



PowerBar iMPB

Installer/User Guide

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Technical Support Site

If you encounter any installation or operational issues with your product, check the pertinent section of this manual to see if the issue can be resolved by following outlined procedures.

Visit <https://www.vertiv.com/en-us/support/> for additional assistance.

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1 Unpacking and Preliminary Inspection

IMPORTANT! Visit www.Vertiv.com/Compliance_RegulatoryInfo for important safety information before beginning installation.

IMPORTANT! Consultez la page www.Vertiv.com/Compliance_RegulatoryInfo pour obtenir des informations importantes relatives à la sécurité avant de commencer l'installation.

NOTE: Read this entire manual before installing and operating the system. Upon receipt of a Vertiv™ PowerBar iMPB, the installer should perform the following steps to ensure a top-quality installation.

- Inspect the shipment for damage or signs of mishandling before unpacking the units.
- Unpack the system components carefully. Use care to avoid puncturing the container with sharp objects that could damage the contents.
- Remove the packing and vapor barriers and inspect the equipment for any obvious shipping damage.

1.1 Mechanical Lifting

- Some sections of the busway system may require mechanical lifting due to their weight. Options for mechanical lifting includes forklift, scissor lift, platform lift and block and tackle. A full assessment of the risks should be carried out by the installer before commencing work.
- The PowerBar iMPB must be safely secured to the lifting apparatus before lifting.
- Always check that the weight of the load does not exceed the safe working load of the lifting apparatus. Ensure that the lifting equipment is used according to the manufacturer's guidelines.

1.2 Storage

- The PowerBar iMPB is delivered to the customer neatly stacked on a wooden pallet for ease of removal. The maximum weight of the pallet will not exceed 5500 lbs. (2500 kg).
- The PowerBar iMPB is protected from minor water ingress by an outer polythene wrap that should be left in place until the track is mounted.
- If the PowerBar iMPB will not be installed immediately upon delivery, it should be stored in a clean, dry area with temperatures maintained in the range of 32 °F to 104 °F (0 °C to 40 °C) and humidity of up to 95% Non-Condensing. The busway system should never be stored outdoors.
- Storage/transport: Up to 40000 ft. (12200 m) above mean sea level.
- Do not store busway channel in the upwards orientation.

1.3 Operating Environment and Specifications

Refer the Data sheet of PowerBar iMPB for the information about the operating environment and other specifications. Scan the QR code to obtain the Vertiv™ PowerBar iMPB Data sheet.



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2 Installation

IMPORTANT! These guidelines are for qualified installers who must have knowledge of local wiring practices pertaining to the equipment being installed.

IMPORTANT! Ces consignes s'adressent aux installateurs qualifiés qui doivent avoir connaissance des pratiques locales en matière de câblage applicables à l'équipement installé.

Before you begin ensure the following:

- The entire route is inspected for any obstructions before installation.
- A plumb line is applied from the start of the run to the end of the run as a guide for the installation.

Figure 2.1 Installation Overview

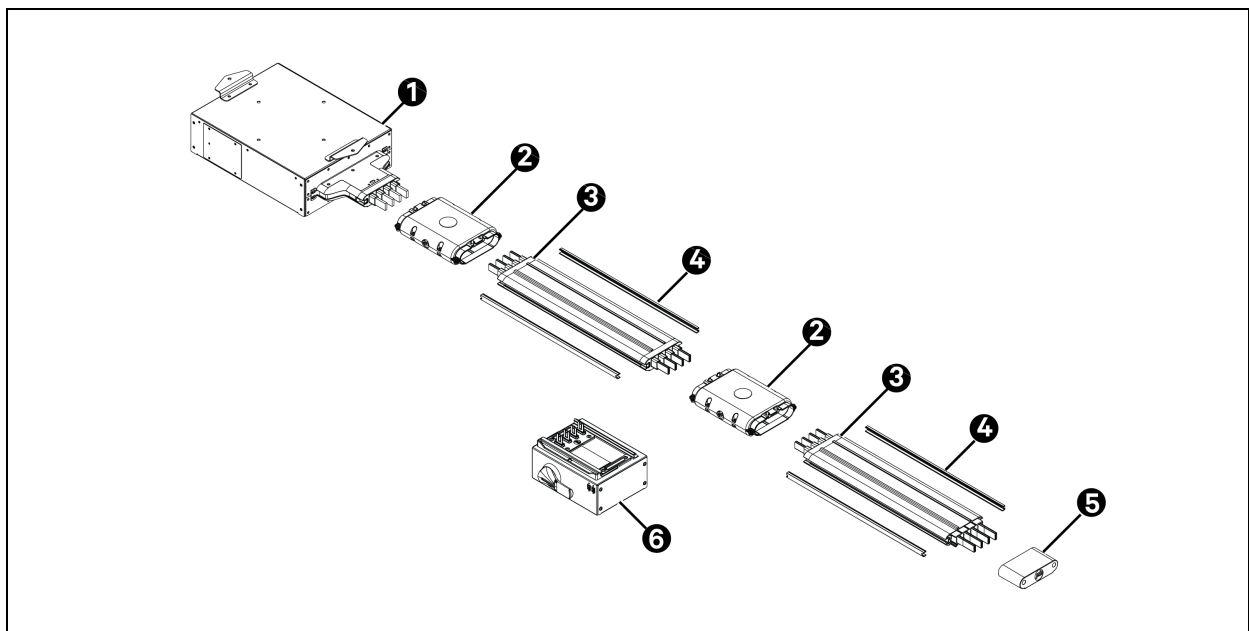


Table 2.1 Overview Description

Item	Description
1	Power Feed Box
2	Joint Pack
3	Busway track
4	Monitoring/Communication Cover (Optional Accessory)
5	End Cap
6	Tap-Off Box

2.1 Power Feed Box

The Power Feed Box is an IP2X enclosure that provides connections for incoming power cables to the PowerBar iMPB. The Power Feed Box is usually the first component to be mounted on a run.

NOTE: The Power Feed Box should be installed at the correct height in accordance with the approved drawings. Refer to the [Submittal Drawings](#) on page 37 of IMPB HB1&2 and and IMPB BUSBAR for installation height, torque values, and additional technical information. Contact your Vertiv representative for copies of the appropriate submittal drawing.

Consult the design engineer's approved drawings for busway track installation requirements.

The power feed box may be installed using all-thread 3/8 in. (10 mm) from the ceiling or Unistrut. For horizontal installations, move the mounting brackets to the narrow side of the box. For vertical installations, move the mounting brackets to the wide top side of the box. For position of horizontal mounting bracket of IMPB HB1&2, see [Horizontal Mounting Bracket](#) on page 1. For Position of vertical mounting bracket of IMPB HB3&4&5, see [Vertical Mounting Bracket](#) on page 1.

Figure 2.2 Standard Cable End

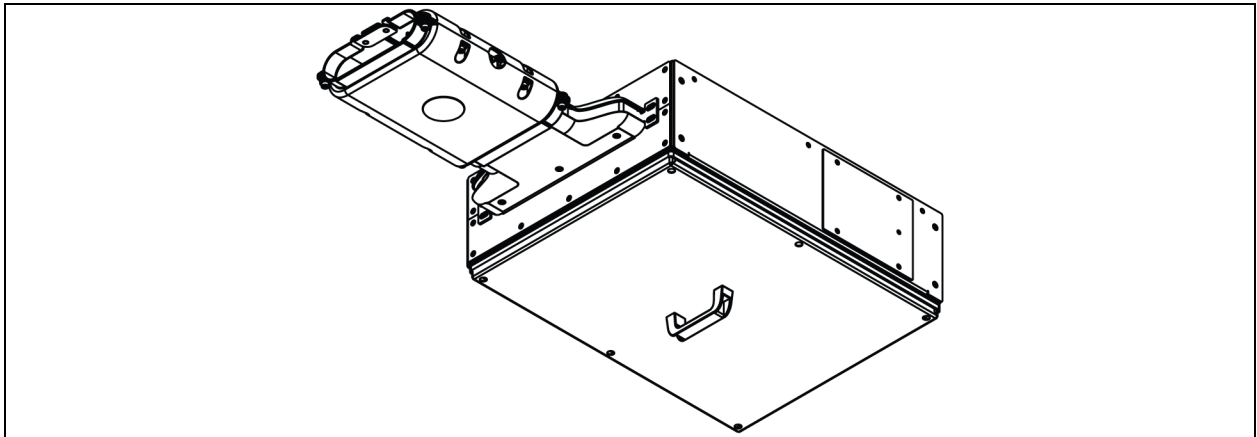
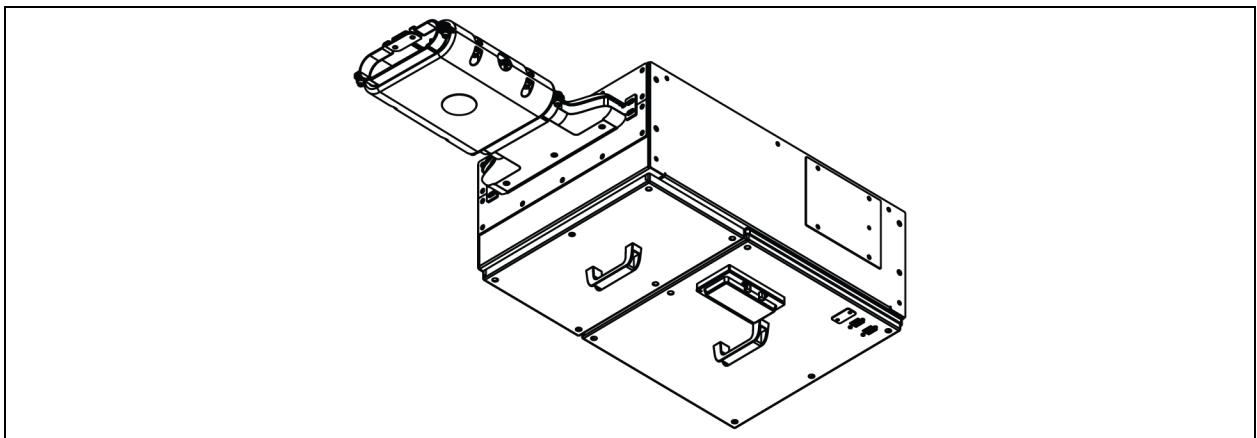


Figure 2.3 Metered Cable End

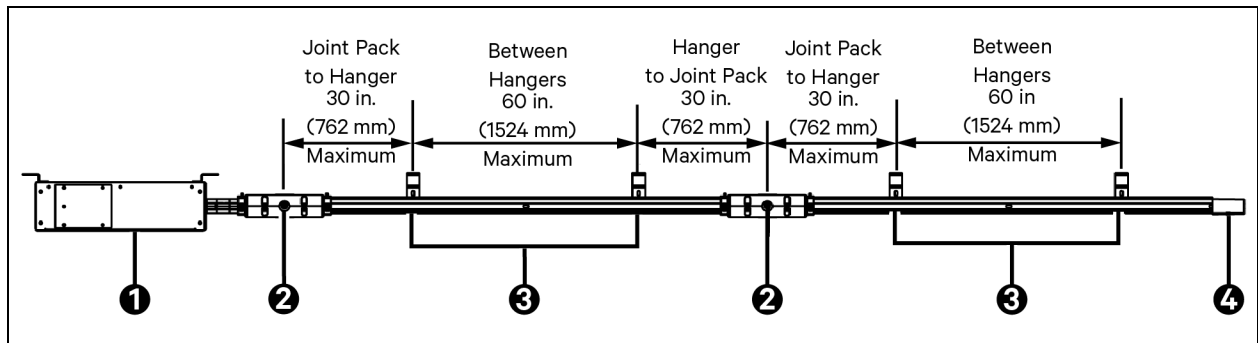


2.2 Hanging Brackets

The PowerBar iMPB busway sections are secured to a framing system using hanging brackets. The busway system can be installed either flat (horizontally) or on its edge (vertically).

NOTE: Vertiv recommends that the hanging brackets be mounted no more than 30 in. (762 mm) from the center of the joint packs and no more than 60 in. (1524 mm) apart.

