



READ ALL OF THE FOLLOWING INSTRUCTIONS BEFORE REMOVING **CABINET** FROM SKID

NET-Access N-Type Network Cabinets TOOL LIST

- -Phillips screwdriver
- -Flatblade screwdriver
- -22mm socket wrench
- -15mm socket wrench
- -13mm socket wrench
- -8mm socket wrench
- -48" Level

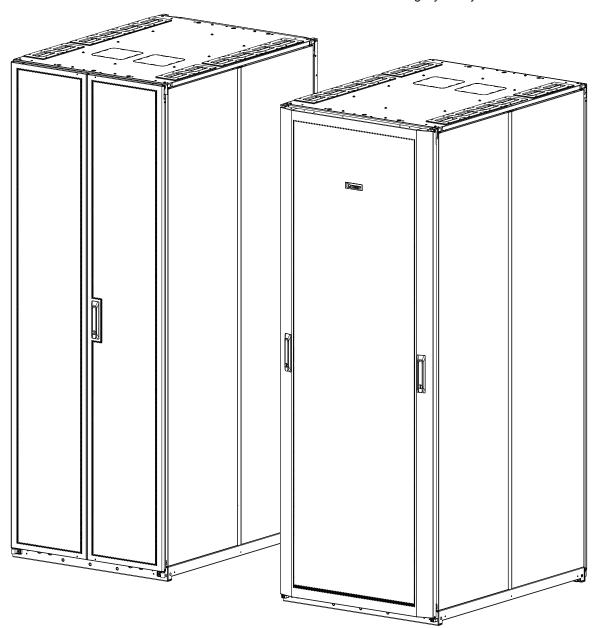
- -7mm socket wrench
- -T30 Torx bit
- -T25 Torx bit
- -6mm Allen key
- -2.5mm Allen key
- -Wire cutter
- -10mm socket wrench

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INSTALLATION INSTRUCTIONS

CM598N

NOTE: Some views in this document may vary slightly from your actual cabinet configuration.



Disclaimer:

The information contained in this manual is intended as a guide for use by persons having technical skill at their own discretion and risk. The recommended practices are based on average conditions. Panduit makes no representation or warranty, express or implied, nor assumes any responsibility for the accuracy or completeness of these installation instructions. Panduit does not guarantee any favorable results nor assume any liability for damages, improper installation, system failures, or any other problems that could arise in connection with the use of these installation instructions.

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IMPORTANT SAFETY INFORMATION



/N WARNING

CABINET TIPPING HAZARD

This cabinet can easily be tipped. Use extreme caution when unpacking or moving the cabinet.

Use at least [2] persons to remove cabinet from pallet and move cabinet into position (refer to pages 5-6).

After the cabinet has been removed from the pallet, ensure that the leveling legs are in the fully-retracted position (refer to pages 5-6) before rolling the cabinet on casters. It is recommended to add at least 300 lbs. of equipment to the bottom 10 RU of the cabinet to provide extra stability before rolling the cabinet.

When rolling the cabinet on casters, push the cabinet from the front or rear only, to prevent the cabinet from tipping on its side.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN LEAD TO SERIOUS INJURY, DEATH, OR DAMAGE TO YOUR EQUIPMENT.

Safety Notes:

The maximum static weight load of the cabinet is 3000 lbs. [1361 kg]. The maximum weight load when the cabinet is rolling on casters is 2500 lbs. [1134 kg]. The weight load should be evenly distributed across the height of the cabinet, with the heaviest components mounted at the bottom of the cabinet.

The maximum weight load on the integral cabinet top cable routing system is 200 lbs. [91 kg].

The maximum weight load on the following shelves: RSHLF, RSHLF23, RSHLF36 is 275 lbs. [125 kg].

The maximum operating temperature is 50° C; so that the installer is able to determine acceptability of use of accessories and components in the operating state.

The equipment shall be installed or serviced by trained service personnel in accordance with the applicable requirements of the National Electric Code, ANSI/NFPA 70 or Canadian Electrical Code and the applicable sections of ANSI C2, the National Electrical Safety Code. The instruction shall not result in the risk of fire, electric shock, or injury to persons.

