

INSTALLATION MANUAL

ABB DC WallBox Pedestal

Guide to Installing the DC WallBox Pedestal

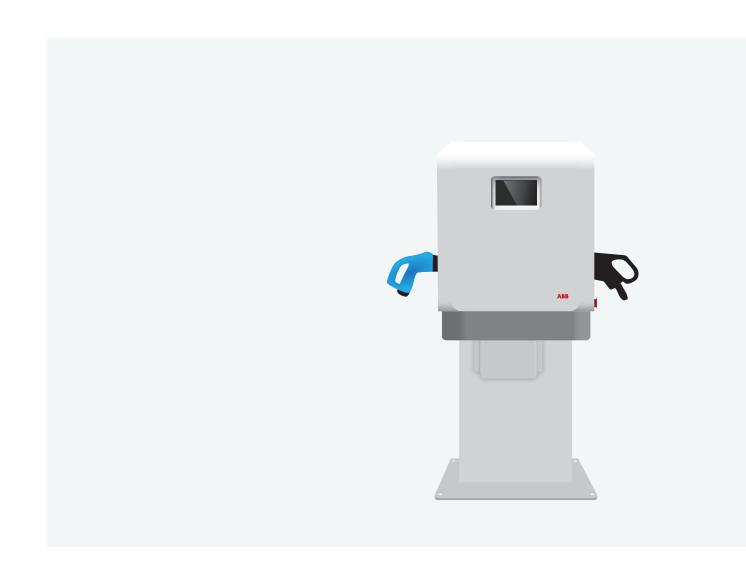




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Introduction

ABB DC WallBox Pedestal

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Intended Document Users

This document is intended to be used by:

- Customers who purchased a DC pedestal or are in the process of ordering and want to know in more detail how it has to be installed.
- Contractors who are responsible for site preparation and/or installation of a DC Pedestal.

Safety Warnings & Notices

Signs and Their Meanings



Installation Safety

1. Always switch off the external group switch upstream (Main breaker, RCD, and disconnector) before performing any installation, disassembly, repair, or replacement of components.

- 2. Do a voltage check and make sure that the electrical power is disconnected from the system.
- 3. When the system is in an open or dangerous condition, do not allow unqualified persons to go near it. Instruct and warn people about the potential harmful high voltages.

The following signs are used on the equipment and in this manual.



Danger

Identifies a hazard that could result in severe injury or death through electrocution.



Environmental Damage

Identifies a hazard that could result in environmental damage and/or environmental pollution.



Warning

Identifies a hazard that could result in severe injury or death.



Notice

Contains remarks, suggestions, or advice.



Warning

Identifies a hazard that could result in injury due to the presence of rotating or moving parts.



Tilting & Handling

The AC pedestal weighs about 70 lbs. Handling instructions:

- 1. Consider always two people to unpackage and install.
- 2. Do not drop the AC pedestal.



Warning

Identifies a hazard that could result in injuries in which some body parts are pinched or crushed.



Sharp Edges

There could be sharp metal edges inside the AC pedestal. It is recommended to wear mesh protective gloves when working on the AC pedestal.



Caution

Identifies a hazard that could result in damage to the machine, other equipment, and/or environmental pollution.



Electric Hazards

The ABB Charging Station contains conductors under hazardous electrical voltages. The terminals on the internal connection points may carry hazardous voltages, even if all circuit breakers are switched off.

Owner Responsibilities

Requirements for the owner & site operator

The owner and site operator are required:

- To operate the charge station pedestal and cable retraction system with the protective devices installed and to make sure all protective devices are correctly installed after carrying out installation or maintenance.
- To write an emergency plan that instructs people what to do in case of emergency.
- To prepare the site where the charge station will be installed, according to the requirements described in this guide.
- To make sure that there is enough space around the charger to carry out maintenance work.
- To appoint a person responsible for the safe operation of the charge station and for the coordination of all work.
- The owner is cautioned that changes or modifications not expressly approved by ABB could void the owner's authority to operate the equipment and ABB's warranty policy.
- Neither ABB nor its affiliates shall be liable to the purchaser of this product or third parties for damages, losses, costs or expenses incurred by purchaser or third parties as a result of: an accident, misuse or abuse of this product or unauthorized modifications, repairs or alterations to this product, or failure to strictly comply with ABB operating and maintenance instructions.

Environment and Disposal of Waste

Notice

Always observe the local rules and regulations with respect to processing (non-reusable) parts of the DC WallBox pedestal.