Figure 2.4 Hanging Bracket Installation Requirements

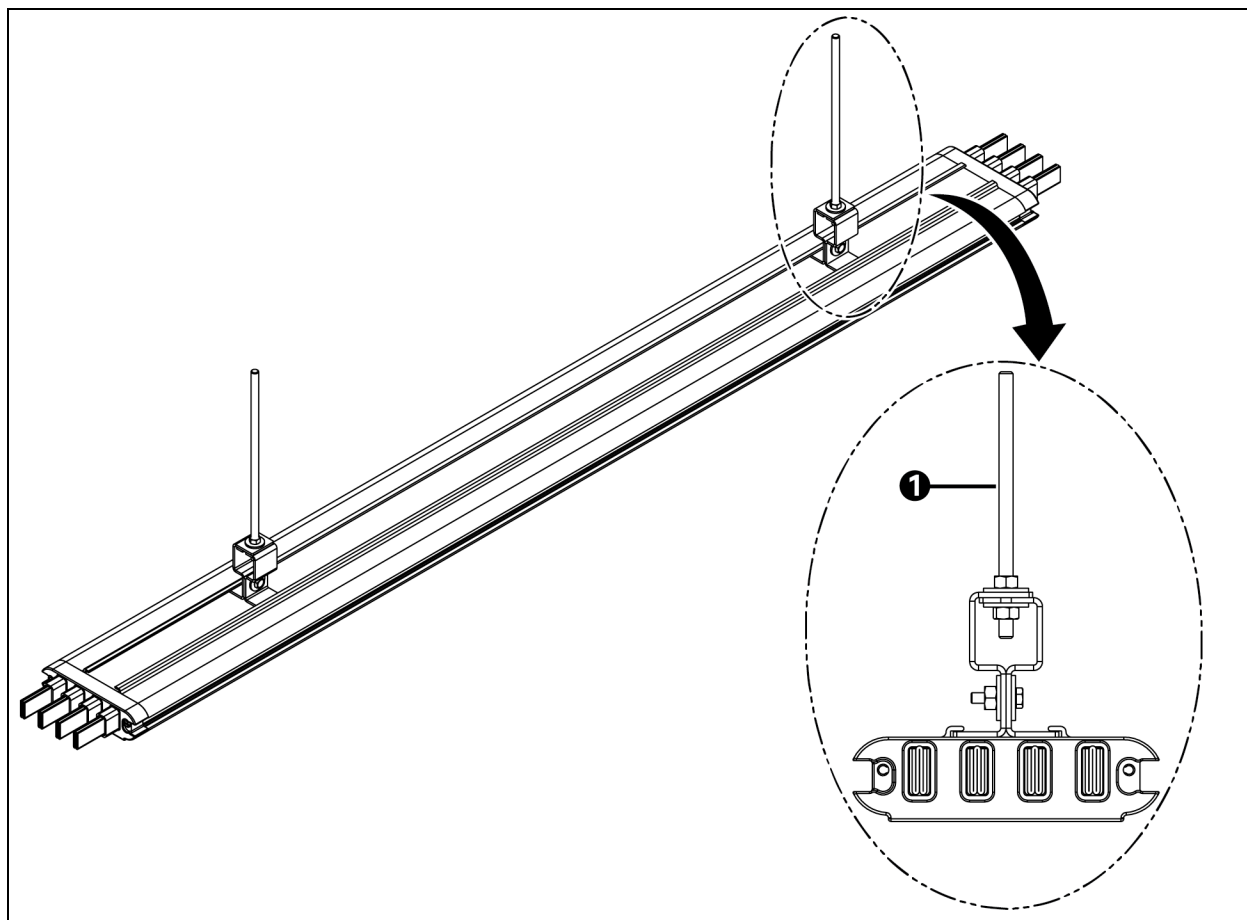


Item	Description
1	Power Feed Box
2	Joint Pack
3	Busway Track
4	End Cap

Ensure that each section of the busway system has at least two sets of hanging brackets fitted and that the busway track is level and plumb before final tightening of the joint packs.

The power feed box comes with mounting brackets pre-installed for vertical hanging using all-thread. If horizontal hanging is required, unbolt in the mounting bracket and reinstall on the rear of the box. Torque the bracket bolts to the box to 10 Nm (89 in./lb.). See [Submittal Drawings](#) on page 37 for details information of IMPB HB1&2.

