



POWERDUCT TRACK BUSWAY INSTALLATION MANUAL

Follow the safety label instructions on this equipment and inside this bulletin.



DANGER

HAZARD OF ELECTRIC SHOCK, BURN, OR EXPLOSION

- Only qualified electrical maintenance personnel should install, operate, service or maintain this equipment. This document should not be viewed as sufficient for those who are not otherwise qualified to operate, service, or maintain the equipment discussed.
- Turn off power to busway before installing, removing, or working on this equipment. Use properly rated voltage sensing device to confirm power is off.
- The successful operation of this equipment depends upon proper handling, installation, operation, and maintenance.
- Conduct insulation resistance test with DC 500V tester before energizing.
- Before installing, removing, or performing any work on or inside the Plug-in Unit:
 1. Wear electrical personal protective equipment appropriate for the hazard;
 2. Turn off the Plug-in Unit;
 3. Always use a properly rated voltage sensing device at all load side connections to confirm that the Plug-in Unit is OFF.Never operate the Plug-in Unit with the door open.
Never install the Plug-in Unit onto the busway without having a Circuit Breaker installed.

Failure to follow these instructions will result in death or serious injury.



WARNING

HAZARD OF ELECTRIC SHOCK, BURN, OR EXPLOSION

- Protect this equipment from contaminants such as water, salts, concrete and other foreign matter and other corrosive environments before and during installation.
- Outdoor equipment is not weather resistant until completely and properly installation.
- Do not sit, walk or stand on this equipment.
- Make sure the busways installed in the correct phase direction.

Failure to follow these instructions can result in death, serious injury, or equipment damage.



CAUTION

HAZARD OF EQUIPMENT DAMAGE

- Hydrocarbon spray propellants and hydrocarbon-based sprays or compounds will cause degradation of certain plastics. Before using products to clean, dry, or lubricate components during installation or maintenance.

Failure to follow these instructions will result in death or serious injury.

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General Information

Introduction

This publication is a guide of practical information containing instructions for handling, installation and operation of Powerduct Track Busway busway and some busway accessories. These recommendations and guidelines will be valuable to electrical engineers, electrical contractors, electricians, maintenance engineers and others person who responsible for the handling, installation and operation of Powerduct Track Busway. This manual will be updated to reflect certain relevant developments in Powerduct Track Busway.

Please read the following warning very carefully before proceeding with any installation, and operation of Powerduct Track Busway.

Warning:

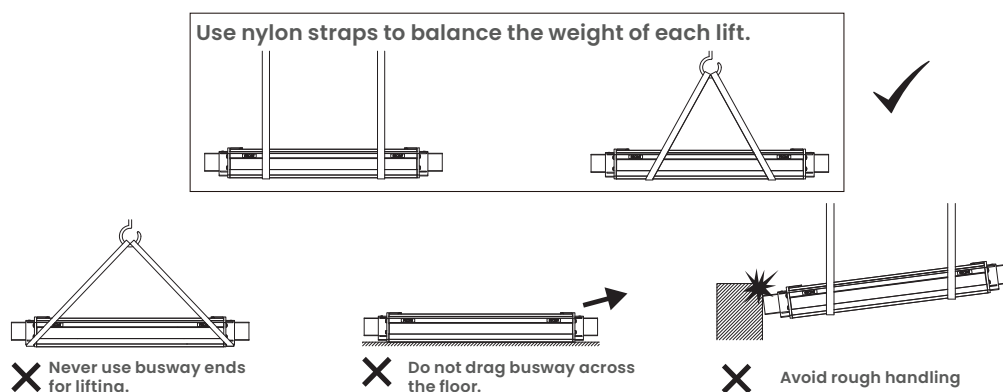
Please take extreme caution when working in or around electrical equipment as there is a hazard of electrical shock can cause severe injury.

- Read all the instructions before installation. Save instructions for later use.
- Turn off the power at fuse or circuit breaker box before installation or maintenance work.
- Wear rubber soled shoes and work on a sturdy wooden or non-conductive ladder.
- Do not exceed the nominal supply voltage or amperage ratings.
- Installing contrary to instructions may cause unsafe conditions.
- Avoid hazards to children: account for all parts and properly dispose of all packing materials.
- Call the Technical Support department at with any installation questions.

Handling (including Unpacking)

These guidelines are provided to help reduce the risk of personal injury and equipment damage during handling.