UL Listing covers enclosure cabinet only

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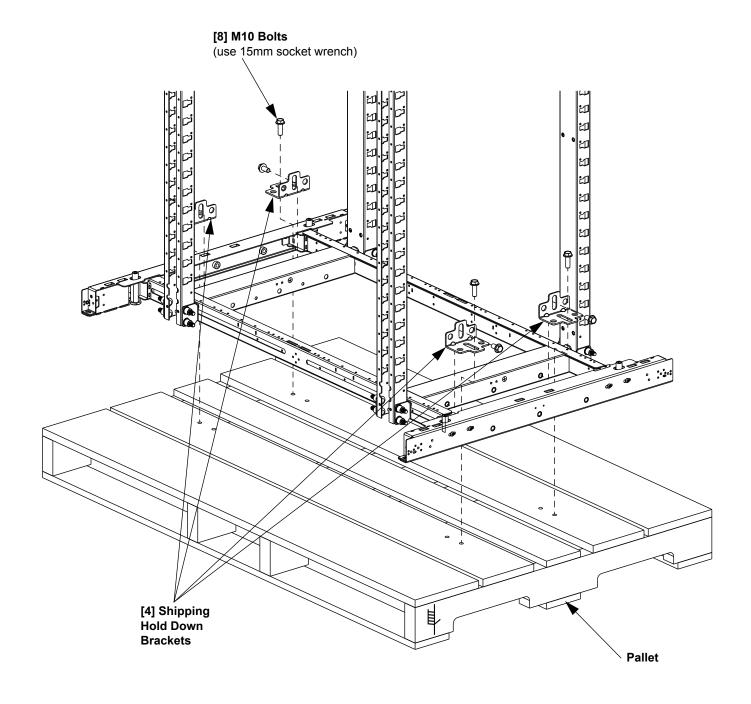
Packaging Material Removal

"Shipping Hold Down Brackets" Double as Floor Mounting Brackets. Retain brackets if floor mounting is desired. (see Page 8)

- · Remove all stretchwrap and protective cardboard from outside of cabinet
- · Remove [4] Hold Down Brackets at front and rear of cabinet
- Use [2] persons to carefully lift and remove cabinet from pallet

IMPORTANT:

Leveling Legs must be fully retracted before the cabinet is moved into place. Sliding cabinet on leveling legs may result in damage to the leveling legs.

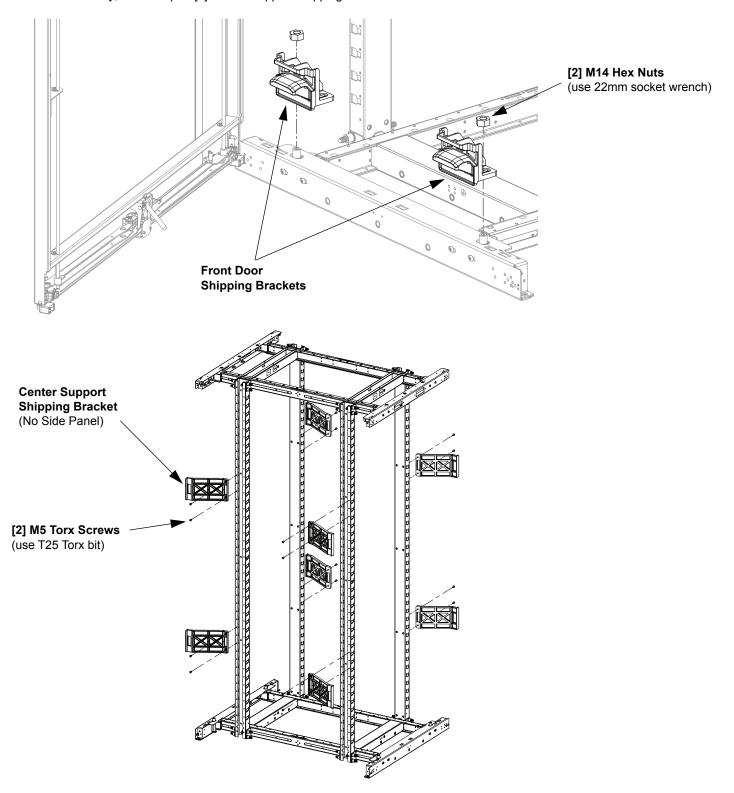


Note: Doors, Side panels, and other components are removed for clarity.