Figure 2.5 Horizontal Mounting Bracket

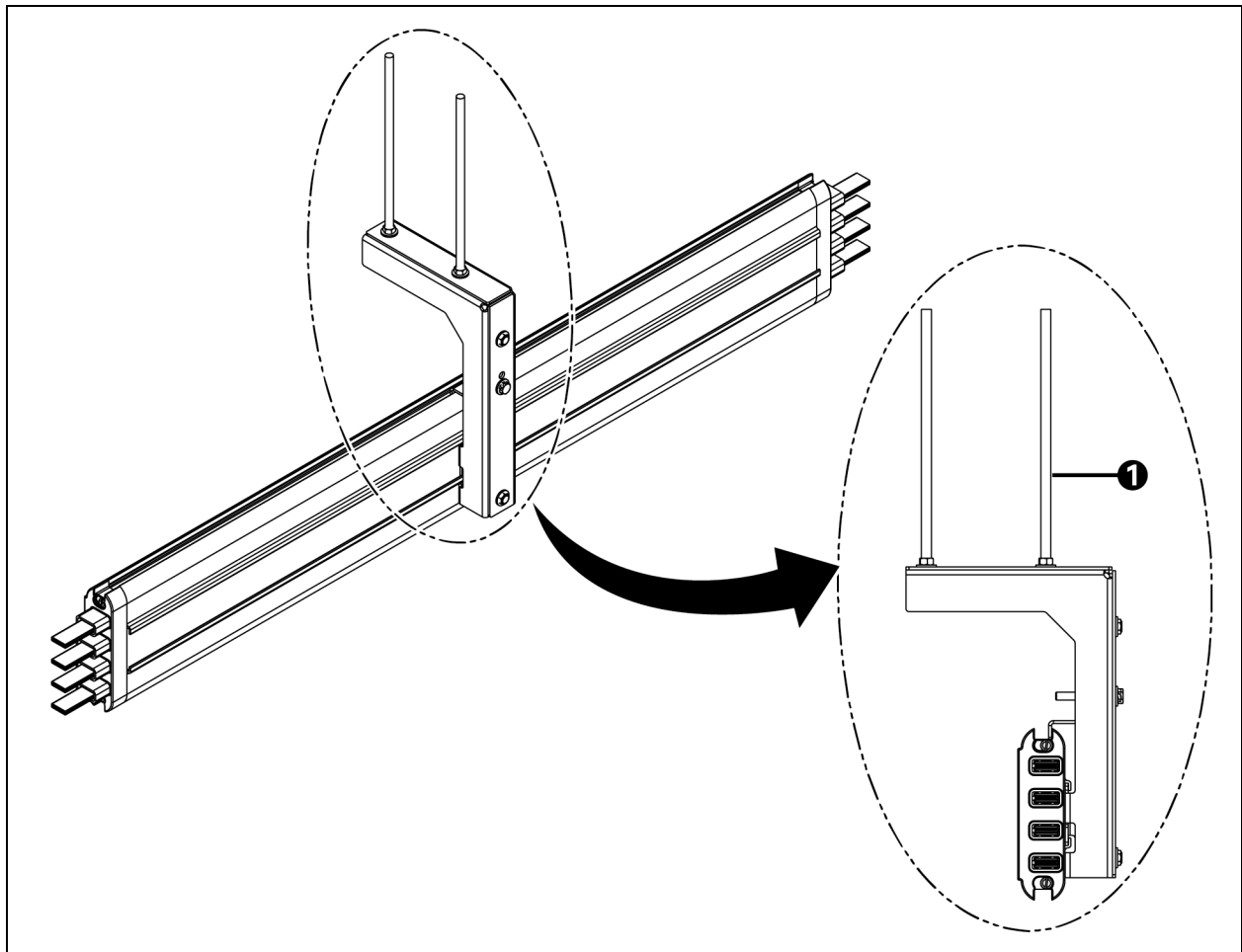


Item	Description
1	Drop Rod

NOTE TO FIGURE

1. M8 Mild steel fixings should be torqued to 28 Nm (20.65 lbs/ft).

Figure 2.6 Vertical Mounting Bracket

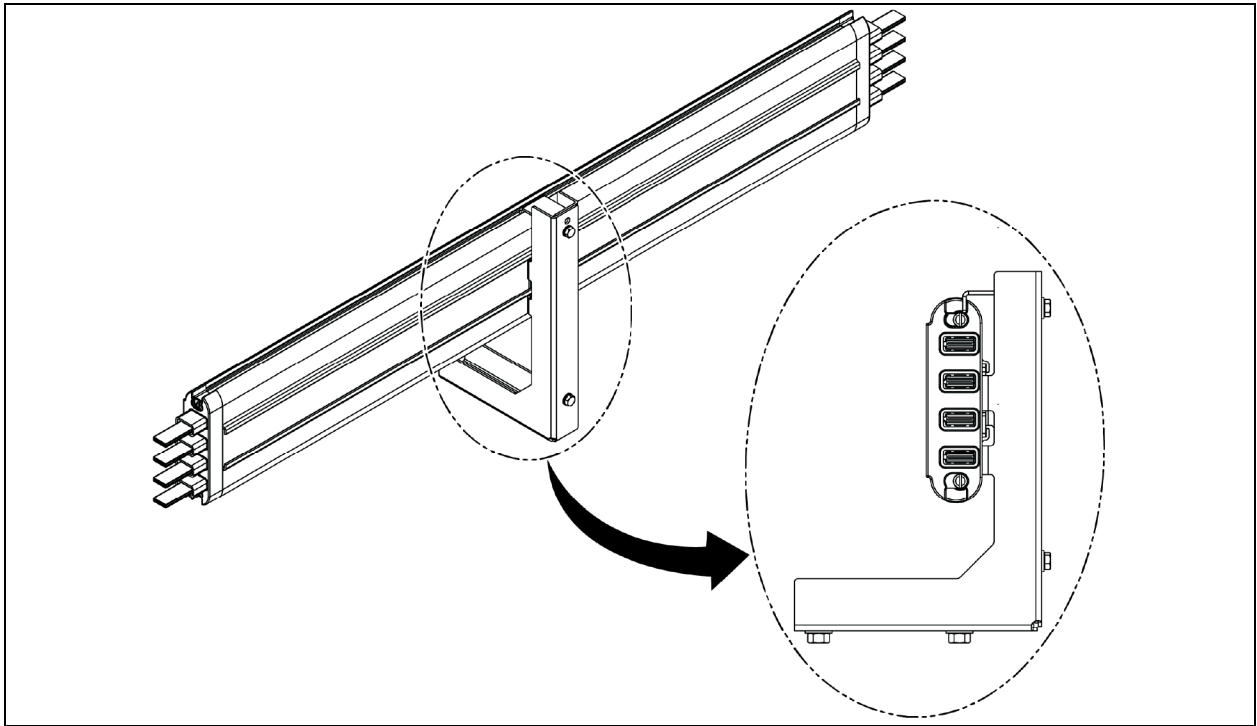


Item	Description
1	Drop Rod

NOTE TO FIGURE

1. M8 Mild steel fixings should be torqued to 28 Nm (20.65 lbs/ft).

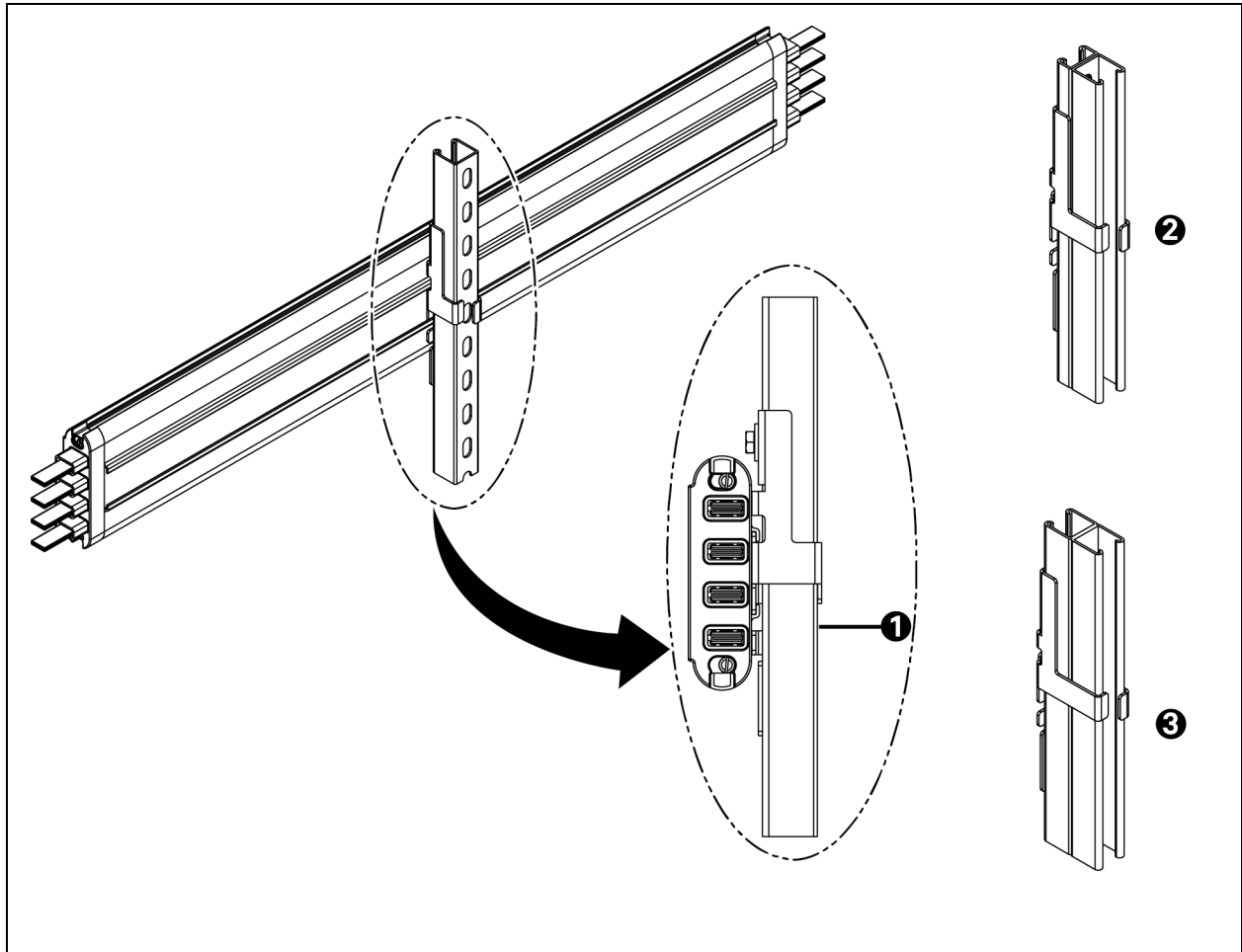
Figure 2.7 Underfloor Installation



NOTE TO FIGURE

1. M8 Mild steel fixings should be torqued to 28 Nm (20.65 lbs/ft).

Figure 2.8 Unistrut Installation



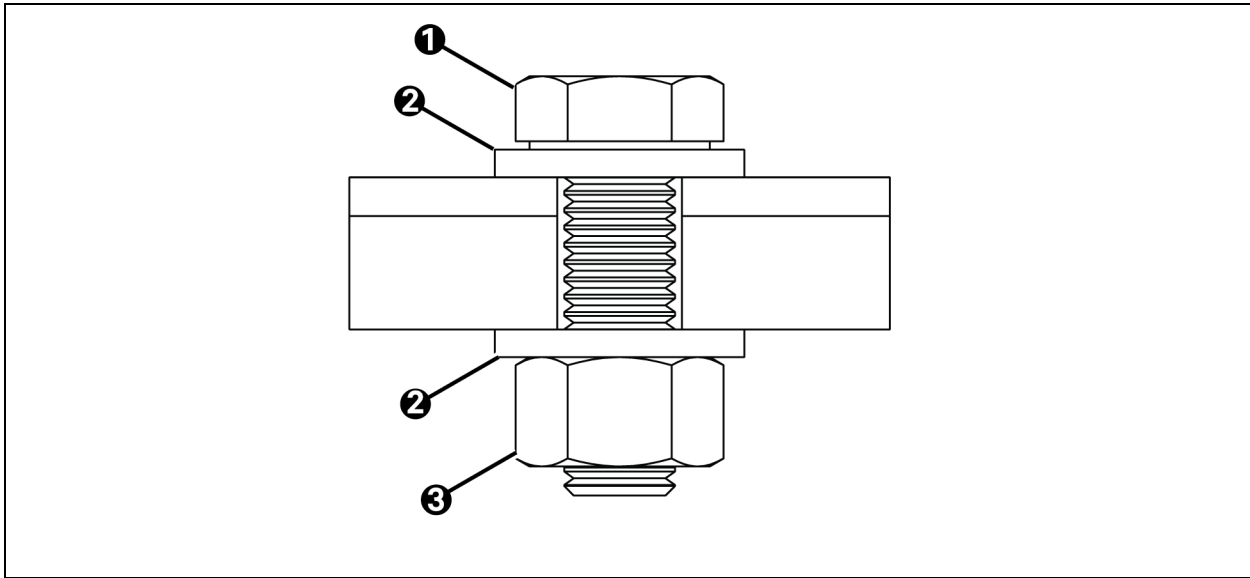
Item	Description
1	Unistrut
2	22+41 mm Unistrut
3	Double Unistrut

NOTES TO FIGURE

1. M8 Unistrut channel nuts should be torqued to 17 Nm (12.54 lbs/ft).
2. M10 Mild steel fixings should be torqued to 36 Nm (26.55 lbs/ft).

Torque the Power End Feed Box interior 3-phase live and neutral conductor connections according to **Table 2.2** on the next page. For units equipped with monitoring, the voltage sense leads are torqued to 10 Nm (7.4 ft-lb.) for 3-phase and neutral conductors; the monitoring ground is torqued to 4 Nm (3 ft-lb.).

Figure 2.9 Applicable Hardware Stack for Electrical Torque Specifications



Item	Description
1	Bolt
2	Flat Washer
3	Nut

Table 2.2 Electrical Connection Torque Specifications

Hardware	Torque Specification
1/4 in. (M6/10 mm)	8 Nm (71 in.-lb)
5/16 in. (M8/13 mm)	22 Nm (195 in.-lb)
3/8 in. (M10/17 mm)	40 Nm (354 in.-lb)
1/2 in. (M12/19 mm)	55 Nm (487 in.-lb)

2.3 Busway Track

The PowerBar iMPB system allows you to supply electrical power to other parts of the building using busway systems connected together. Busway track pieces must be connected to another track piece, an End Cap or a Joint Pack in order to complete an installation. Busway tracks come in 3 ft. to 13 ft. (0.6 m to 4 m) sections and can be IEC: 160 A, 250 A, 400 A, 630 A, 800 A or 1000 A (Aluminium only), UL: 160 A, 250 A, 400 A or 800 A.

NOTE: Busway track pieces must be level when they are installed to ensure that the Tap-Off Boxes mount to the track properly.

NOTE: The busway system should be installed at the correct height in accordance with the approved drawings. Refer to the [Submittal Drawings](#) on page 37 of IMPB HB1&2 and IMPB BUSBAR for installation height, torque values and additional technical information. Contact your Vertiv representative for copies of the appropriate submittal drawing.

2.4 Joint Pack Installation

The steps below outline best practice, the Busbar orientation and site conditions may restrict installers from adhering to this methodology. In these cases installers must be cautious and ensure the joint pack is installed correctly. Ensure all parts are megger tested and visually inspected prior to installation.

To Install a Joint Pack:

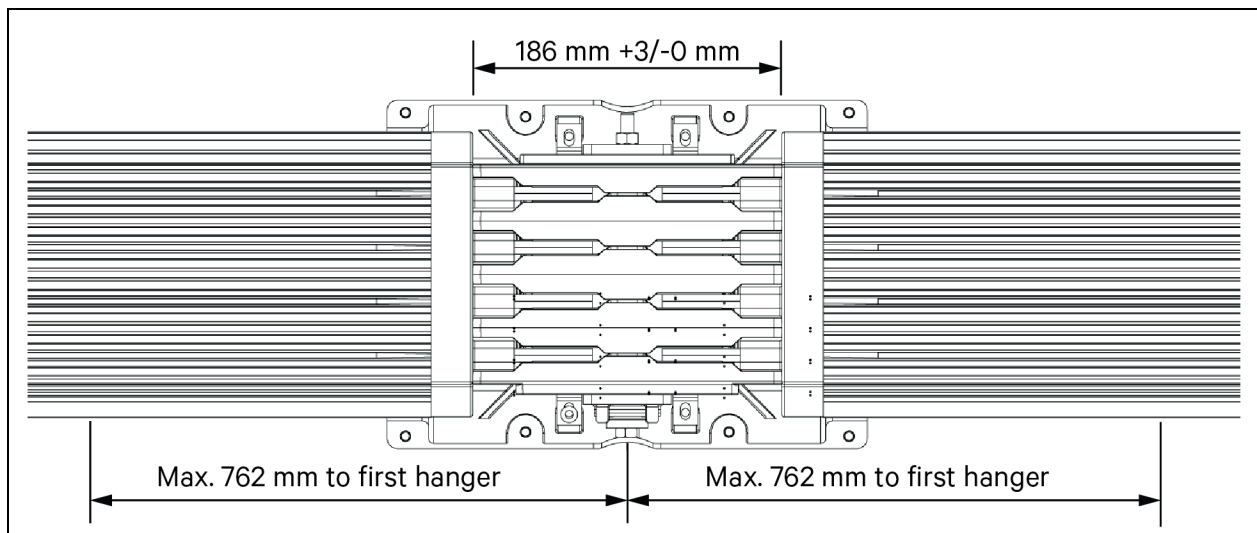
1. The joint pack bottom cover and fixing brackets should be removed. The top cover comes fixed to the internal joint pack parts.
2. Fix both lengths into place using the appropriate bracketry. Ensure the phasing is lined up correctly by checking the labels and inspecting the earth channel. The conductors should be positioned in such a way that the end plastic piece edge to the next one is $186 \text{ mm } +3/-0 \text{ mm}$. See **Figure 2.10** below for more information. For short term staging of the busway keep contact channels faced downwards to prevent debris ingress.
3. Push the joint down onto the conductors and check that the fish plate separators are tight up against both end pieces.

Never force the joint or strike it with any object, as this may damage the joint or the busbar section. The joint should be inserted by means of constant force such as pushing by hand.

Ensure the joint pack assembly is:

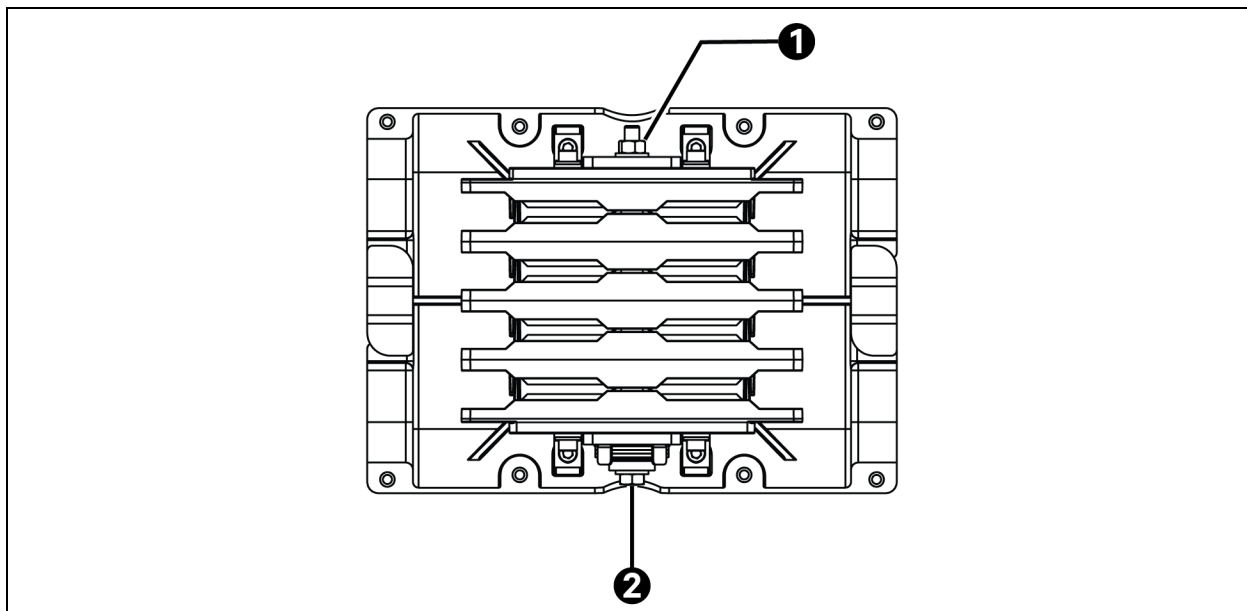
- Free from contaminants
- Unblemished
- Not damaged
- Correctly aligned

Figure 2.10 Bottom Up View



CAUTION: When preparing the Joint Pack for installation, the bottom cover must be removed first, then the center bolt should be loose to ease the busway installation.