1. Always take good care while unpacking.
2. Use nail pullers for unpacking wooden crates to void damage.
3. Take good care when handling busway. Do not subject busway to twisting, denting impact and from of rough handling which can result in damage to internal components and the housing or its finish.
4. Never use bus bar ends for lifting busway sections fittings. Apart from running the risk of dropping the busduct. This method of lifting busway can also cause injury. If a crane (overhead or other) is used for busway installation ,use nylon straps to balance the weight of each lift. Open up busway packaging sufficiently to check it for concealed damage as well as to make sure shipment is complete and correct.
5. Do not drag the busway across the floor this can damage the housing and finish (paintwork).



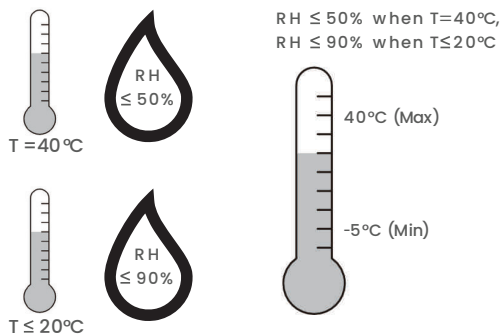
6. Open up busway packaging sufficiently to check it for concealed damage as well as to make sure shipment is complete and correct.
7. If the busway are not required for immediate installation and need to be stored for some time restore the packaging for protection.
8. Know the capacity of the moving means (overhead crane, hoists block & tackle etc.) available to handle the weight of the busway sections and fitting. Refer to Powerduct Catalogue to check the weight of straight lengths.
9. Forklift trucks can be used to effectively handle busway. With a forklift, busway can be hoisted between floors with ease. Power operated lifts or elevators can be used to effectively move busway between elevations.

Storage Precautions

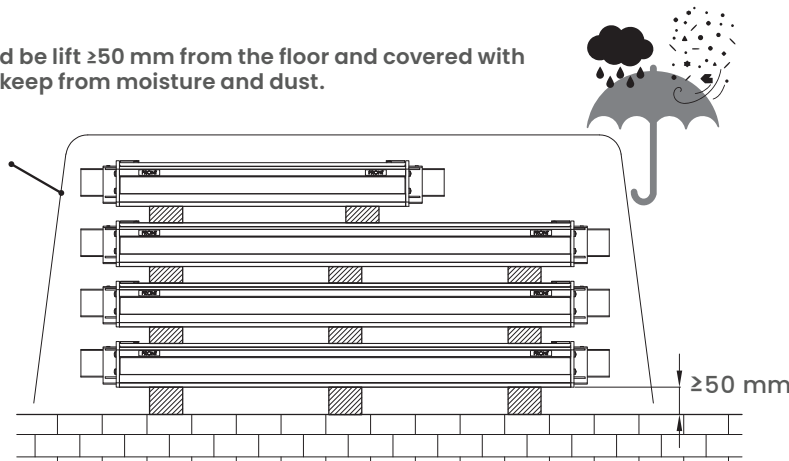
Before storing, unpack thoroughly to make a check of the Busway for possible concealed damage and notify the shipper immediately for any damage reported. If the Busway is free of damage, restore the packing until ready for installation. Store indoors in a clean, dry area, preferably close to the installation points. Protect the Busway from mechanical damage and any contact with or exposure to corrosive fumes, liquids, salts, or concrete. Failure to store and protect the busway properly can cause serious damage and will **void the warranty**.

1. Always store busway in clean and dry place having a uniform temperature to prevent condensation. Ensure that the busway are protected from dirt, fumes, water and physical damage..
2. Do not store busway in a outdoor environment. If busway must be stored outdoor, make sure that the busway are securely covered to provide maximum protection from weather (mainly rain) and dirt.