Packaging Material Removal

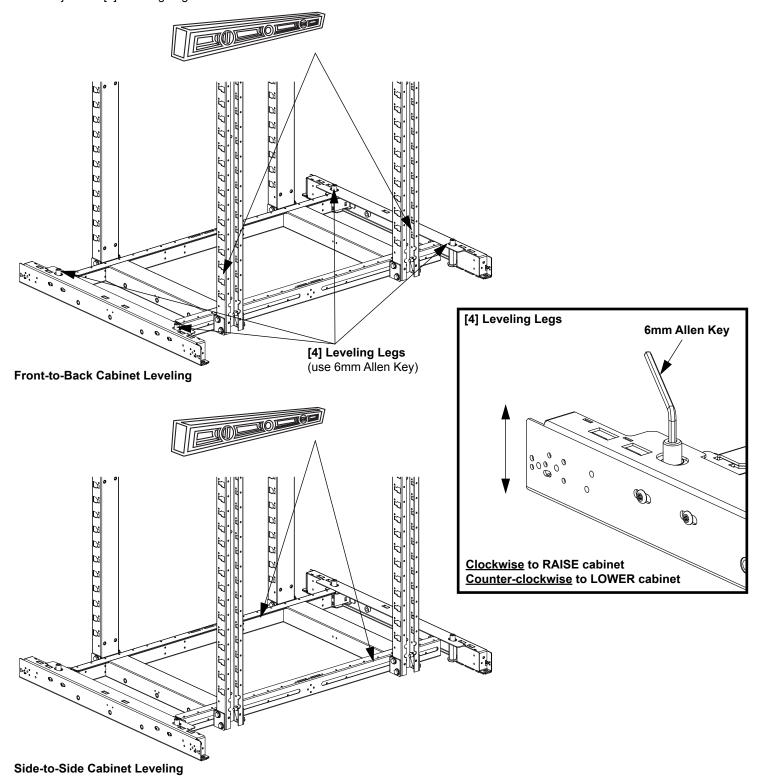
NOTE: Not all configurations include Center Support Shipping Brackets. Shipping Brackets to be discarded after removal. All shipping brackets are labeled "SHIPPING BRACKET REMOVE IMMEDIATELY"

- Remove Front Door Shipping Brackets
- If necessary, remove up to [4] Center Support Shipping Brackets from cabinet frame



Leveling

- · Ensure that [4] Leveling Legs are fully retracted
- · Slide Cabinet into final position
- · Lower the [4] Leveling Legs using a 6mm Allen Key until the cabinet weight is fully supported by only the leveling legs
- · Adjust the [4] Leveling Legs so that the cabinet is level front-to-back and side-to-side



Note: When ganging multiple cabinets together, ensure that adjacent cabinets are adjusted to the same height.

⚠ WARNING

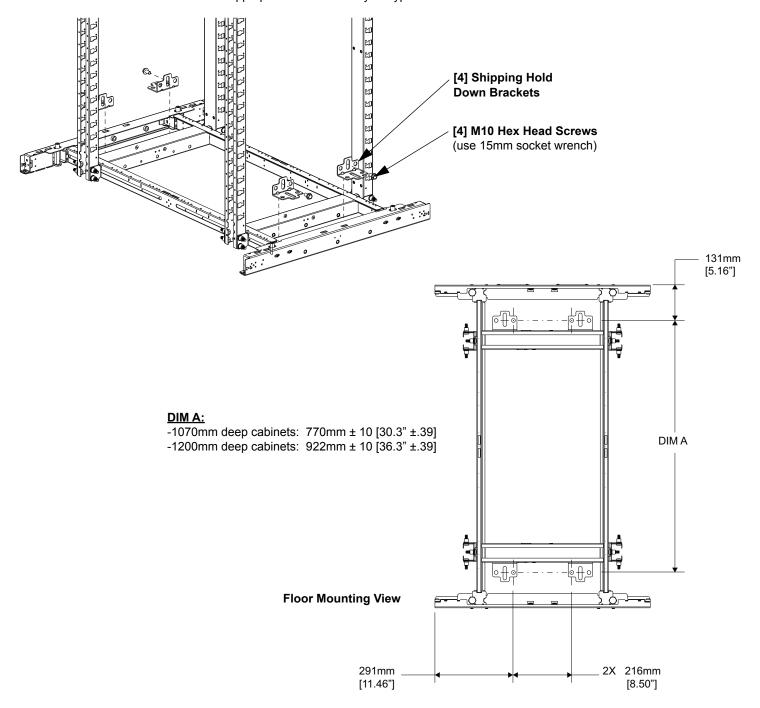
CABINET TIPPING HAZARD

Mount cabinet to floor before equipment is installed in cabinet.

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN LEAD TO SERIOUS INJURY, DEATH, OR DAMAGE TO YOUR EQUIPMENT.