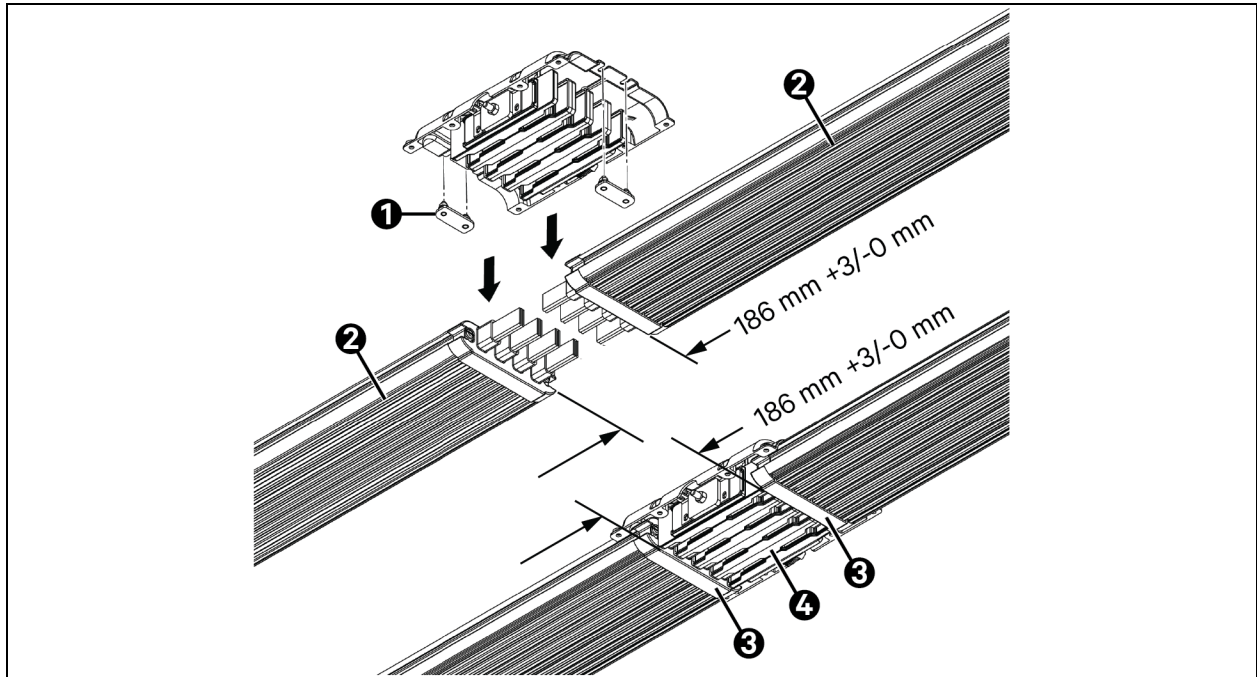
Figure 2.11 Joint Pack Bottom View



Item	Description
1	Joint Pack Center Nut
2	Joint Pack Center Bolt

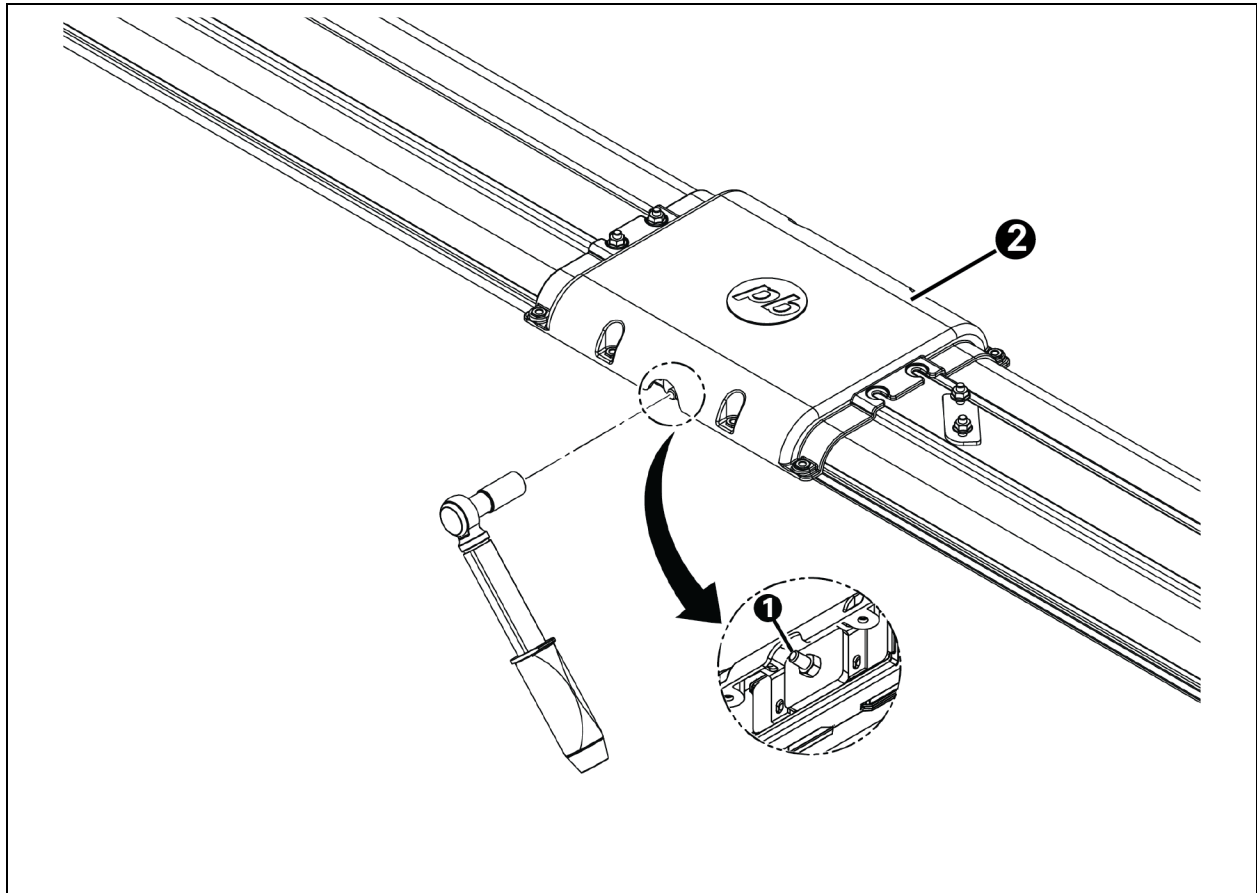
NOTE: Loosen the center bolt, leaving a few threads of the nut engaged to maintain the joint pack assembly's stability. This will offer greater flexibility during the insertion of the joint pack.

Figure 2.12 Joint Pack Installation



Item	Description
1	Joint Pack Fixing Bracket
2	Earth Channel
3	End Piece
4	Fish Plate Separator

Figure 2.13 Joint pack Torquing

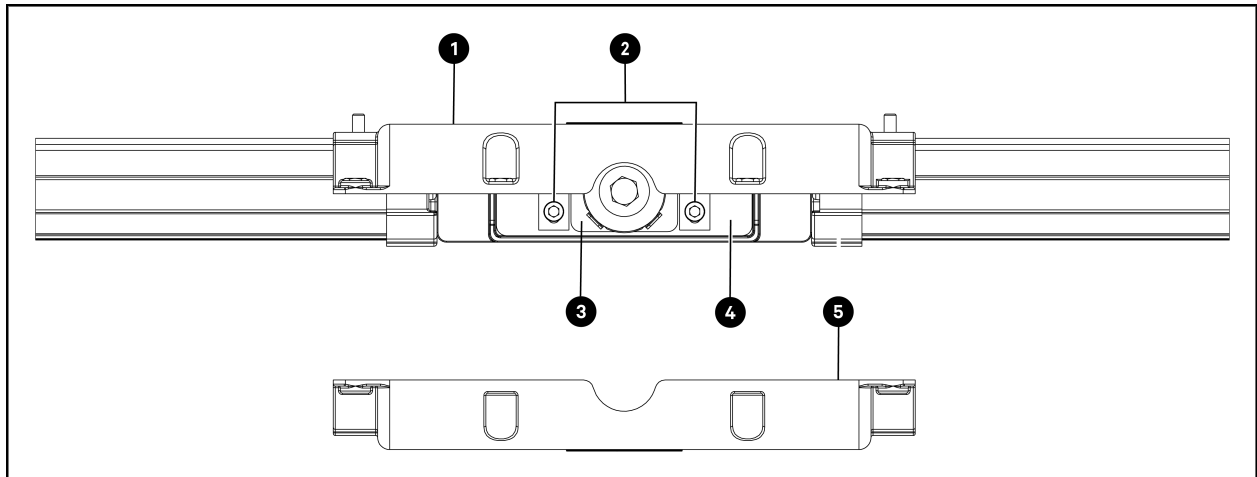


Item	Description
1	Joint pack Center Bolt
2	Joint Pack Finish Bracket

NOTE: The joint pack center bolt should be torqued to 25 Nm (221 in/lbs.).

4. Insert the joint pack fixing brackets into place and tighten both fixing brackets to 10 Nm (88.5 lb-in.). Then tighten the joint pack center bolt to 25 Nm (221 in/lbs.).