1. Control temperature and humidity.



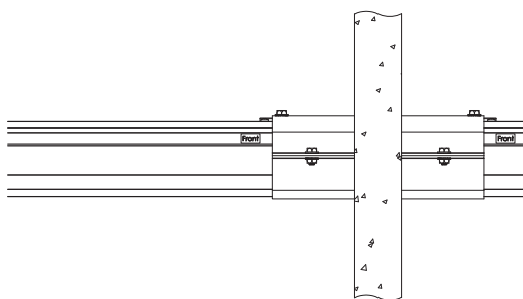
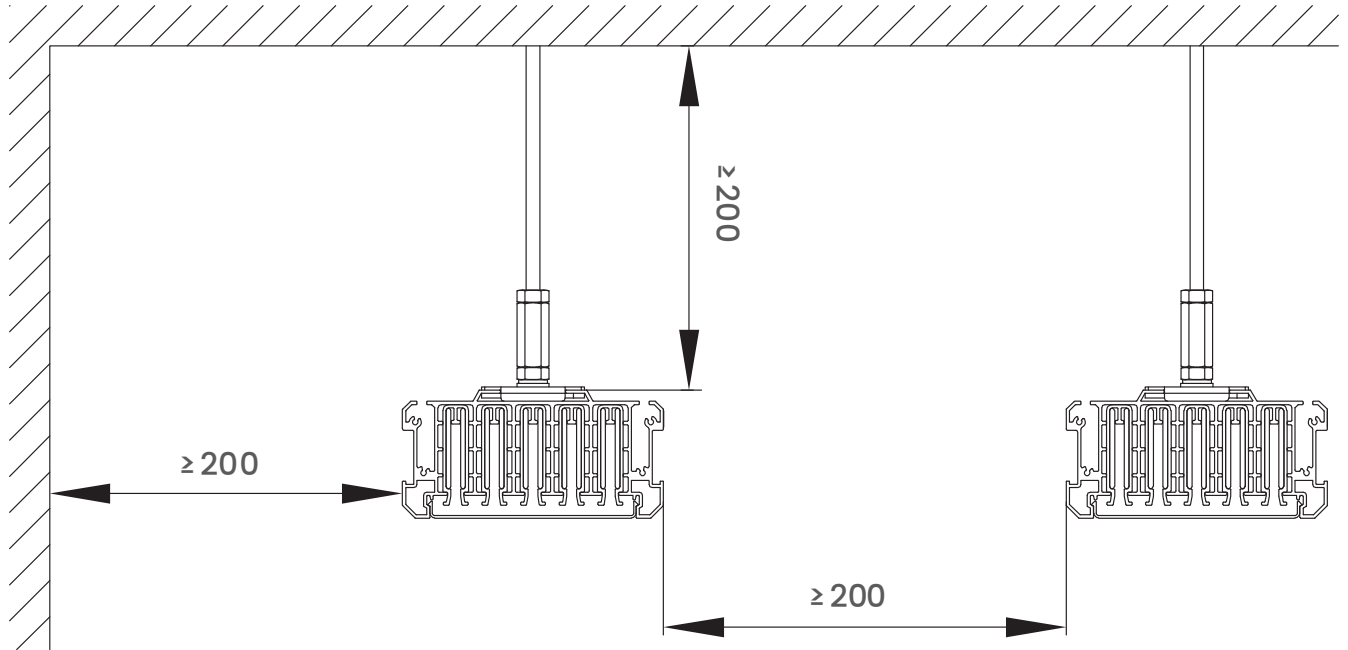
2. The busway should be lift ≥ 50 mm from the floor and covered with waterproof sheet to keep from moisture and dust.



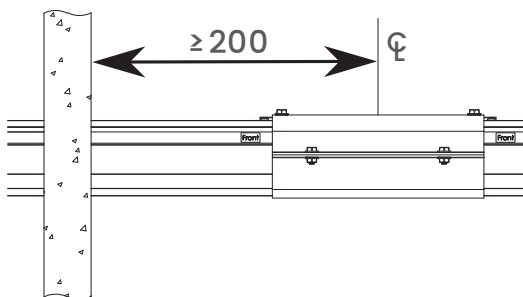
Hanger Installation

Minimum clearance for busway installation.

*Unit in mm



Avoid joint through wall.



Joint center line

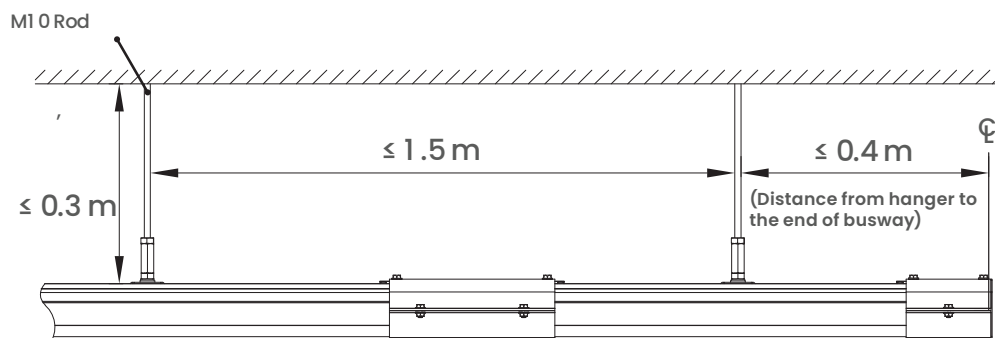


When the joint is on either side of the wall, end of busduct should away from the wall for atleast 200 mm.