Caution

The installation company is responsible for design and installation according to local regulations.

Site Installation Prerequisites



This instruction outlines the recommended general procedure for installation by a qualified person, as defined by all local electrical codes and/or the NEC®.



Due to the weight of the DC WallBox Pedestal and DC Charger, more than one person is required to safely unpack and install the pedestal and charger.



Be aware that many areas require special permits and/or utility approvals to install EV charging equipment. Contact your local electrician inspector's office and your local utility prior to beginning work to understand local requirements.

Concrete Pad, Power Feed, and Anchor Requirements

Provide an approved concrete or composite base with the top flush at ground level with 12"-18" conduit stub-up centered in the base.

The conduit should be sized to provide wires (L1, L2, L3, GND) as per instructions for the charging station being mounted.

Feed wire size should be determined by a qualified electrician using industry standard calculations.

The concrete base should be a minimum of **36"W x 24"L x 18"D** and can be poured or pre-cast / pre-made.

Ensure ADA reach point requirements are maintained. **See Figure 1.1**. https://www.ada.gov/law-and-regs/

NOTE: It is recommended to install protective concrete filled steel bollard posts and/or curb stops to protect the charger from an automobile strike.

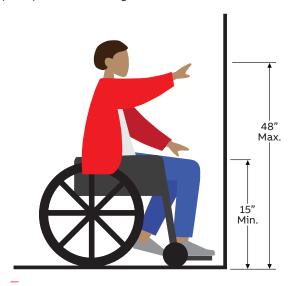


Figure 1.1

Figure 1.1 ADA Reach Height Requirements 8

Unpacking the DCWB Pedestal

MOUNTING PREPARATIONS

Unpack the contents of boxes and verify that all the following components are present. See Figure 2.1.

Figure 2.1 Box Contents

Box Contents

Quantity	Component
One (1)	DC WallBox Pedestal (23" x 12.6" x 53") w/ Rear Panel
One (1)	Power Wire Cover
One (1)	Cover Plate
Eight (8)	#10-32 Mounting Lock Washer (stainless)
Eight (8)	#10-32 Mounting Nuts (stainless)
Four (4)	1/2-13 Drop-in Concrete Anchors
Four(4)	1/2-13 x 2 1/4" Anchor Bolts
Four (4)	1/2" Anchor Washers
Ten (10)	1/4-20 x 3/4" EVSE Bracket & Holster Mounting Screws

Figure 2.1

INSTALLING THE DC WALLBOX PEDESTAL

- 1. Use the provided drop-in anchors with a concrete base, level and secure the pedestal to the base.
- 2.Clean debris from the holes and install drop-in anchors using the proper setting tool (not included).
- 3. Remove rear access panel and place to the side.
- 4. Attach cover plate to upper square opening on front of pedestal.
- 5. Install the DC WallBox pedestal with charging station so that all user controls are no more than 48" above ground level (as per ADA regulations). See Figure 1.1.
- 6. Using the DCWB installation instructions, attach the mounting bracket to the pedestal using the enclosed 1/4-20 screws.
- 7. Install the DCWB (requires two people) to the mounting bracket as per manufacturer's instructions.

NOTE: Liquid-tight conduits and fittings are required as the pedestal is not rated to resist water penetration.

- 8. Install the wire feed cover to the lower square opening on front of the pedestal.
- 9. Using the included 1/4-20 screws, mount the connector holster(s) provided with the DCWB on the side(s) on the pedestal.
- 10. Once the above steps are complete and all screws, bolts, fittings, wire connectors, etc. are tight, install the rear access panel.

FOLLOW THE STEPS BELOW TO INSTALL (OPTIONAL) CABLE RETRACTOR

- 10a. The DC WallBox pedestal is designed for easy bolt-on installation of the *optional* cable retractor.
 - The rear access panel has (4) threaded holes to mount the retractor using the included 1/4-20 stainless steel screws.
 - Follow steps 10-15 to attach the retractor cable clamp to the charging station cable.
- 11. Turn on the power feed to the station(s) and test per manufacturer's instructions.