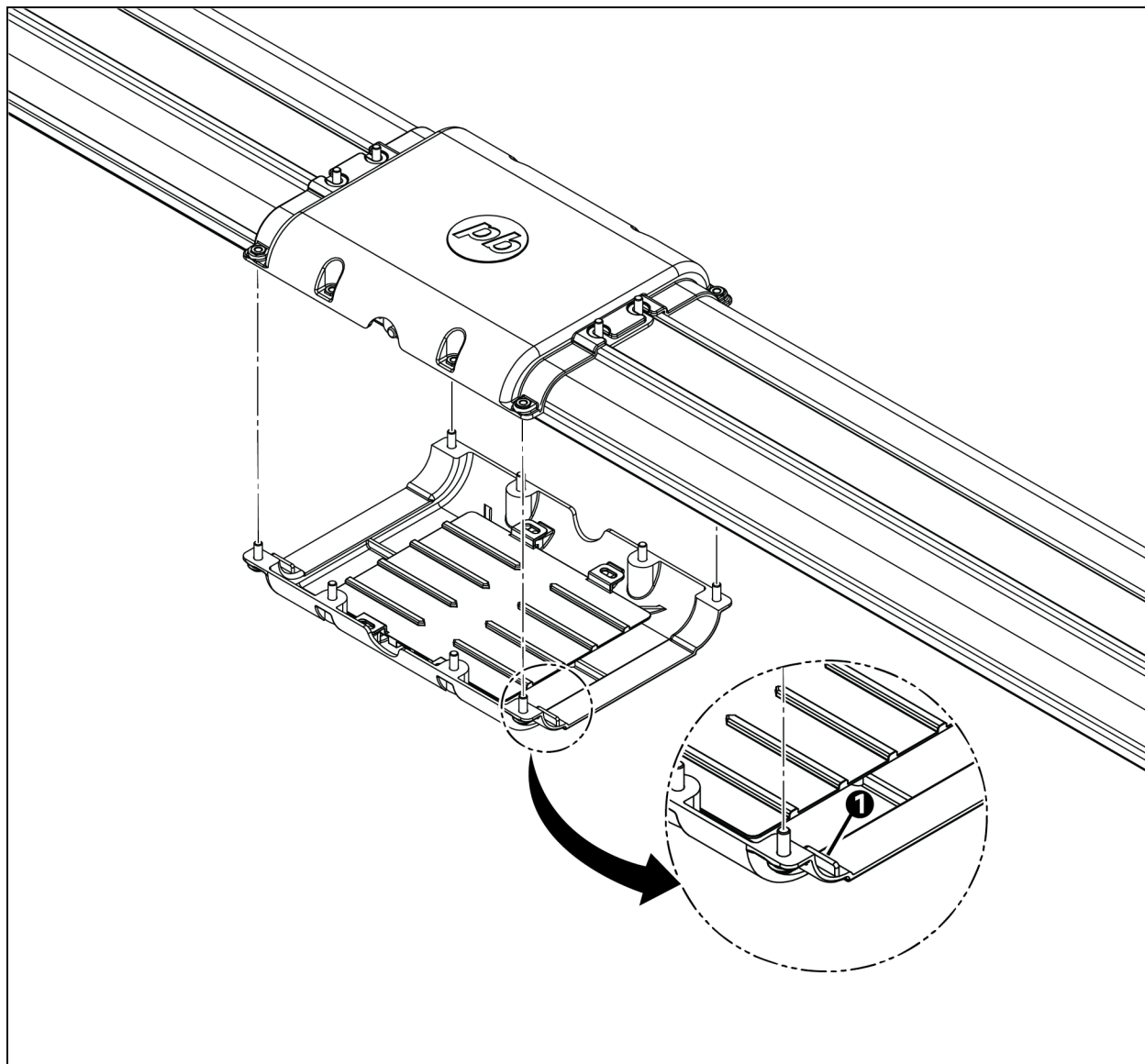
Figure 2.14 Square Washer



Item	Description
1	Top/Finish Joint Pack Cover
2	Earth Strip (x2)
3	Square Washer
4	Clamping Plate
5	Bottom Joint Pack Cover

NOTE: Make sure that the Washer and the Clamping plate are square, before tightening the joint and fitting of the bottom cover.

Figure 2.15 Bottom Joint Pack Cover Installation



Item	Description
1	Earth Tab

5. Attach the Bottom Joint pack cover using the M6 socket cap screws provided and tighten to 8 Nm (70.8 lb-in.).

NOTE: The Earth tabs fit into the earth channel on the housing when the phasing is correctly aligned.

2.5 Tap-Off Box

The Tap-Off Box contains an arrangement of enclosure, circuit breaker, monitoring device (optional), rotary handle (load isolator) and safety interlocks that provide a unique set of safety features that allow installing or removing the Tap-Off Boxes while the PowerBar iMPB is energized.

The proprietary, spring-loaded mechanical interlock ensures:

- The Tap-Off Box can be inserted in the busway system only with the rotary handle (load isolator) in the Off position.
- The Tap-Off Box is correctly located and fixed to the busway track frame.
- Is fully grounded/earthed to the busbar case prior to any phase contact operation.
- The tap-off conductors can be inserted into the busway track while ensuring that no conductors are exposed to the installer.

The PowerBar iMPB housing, earth strip and mechanical housing ensure that the Tap-Off Box cannot be inserted in the wrong orientation with reverse polarity.

The rotary handle (load isolator) of the Tap-Off Box has a further positive engagement tab that must be operated to allow the rotary handle to be operated.

The Tap-Off Box is fully grounded/earthed before any phase connections are made and the earth/ground remains intact after any phase connections are broken in the event of Tap-Off Box installation/withdrawal. This safety features ensures electrical safety throughout the operation.

To install the Tap-Off Box:

NOTE: Remove the Tap-Off Box from its packaging and ensure no damage is visible to the device.

1. Align the Tap-Off Box with the housing and visually line up the earth/ground strip and the interlock channel on the busway casing. Insert the ground strip.
2. Pull back the spring loaded interlock and rotate the box into position, then release the spring-loaded interlock when parallel with the busway track.
3. Verify that the ground strip has rotated within the interlock channel and the spring-loaded interlock has released. Verify that the Tap-Off Box is secured in place. See **Figure 2.16** on the next page.

NOTE: Ensure that the box is fully supported during this procedure.

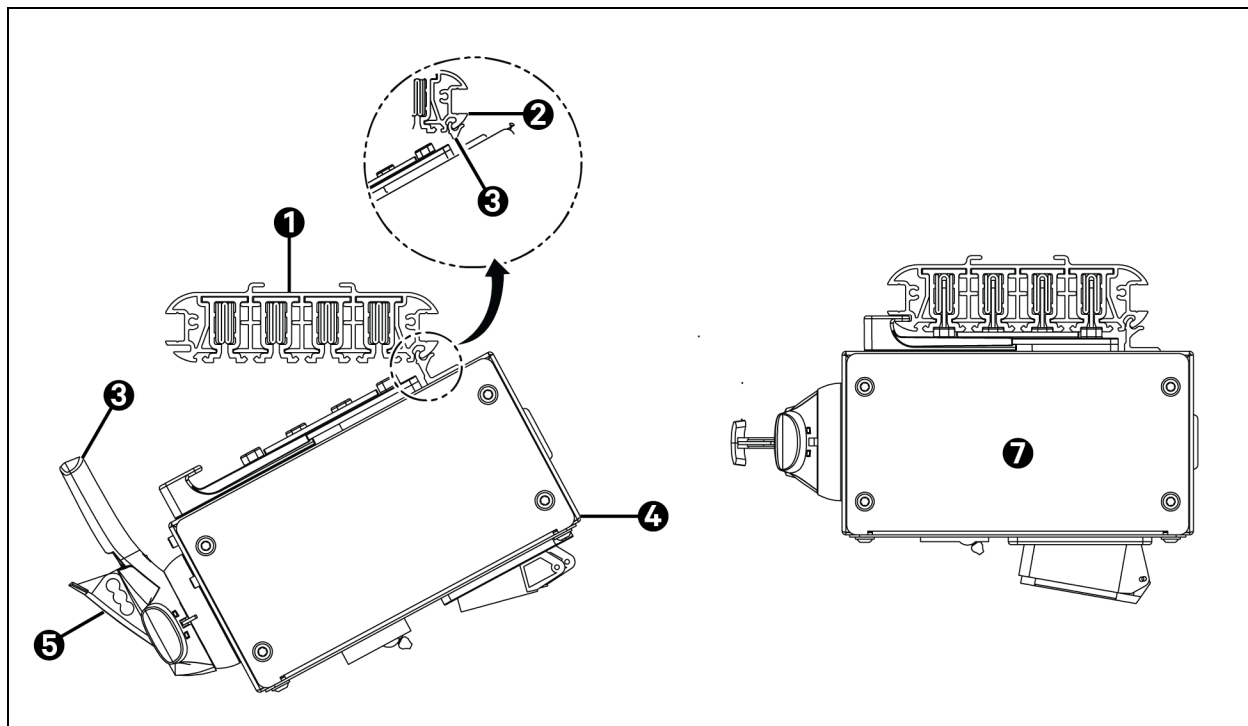


CAUTION: Ensure the spring loaded interlock is seated properly before engaging the rotary handle.

4. Engage the contacts by rotating the rotary handle 90 degree. The handle has a safety feature built in and the engagement tab must be pushed in before the rotary handle can be turned.
5. (Optional) If a Tap-Off Box has a factory-installed monitoring option, it will have two ethernet ports on the side of the enclosure. Using an RJ-45 ethernet cable, connect one end to the power feed box; daisy-chain the other between Tap-Off Boxes, as required. (RJ45 cable supplied by Others.)
6. Connect one RJ-45 cable from the network to the Power Feed Box for monitoring of the Tap-Off Boxes. See **Figure 2.23** on page 22 (RJ45 cable supplied by Others).
7. As an additional safety feature, you can padlock the handle in the Off position. This allows you to work freely within the cabinet without electrical hazard risk. See **Figure 2.24** on page 22.

NOTE: Padlock not factory-provided.

Figure 2.16 Tap-Off Box Installation



Item	Description
1	Busway Feeder
2	Interlock Channel
3	Earth/Ground Strip
4	Tap-Off Box
5	Engagement Tab
6	Rotary Handle
7	Tap-Off Box in Installed Position

Figure 2.17 Tap Off Box Installation Clearances

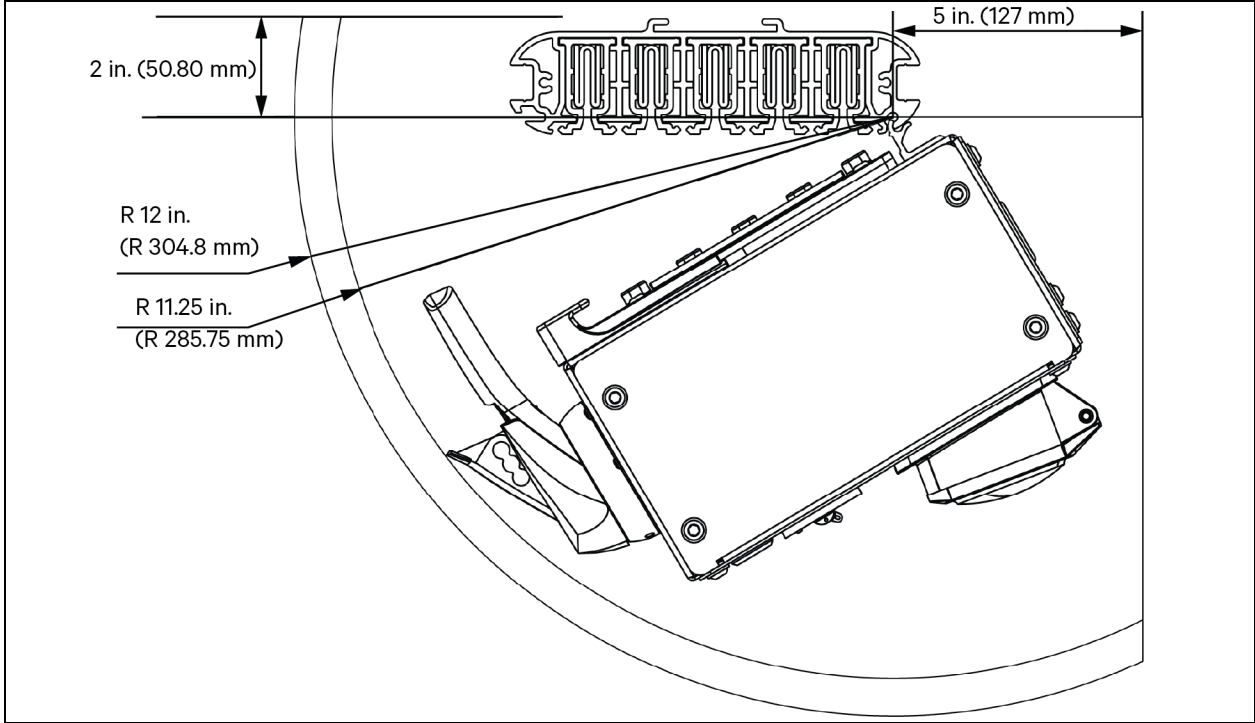


Figure 2.18 Tap Off Box Installation Example - Above the Rack with Single Vertical Run of Busway