Single Rod Hanger Mounting

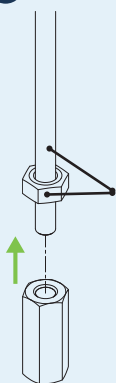
i Before installing the busway, conduct an insulation resistance test, see details on page 19.

For single rod mounting,
The length of rods should
 ≤ 0.3 m to prevent lateral
movement.

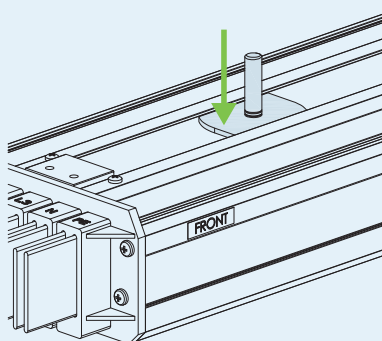


ζ : Joint center line

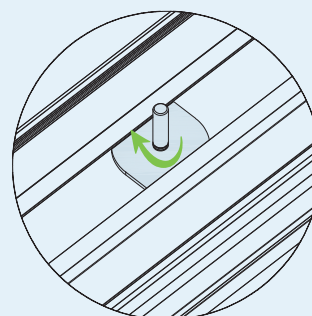
1 Place the long nut on the rod.



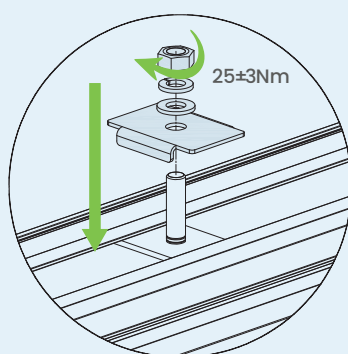
2 Place the hanger bracket to hanger 3 track.



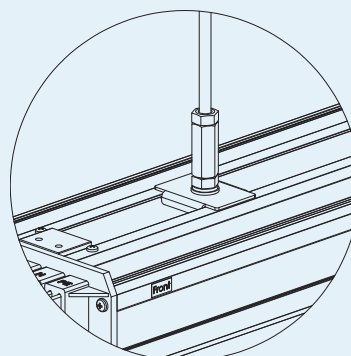
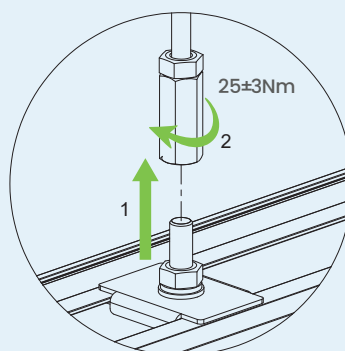
3 Rotate the hanger bracket around 90°.



