trade Size
DC power path input wires	2 x 4 inch max. or 4 x 3 inch max.
48 DC wires and Ethernet cable	2 x 1 inch (*)
Optional features (Ethernet to USB or soft shutdown switch)	2 x 3/4 inch max.

NOTE: (*) 48 V DC and Ethernet wires travel in the same conduit. 1 inch conduit size is required. The quantity of conduit will depend on configuration.

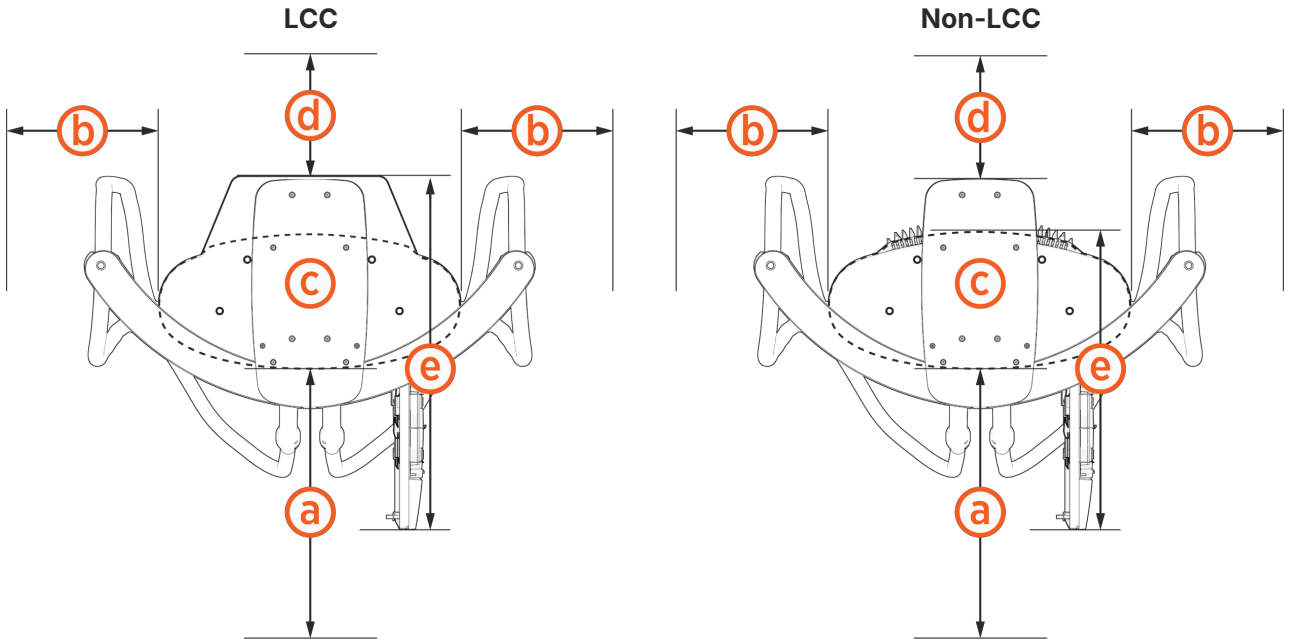
Verify the following:

	Indicate Yes or No Add Comments
1. Conduits meet the specifications given above.	◯ Yes ◯ No

Service Clearance Verification

Power Link 2000 Clearances

The Power Link 2000 requires minimum site and service clearances listed below.



Power Link 2000		Clearance
(a) Front	Minimum open space	610 mm (2 ft)
(b) Side		305 mm (12 in) at grade, minimum **NOTE:** 610 mm (24 in) recommended for user service and this 610 mm (24 in) can be shared between Power Link 2000s
(c) Top	Pedestal or wall-mount	26 mm (1 in) from top of CMK or 305 mm (12 in) from top of Power Link 2000, whichever is higher.
	Overhead-mount	305 mm (12 in) from top of Power Link 2000

Power Link 2000		Clearance
(d) Rear	Pedestal-mount	203 mm (8 in) for non-LCC or 305 mm (12 in) for LCC. This provides service clearance for CMK and LCC. **NOTE:** At least 610 mm (2 ft) of clearance is required for surface conduit entry. In the case of back-to-back Power Link 2000s, each with surface conduit entry, the clearance can be shared.
(e) Door swing plus station width		730 mm (28.75 in)

Bollards

Bollards (if applicable) placement allow sufficient clearance:

Follow the measurements listed for bollards placement:

(a) Anchor bolt to bollard inside edge: 254 mm (10 in)

(b) Anchor bolt to bollard front edge: 424 mm (16.7 in)

(c) Power Link 2000 side to bollard inside edge: 122 mm (4.8 in)

(d) Power Link 2000 front to bollard front edge: 305 mm (12 in)