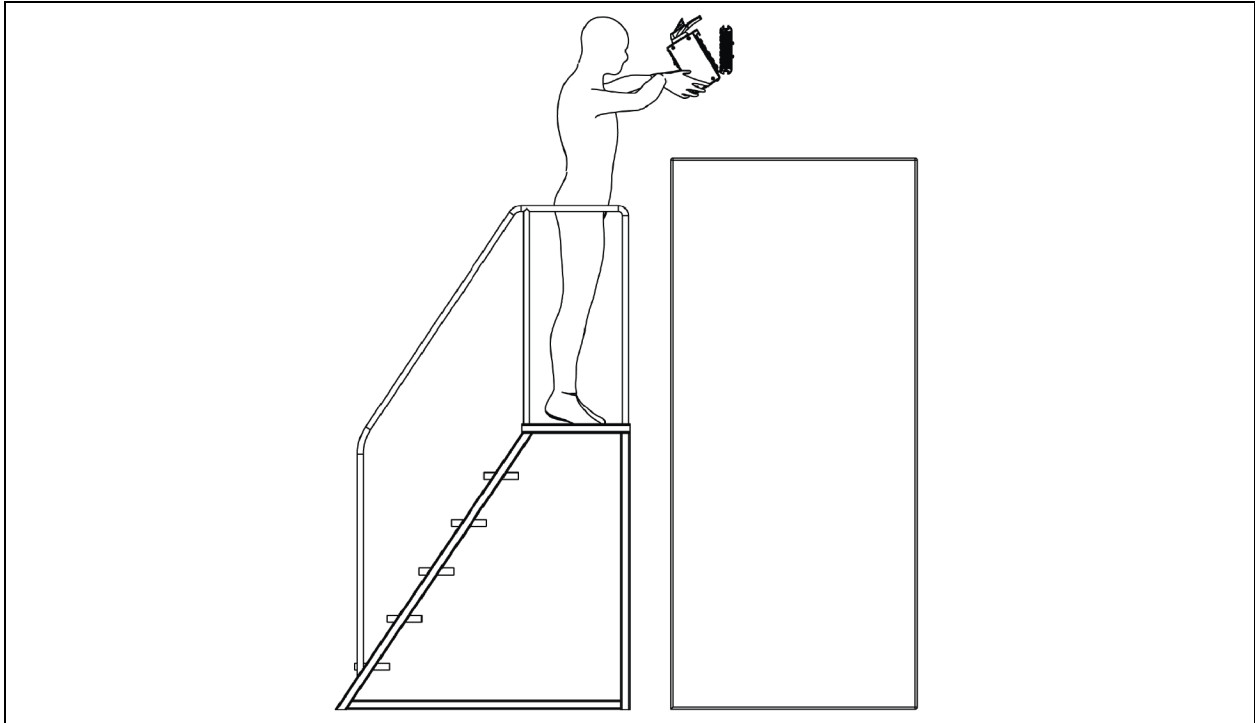


Figure 2.19 Tap Off Box Installation Example - Above the Rack with Double Vertical Run of Busway - Stacked

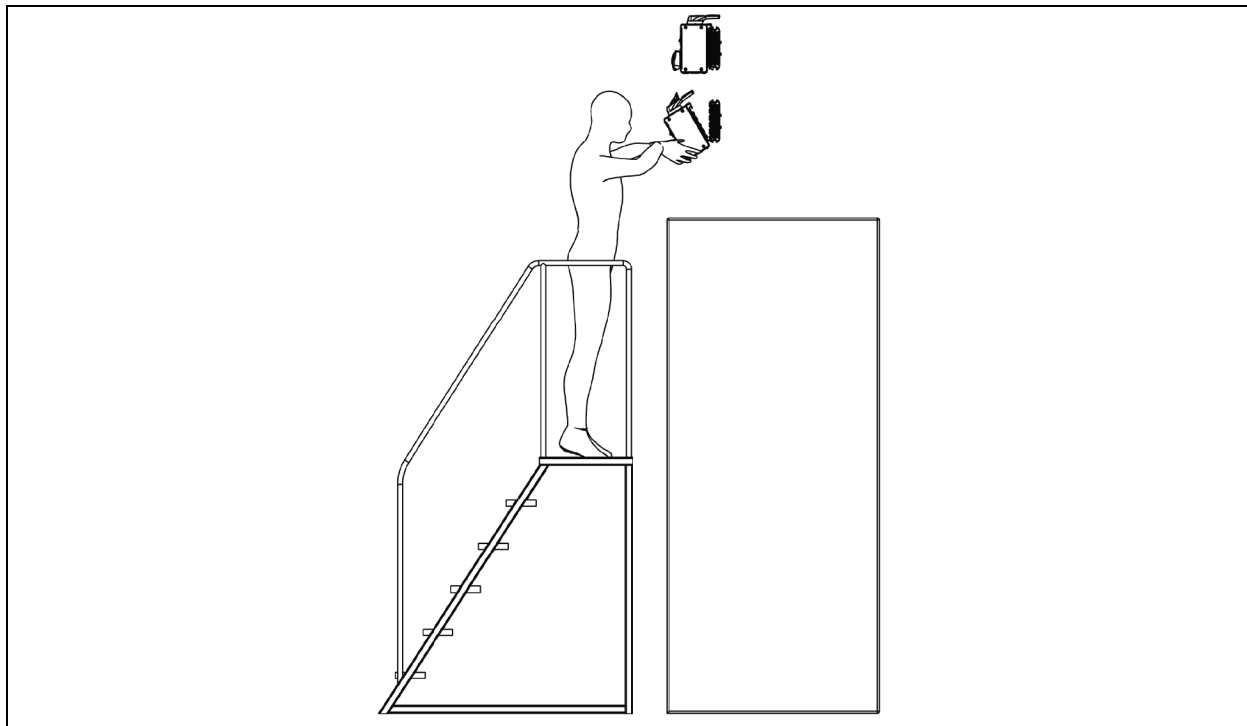


Figure 2.20 Tap Off Box Installation Example - Above the Rack with Single Horizontal Run of Busway

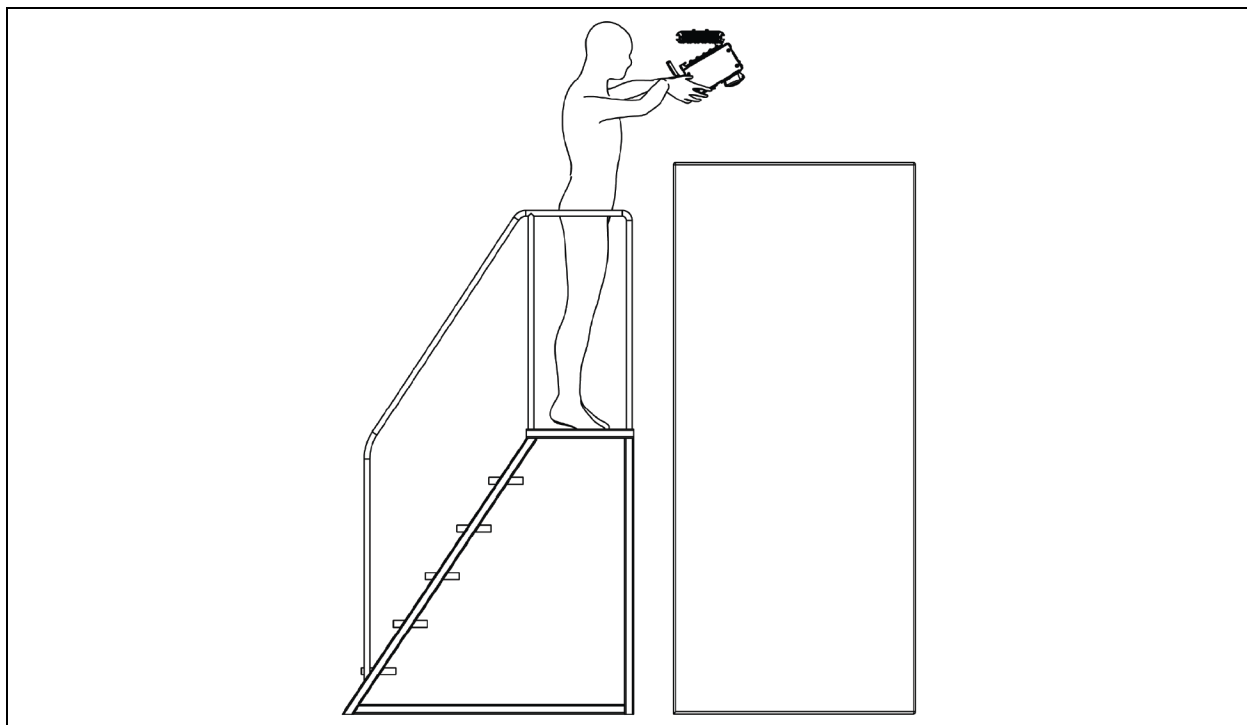


Figure 2.21 Tap Off Box Installation Example - Above the Rack with Double Horizontal Run of Busway - Stacked

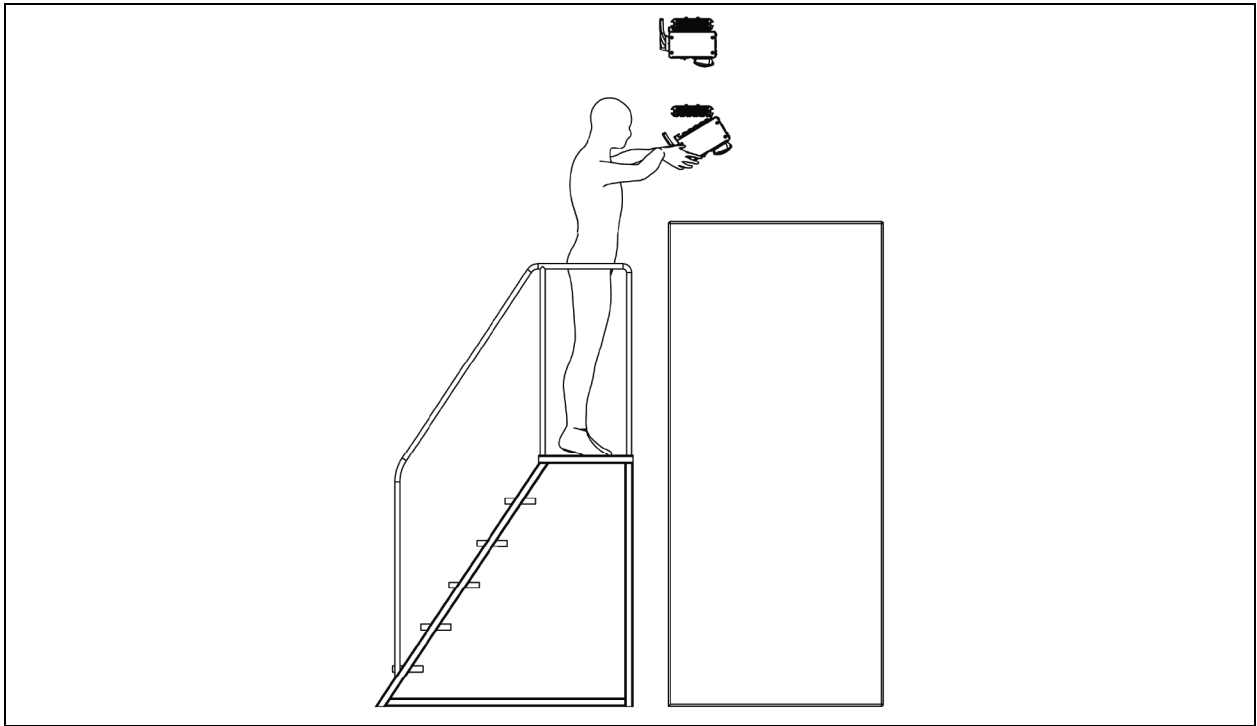


Figure 2.22 Tap Off Box Installation Example - Above the Rack with Double Horizontal Run of Busway - Side by Side