4 Install the pressing plate.



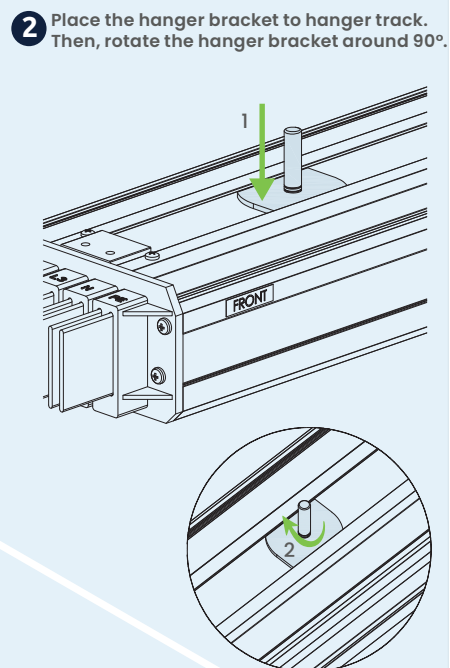
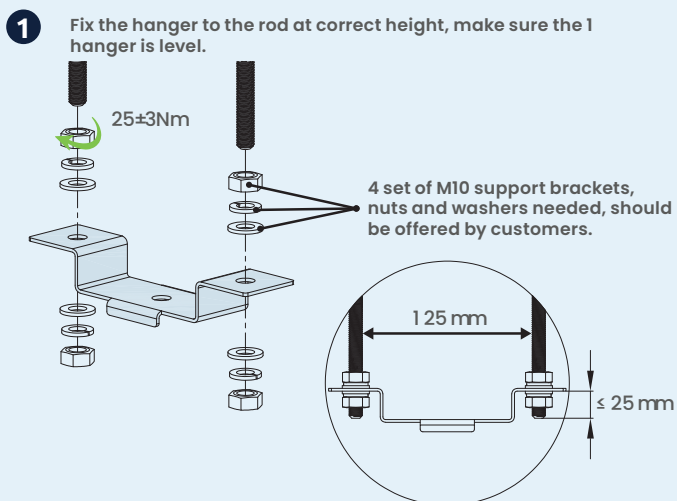
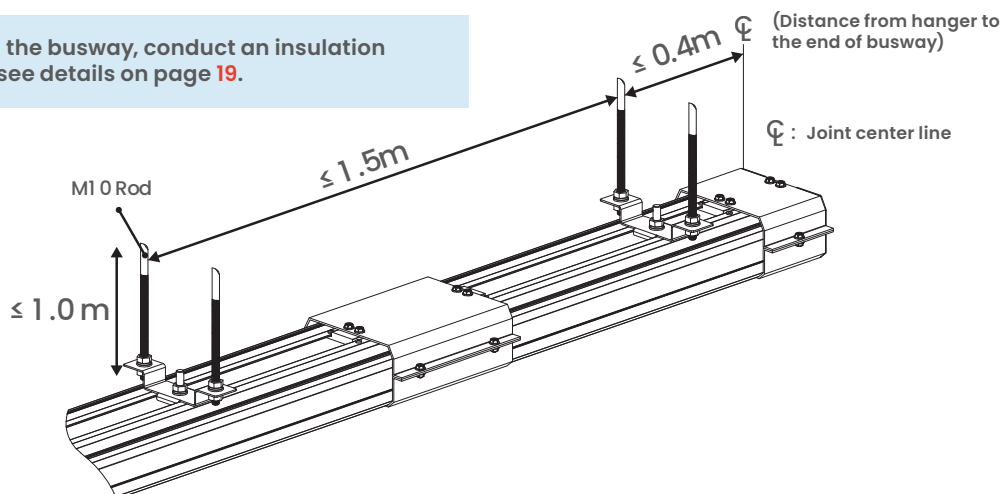
5 Fix busway to the rod, then 5 tighten the nuts.



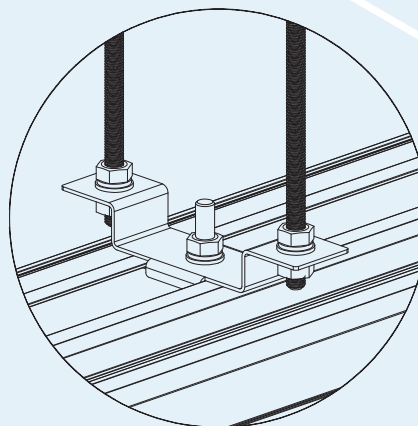
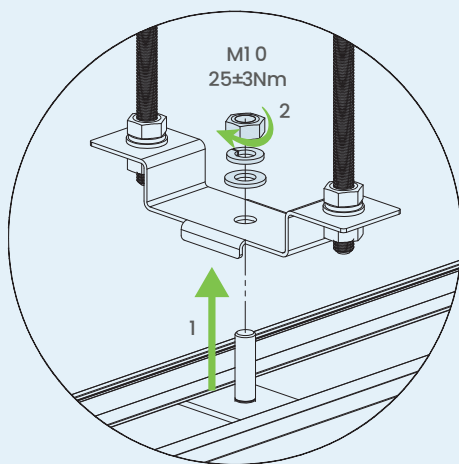
Double Rods Hanger Mounting

- i** Before installing the busway, conduct an insulation resistance test, see details on page 19.

The length of rods should ≤ 1.0 m



- 3** Fix the busway onto the hanger and tighten the nuts.



Notes



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