Verify the following:

	Indicate Yes or No Add Comments
1. The installed Power Link 2000 will meet all service and clearance requirements given above.	◯ Yes ◯ No
2. The installed bollards (if used) meet all clearance requirements given above.	◯ Yes ◯ No
3. No walls, fences, curbs, bollards, equipment, vegetation, or other obstructions will encroach on the required clearance areas.	◯ Yes ◯ No

Electrical Work Verification

IMPORTANT:

- For DC power path high-current wiring:
  - Use copper or aluminum wires rated for 90 °C (194 °F).
  - Wires can be XHHW/XHHW-2 based on site condition (dry or wet) and must be rated for 1000 V.
- For 48 V DC and soft shutdown wiring, use copper wiring only. Wires can be XHHW/XHHW-2 based on site condition (dry or wet). Wires must be rated for 1000 V(due to routing proximity to power conductors) and 75 °C (167 °F).
- Use copper lugs for copper wires and aluminum lugs for aluminum wires. The lugs must be nickel, tin, or silver plated compression (not mechanical) lugs. Nickel-plated lugs installed with dielectric grease is recommended.
- When using aluminum lugs, ChargePoint recommends using an appropriate antioxidant compound on aluminum conductors when terminating into tin-, nickel-, or silver-plated lugs, where required by code or specified by the lug manufacturer.

IMPORTANT: Following are wire specifications for the Power Link 2000, including the maximum quantity and size that the wire terminals can accommodate. All sizing assumes a maximum ambient temperature of 50 °C (122 °F). Where the maximum wire size is listed, the actual wire quantity and size must be chosen based on site-specific wiring requirements and in accordance with the maximum allowed conduit filling rate per local code.

Wire	Quantity	Size	Termination
DC Power Paths A and B	Max. 12 wires per Power Path (three wires per pole on each landing)	Upper landings: 300 MCM(*) Lower landings: 4/0 AWG (max. 500 A per landing)	Lug: Long barrel and tongue with two holes spaced 44.5 mm (1.75 in) apart and sized for M12 (0.5 inch) studs. Max. lug tongue width: 31 mm (1.25 in) for upper landings, 25.9 mm (1 in) for lower landings. Aluminum lug max. tongue thickness: 10 mm (0.4 in) for upper landings, 5 mm (0.2 in) for lower landing.
Ground	Max. 6 wires (one per supplying power cabinet)	Refer to the local code for size; max. 1/0 AWG	Lug: Short barrel and tongue with single hole, sized for M6 stud.
48 V DC	Max. 8 wires (four wire pairs; each pair has one wire per pole)	6 AWG	Stripped wire end or ferrule
Ethernet	Max. 4 cables	Outdoor-rated Cat6 STP(**)	RJ45 connector
Soft shutdown switch(***)	2 wires	14 AWG	Stripped wire end or ferrule

NOTE: (*) If utilizing both upper and lower landings, the maximum DC input power path wire size is 4/0 AWG. (**) The required Ethernet cable type depends upon the cable run length. For details refer to *Ethernet Requirements* section in *Express Distro Power Link 2000 Site Design Guide*. (***) Soft shutdown switch is an optional feature.

Complete the following electrical work checklist for each station location across the site.

Electrical Work Checklist	Indicate Yes or No Or Add Value
1. Confirm DC power path conductors meet requirements given above. Record the DC power path conductor quantity, gauge, insulation type, voltage rating, and temperature rating.	◯ Yes ◯ No _____ _____ _____ _____
2. Confirm 48 V DC conductors meet requirements given above. Record the 48 V DC output conductor quantity, gauge, insulation type, voltage rating, and temperature rating.	◯ Yes ◯ No _____ _____ _____ _____
3. Record the maximum Power Link 2000 to power cabinet wire run length.	_____ _____
4. If wires are pulled, return this form with insulation test reports for DC power paths.	◯ Yes ◯ No

Network Connectivity Validation

You must test the LTE signal strength on LTE bands 2, 4, 5, 12, and 13 at the proposed mounting location of every station and ensure the location meets the minimum RSRQ at -12.5 dB or better, for RSRP measured at -90 dBm or better. Refer to the graph below for acceptable combinations.

IMPORTANT: In regions where cellular signal repeaters are permitted, ChargePoint recommends installing a properly configured cellular repeater when signal strength or quality is below the specified requirements. Sites that do not meet the specified cellular signal requirements may result in commissioning issues and additional service fees.

Record the measured cellular signal strength below:

Carrier Name	4G (dBi)	RSRQ	RSRP
1.			
2.			
3.			

Site Comments and Signoff

Site Comments

I, _____ hereby certify that the scope of work in this form has been correctly completed.

Signature	Date

chargepoint.com/support