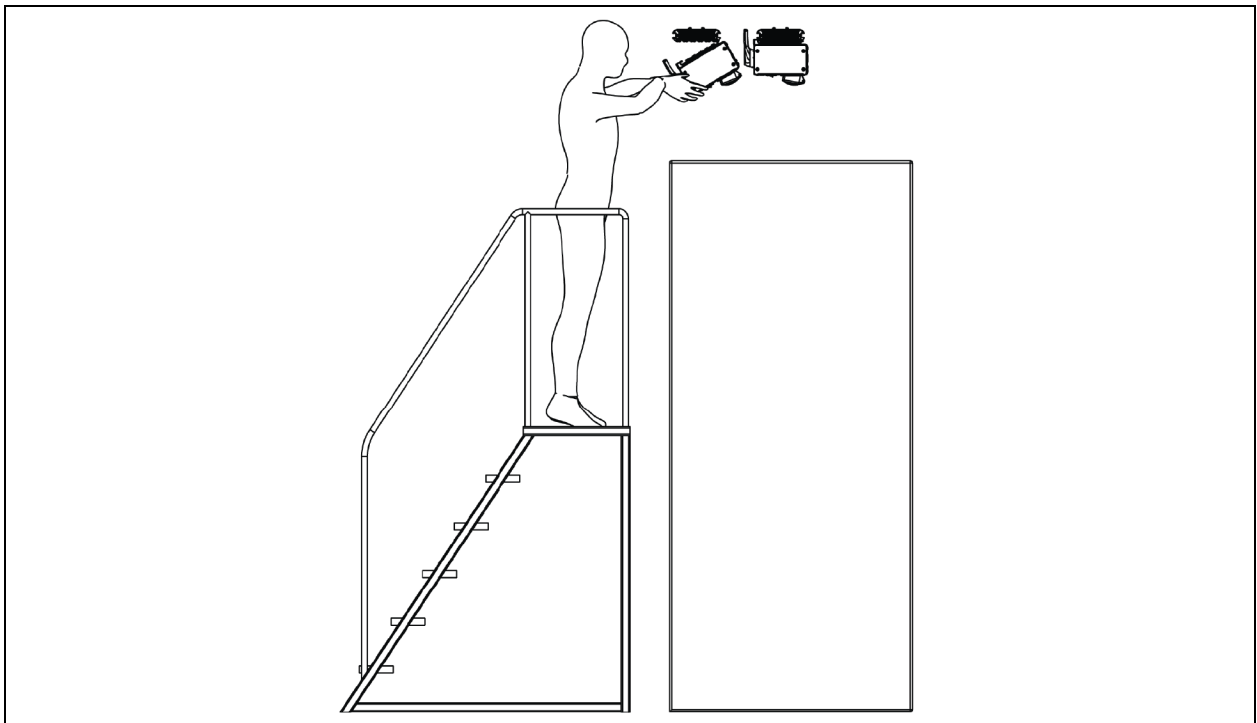
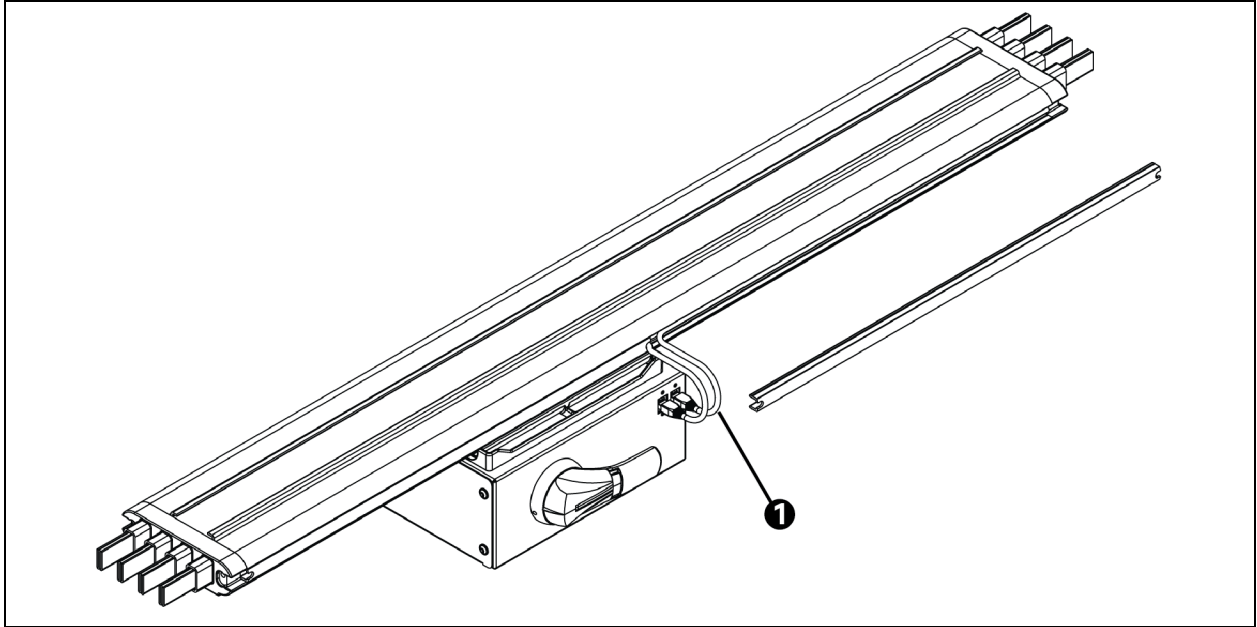


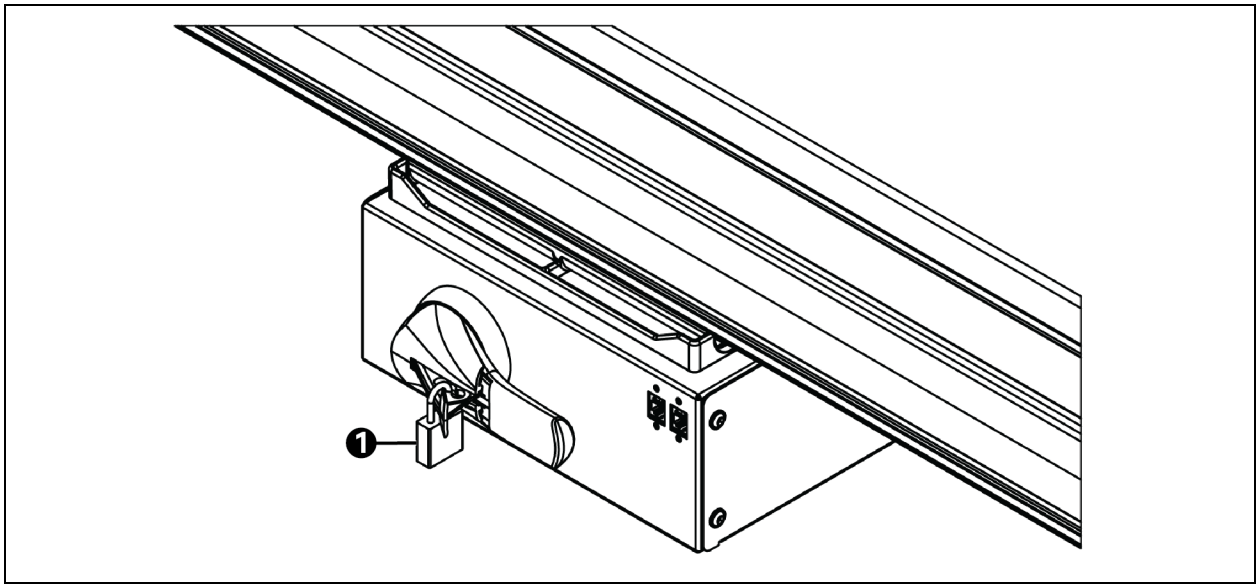
Figure 2.23 Optional Ethernet Connection



Item	Description
1	Ethernet cable

Port Position may vary based on final TOB configuration.

Figure 2.24 Padlock Diagram



Item	Description
1	Padlock

2.6 End Cap Installation

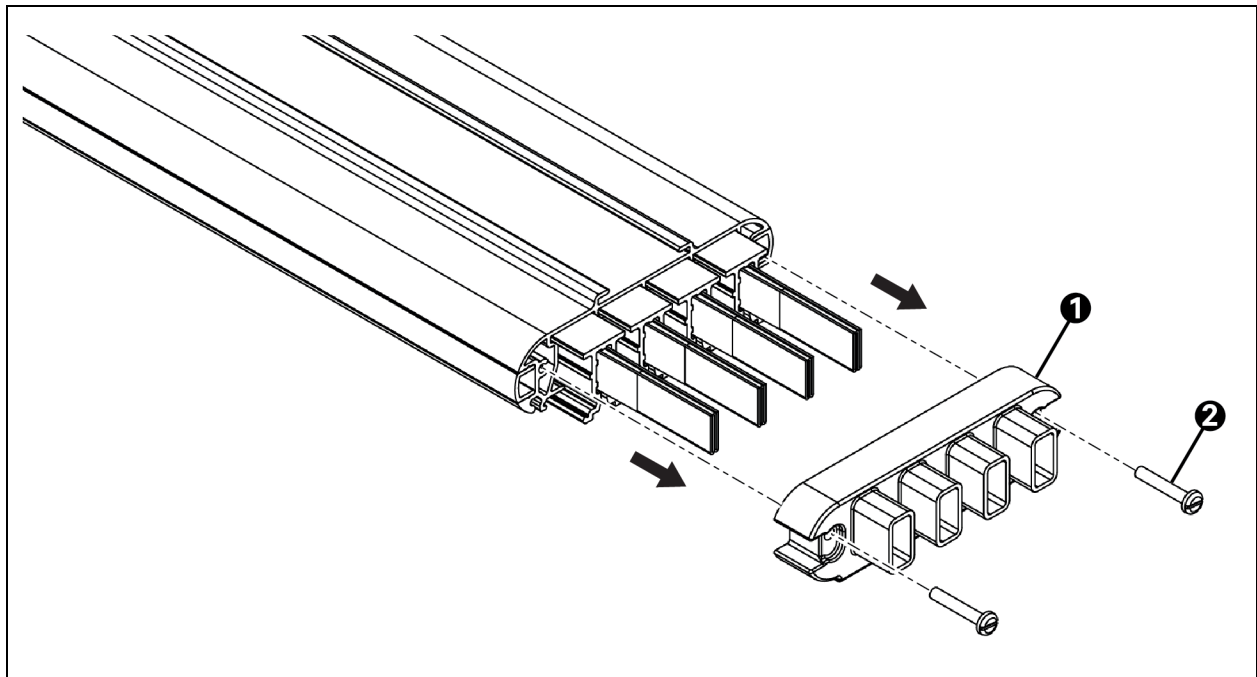


CAUTION: This step is only required at the End of a Run.

To Install the End Cap:

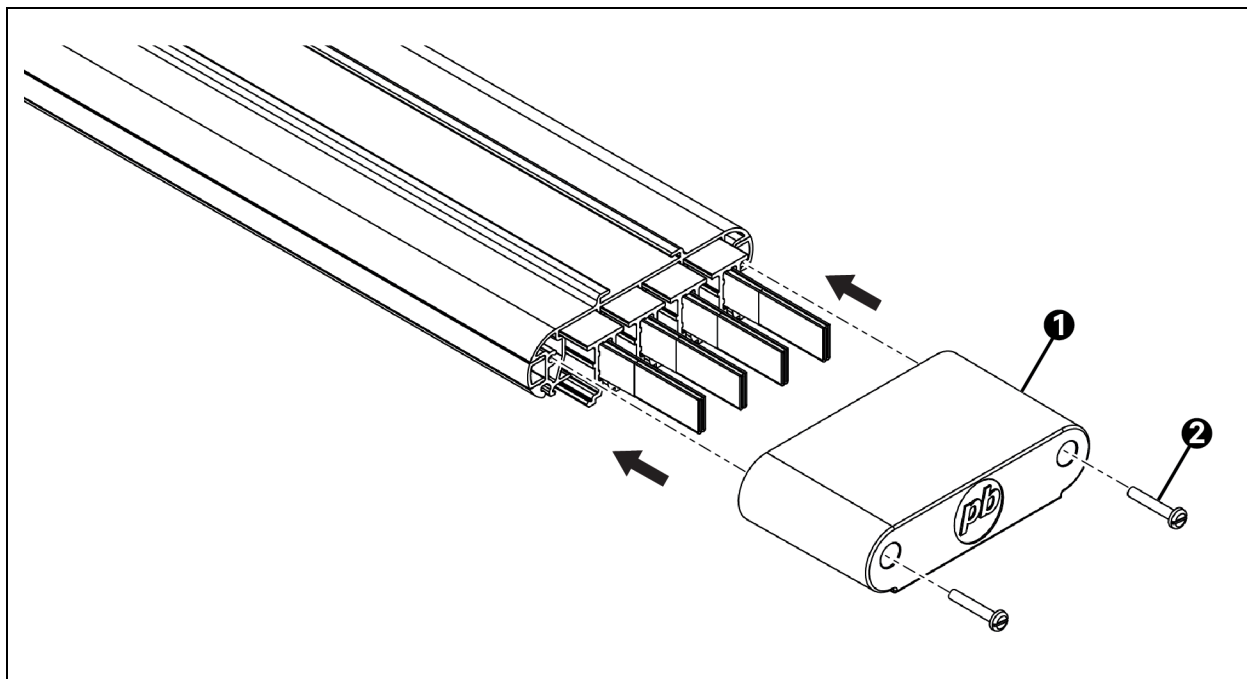
1. Remove the two Pan head screws from the End Piece using a P3 screwdriver.
2. Remove the End Piece from the PowerBar iMPB.
3. Install the busway End Cap in place of the end cap.
4. Secure the End Cap with the two Pan head screws that were removed from the end piece.