Attaching the Cable Clamp

Figure 3.1 Cable Unwound

Figure 3.2 **Charging Cable** Midway Point

Figure 3.3 Cable Hovers Above Ground

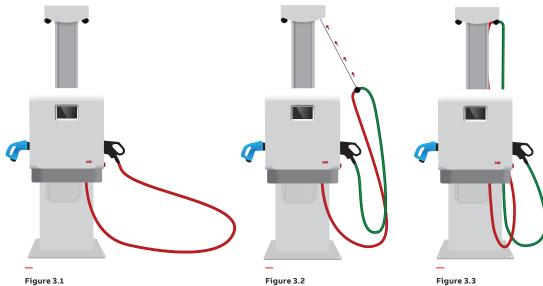


Figure 3.1 Figure 3.2

- 10. Ensure the charging station is properly installed to the pedestal.
- 11. Remove the lower half of the cable clamp by removing the two screws and set aside.
- 12. Unravel the charging cable by removing any twists and holster the charging station connector to the connector dock (see Figure 2.1 Cable Unwound).
- 13. Find the approximate mid-way point of the charging cable. Without tightening the screws all the way, loosely attach the cable clamp to the charging cable and retract to starting point. The cable should freely slide/move within the clamp (see Figure 2.2 Charging Cable Midway Point).

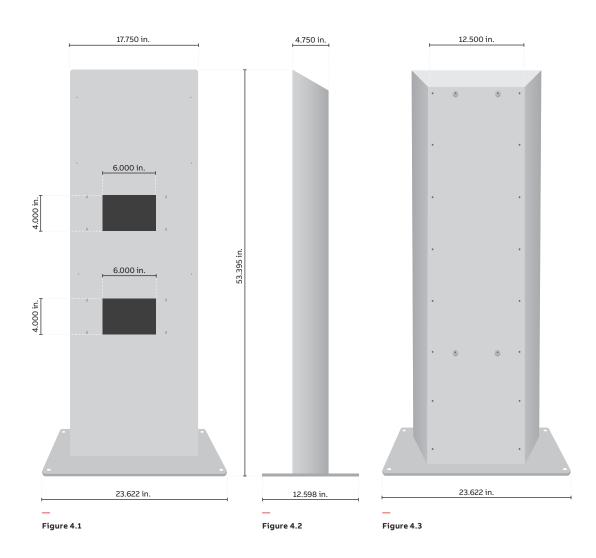
- 14. Slide the cable positioning until you've achieved a loop from charging station to the clamp. Both loops should hover above the ground (see Figure 2.3 Cable Hovers Above Ground).
- 15. Should you be unable to fully tighten the clamp on the cable, use the included rubber spacer and insert between the cable clamp and cable, creating a tight grip on the cable as you tighten the screws (electrical tape can also be used). The cable should not move within the clamp!
- 16. Repeat steps 10-15 on opposite side.

DC WallBox Pedestal Dimensions



DC WallBox
Pedestal, Back
—
Figure 4.4

Figure 4.4 DC WallBox Pedestal Baseplate



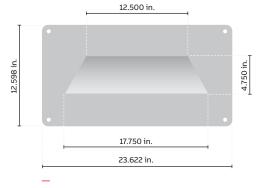
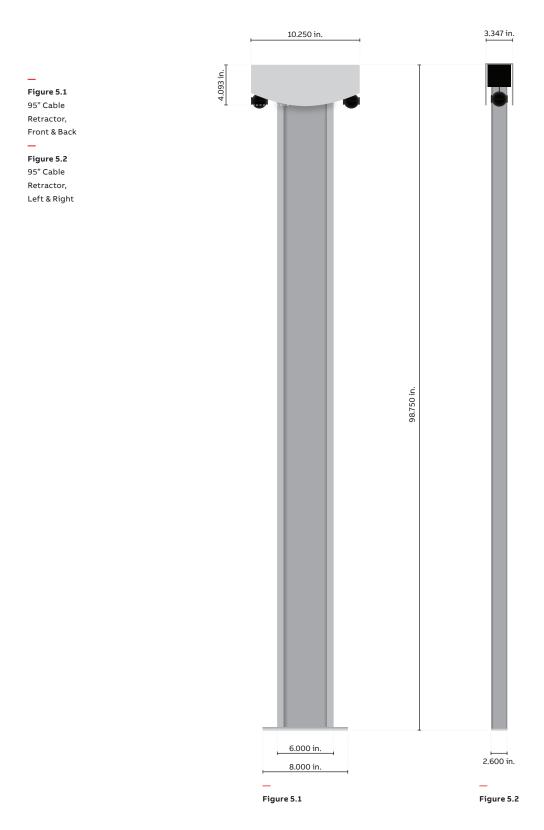


Figure 4.4

(Optional) Cable Retractor Dimensions





– ABB E-mobility Inc.

For service support in the United States: abbevci.zendesk.com For service support in Canada: abbemcan.zendesk.com