Figure 2.25 End Piece Removal



Item	Description
1	End Piece
2	Pan head screws

Figure 2.26 End Cap Installation



Item	Description
1	End Piece
2	Pan head screws

3 Equipment Inspection and Startup

3.1 Inspection

The following must be completed before energizing the Vertiv™ PowerBar iMPB.

- Ensure busway is level.
- Perform a continuity test to verify that the run is complete.
- Ensure that all Tap-Off Boxes are correctly installed and the rotary handles are in the On position for insulation resistance testing.
- Ensure that all connections to the busway track and Tap-Offs are disconnected.
- Verify that all Joint Packs are torqued according to the recommended setting and have not been subsequently loosened.
- Ensure that all joint covers are firmly secured.
- When reconnecting the system before energizing it, ensure correct phase rotation is achieved by testing prior to energizing the supply.
- Ensure that all Tap-Off Boxes are turned Off again prior to energizing the PowerBar iMPB.

3.2 Prior to Energizing

A test must be completed prior to energizing

1. A continuity test to verify the run is complete.
2. A ductor test to check the resistance of the joints through the entire length.
3. A megger test, 1000 VDC between each conductor and ground. Readings will vary widely between site to site due to length of run, humidity, temperature and site conditions. If readings of less than 5 megaohms are obtained, measures must be taken to identify the location of the low resistance level. This test should only be carried out by competent personnel.
4. Ensure all tap off boxes have been correctly installed as instructed and are in the ON position for insulation resistance testing.
5. Ensure all connections to the Busbar/tap offs have been disconnected.
6. Verify that all joints have been torqued according to the recommended setting and have not been subsequently loosened. Ensure all joint covers are firmly secured.
7. When reconnecting the system prior to energization, ensure correct Phase Rotation is achieved by testing prior to energizing the supply.
8. Ensure all tap offs are turned off again prior to Energizing.

3.3 Startup

Follow the [Inspection and Startup Checklist](#) on page 33 when installing the busway system. A qualified electrician should be employed to perform the equipment inspection and startup. System startup may be arranged by calling your local Vertiv sales representative or Vertiv.

- All loads connected to the busway system should be isolated prior to energizing.
- The busway main supply breaker, located on the Power Feed Box, should be energized first, only if power feed is equipped with a circuit breaker.

- If equipped, the protection settings for the main circuit breaker located within the End Feed Box should be adjusted per the engineer-of-record's short-circuit study recommendations.
- Following the successful closing of the supply breaker, close the circuit breakers supplying the connected loads (via Tap-Offs) one by one.
- Visually inspect the energized PowerBar iMPB route to look for any anomalies. Listen for noises from the system as this could indicate loose cover plates or connections.

4 Operating Instructions

4.1 Startup Procedures

Before the Vertiv™ PowerBar iMPB is placed in service after initial installation, after equipment relocation or after equipment has been de-energized for an extended period of time, perform equipment inspection and startup procedures as detailed in [Inspection and Startup Checklist](#) on page 33.

After initial system startup, the following guidelines can be used for standard equipment operation. These guidelines should be reviewed for any special equipment modifications, special site considerations and company policies that may require changes to the standard equipment operation.

4.2 Normal System Shutdown

To perform a normal system shutdown, perform an orderly load equipment shutdown according to the load equipment manufacturer's recommended shutdown sequence. The load equipment can be turned Off at each piece of load equipment. Turn Off the Tap-Off Box circuit breakers and, if equipped, turn Off the main input circuit breaker located within the End Feed Box. To remove all power from the unit, turn Off the building power to the unit.

4.3 Normal System Turn On

Make certain that all unit circuit breakers are in the Off position. All unit circuit breakers are located in the Tap-Off Boxes and within the End Feed Box, if equipped. Turn On building power to the unit. If the circuit breaker has been tripped Off (instead of being turned Off), the circuit breaker handle must be moved to the Off position before being turned On. Individually turn On each Tap-Off Box circuit breaker following the load equipment manufacturer's startup sequence.

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5 Maintenance

The design of the PowerBar iMPB lends itself to simple, reliable installation that enables future modifications to be carried out easily. It has no defined routine maintenance requirements. Any maintenance that may be required is easily identified by thermal imaging of the run.

Standard electrical troubleshooting procedures should be used to isolate problems in the unit. Repair or replacement of standard items, such as circuit breakers and fuses can either be handled by qualified electricians or referred to Vertiv. Repairs related to the monitoring system should be referred to Vertiv. See [Technical Support and Contacts](#) on page 31 for contact information.

Annual general system inspections, cleaning and operation checks are recommended to ensure system performance and long service life.

Maintenance should be carried out in line with Nema BU 1.1. General instructions for handling, operation and maintenance of busway rated 600V or less and any other local code requirements.

5.1 Tap-Off Box Maintenance

As with the main busway track, the Joint Packs require checking on the tap-off connections and thermal imaging can identify localized hot spots.

Upon identifying a local problem, preventive maintenance should be investigated with the busway track isolated.

- Visually check the installation of the Tap-Off Box.
- Check outgoing cable connections.
- Check the operation of the switching On/Off operation.
- Examine protective device for signs of short circuit operation. If a short circuit has occurred on the equipment connected to the Tap-Off Module, check operation of device and the integrity of the device.

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Appendices

Appendix A: Technical Support and Contacts

A.1 Technical Support/Service in the United States

Vertiv Group Corporation

24x7 dispatch of technicians for all products.

1-800-543-2378

Vertiv™ Powerbar Products

Europe - +44(0) 2835 3030

USA - +1 864 375 1757

UAE - + 971 7 221 6100

A.2 Locations

Europe

Ballyderowen,

Burnfoot,

Co. Donegal,

Ireland

United States

400 Supreme Industrial Drive,

Anderson,

South Carolina,

29621, USA

UAE

N16/N17,

Al Ghail Industrial Park,

Ras Al-Khaimah,

United Arab Emirates

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Appendix B: Inspection and Startup Checklist

A copy of the appropriate checklist (furnished with the equipment) must be completed, signed, dated and returned to Vertiv. Warranty coverage of the equipment is not effective unless the checklist is received by the factory.



WARNING! Risk of improper startup. Can cause equipment damage, personal injury and death. Hazardous voltages are present during startup procedures. Electrical safety precautions must be followed throughout inspection and startup. Equipment inspection and startup should be performed only by properly trained and qualified personnel wearing appropriate safety headgear, gloves and shoes.



WARNING! Risque de démarrage incorrect. Peut provoquer des dommages matériels, ainsi que des blessures potentiellement mortelles. Des tensions dangereuses sont présentes lors des procédures de mise en service. Les précautions applicables en matière de sécurité électrique doivent être suivies pendant toute la durée de l'inspection et de la mise en service. L'inspection et la mise en service de l'équipement doivent être réalisées uniquement par des personnes dûment formées, qualifiées et équipées de casques, de gants et de chaussures de sécurité adaptés.

Unit Serial Number:

Unit Model Number:

Date:

B.1 Inspection



WARNING! Risk of electric shock. Can cause personal injury or death. Lethal voltages are present during startup procedures. Electrical safety precautions must be followed throughout inspection and startup. Verify that all incoming power circuits are de-energized and locked out before performing any internal inspection.



WARNING! Risque de choc électrique. Peut provoquer des blessures potentiellement mortelles. Des tensions mortelles sont présentes lors des procédures de mise en service. Les précautions applicables en matière de sécurité électrique doivent être suivies pendant toute la durée de l'inspection et de la mise en service. Vérifiez que l'ensemble des circuits de tension d'entrée sont désactivés et verrouillés avant toute inspection interne.

Exterior Inspection

1. ___ Confirm that the exterior of the unit is undamaged.
2. ___ Confirm that service and maintenance clearances are adequate.

End Feed Box Inspection

1. ___ Open the End Feed Box door.
2. ___ Inspect all conductor insulation for damage.
3. ___ Check all connections for tightness. Re-torque, before if necessary.

4. ____ Remove any foreign objects from the components or the interior area of the unit.
5. ____ Close the End Feed Box door.

Tap-Off Box Inspection

1. ____ Ensure that all Tap-Off Boxes are securely fastened to the busway track.
2. ____ Ensure that the breakers located in each Tap-Off Box are in the Off position before energizing the PowerBar iMPB.

Joint Pack and End Cap Inspection

1. ____ Ensure that the joint pack center bolt is torqued to the required value indicated in the [Joint Pack Installation](#) on page 11.
2. ____ Ensure that the joint pack cover plates are secure.
3. ____ Ensure that the end cap is installed and secured.

B.2 Startup



WARNING! Risk of electric shock. Can cause personal injury or death. Hazardous voltages are present in the equipment throughout the startup procedure. This unit has several circuits that are energized with high AC voltage. Only properly trained and qualified personnel wearing appropriate safety headgear, gloves, shoes and glasses should be involved in starting this unit. When performing any procedure with any part of the equipment under power, personnel and test equipment should be standing on rubber mats. In case of fire involving electrical equipment, use only carbon dioxide fire extinguishers or those approved for use in fighting electrical fires. One person should never work alone, even if all power is disconnected from the equipment. A second person should be standing by to assist and to summon help in case of an accident.



WARNING! Risque de choc électrique. Peut provoquer des blessures potentiellement mortelles. L'équipement est soumis à des tensions dangereuses pendant la procédure de mise en service. Cette unité contient plusieurs circuits alimentés par des tensions c.a. élevées. La mise en marche de cette unité doit être réalisée uniquement par des personnes dûment formées, qualifiées et équipées de casques, de gants, de chaussures et de lunettes de sécurité adaptés. Lors de toute procédure sur une quelconque partie de l'équipement sous tension, le personnel et l'équipement de test doivent se trouver sur des tapis en caoutchouc. En cas d'incendie impliquant du matériel électrique, utilisez uniquement des extincteurs au dioxyde de carbone ou ceux homologués pour la lutte contre les incendies d'origine électrique. Ne travaillez jamais seul, même si l'équipement est complètement déconnecté de l'alimentation. Une deuxième personne doit être présente pour vous porter assistance et demander de l'aide en cas d'accident.

1. ____ Make sure all circuit breakers are in the Off position and that power to the unit is locked out.
2. ____ Turn On the building power to the unit. If equipped, check the phase rotation of the End Feed Box main input circuit breaker. Phase rotation should be L1, L2, L3 as indicated.
3. ____ Check and record the input voltages. If output voltage is incorrect, check for wiring errors or incorrect input voltage.

Table B.1 Input Voltages

	Input 1	Input 2	Input 3	Input 4
Volts, Phase L1 to Phase L2 =				
Volts, Phase L2 to Phase L3 =				
Volts, Phase L3 to Phase L1 =				

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Appendix C: Submittal Drawings

The submittal drawings are in the order of document part number (DPN). **Table C.1** below groups the drawings by topic/application.

NOTE: Refer to **Vertiv™ iMPB Submittals addendum document SL-71013** for submittal drawings.

Table C.1 Submittal Drawings Contents

Document Number	Title
IMPB BUSBAR	Outline Drawing Distribution Bussing
IMPB CEB	Outline Drawing 250-600A End Power Feed Box No Monitoring
IMPB CEB METER	Outline Drawing 250-600A End Power Feed Box With Monitoring
IMPB HB-13	Hanger Detail Vertical/Horizontal Unistrut Hanger
IMPB HB1&2	Hanger Detail Horizontal Hanger HDH
IMPB HB3&4&5	Hanger Detail Vertical Hanger VDH

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