Floor Mounting

- Ensure that [4] Leveling Legs are fully retracted
- If Necessary, secure [4] "Shipping Hold Down Brackets" at front and rear of cabinet
- See Floor Mounting View below for floor mounting dimensions
- · Attach the anchors to the floor with appropriate hardware for your type of floor



↑ WARNING

CABINET TIPPING HAZARD

Ganging of cabinets only provides limited stability to the cabinets, and is not a substitute for proper leveling or floor mounting of cabinets. Ensure that cabinets are properly mounted to floor before equipment is installed in cabinet. (See page 8)

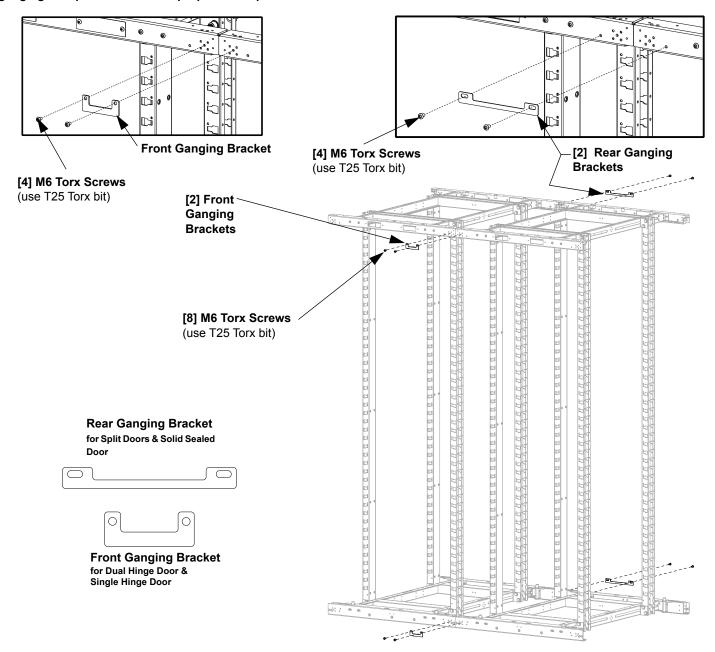
FAILURE TO FOLLOW THESE INSTRUCTIONS CAN LEAD TO SERIOUS INJURY, DEATH, OR DAMAGE TO YOUR EQUIPMENT.

Ganging

- · Ensure cabinets are level
- · Secure Ganging Brackets to cabinets at [4] locations shown below
- · Do not use Ganging Brackets to cinch cabinets together

IMPORTANT:

Ensure cabinets are level by following the guidelines on page 7. Leveling the cabinet prior to ganging is important to ensure proper door operation.



⚠ DANGER

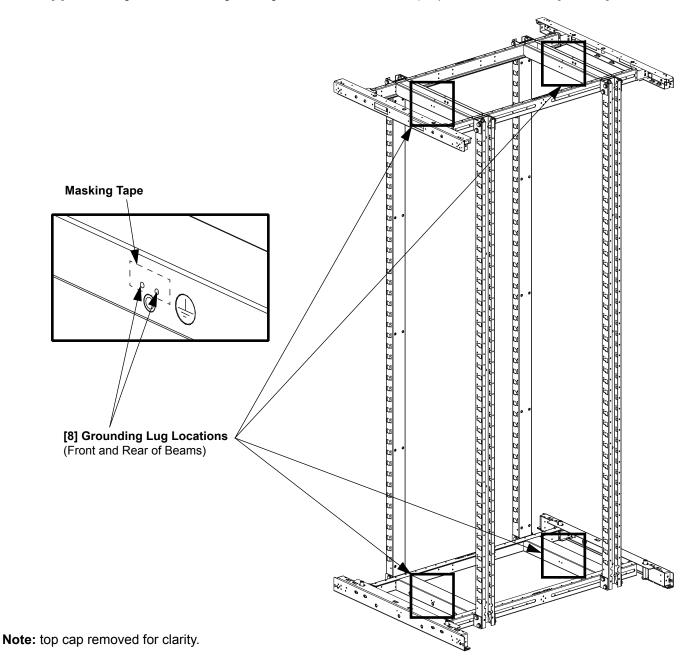
ELECTRICAL SHOCK HAZARD

Each cabinet must be connected to the Common Bonding Network (CBN).

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN LEAD TO SERIOUS INJURY, DEATH, OR DAMAGE TO YOUR EQUIPMENT.

Grounding

- Attach Grounding Lug or Grounding Bar to Common Bonding Network (CBN) at any of the [8] location(s) shown below
- Grounding location is indicated by universal ground symbol near grounding lug locations
- Remove factory-installed masking tape at grounding lug location to expose unpainted surface of cabinet frame. Grounding lug or grounding bar must assembled onto this unpainted surface (per NEC NFPA 70 Article 250.12)
- Use [2] M5 bonding screws to fasten grounding terminal to cabinet frame (torque screws to 5.1 N-m [45 in-lbs]



⚠ WARNING

FALLING EQUIPMENT HAZARD

Remove all equipment installed onto equipment rails before performing any adjustments to equipment rail spacing.

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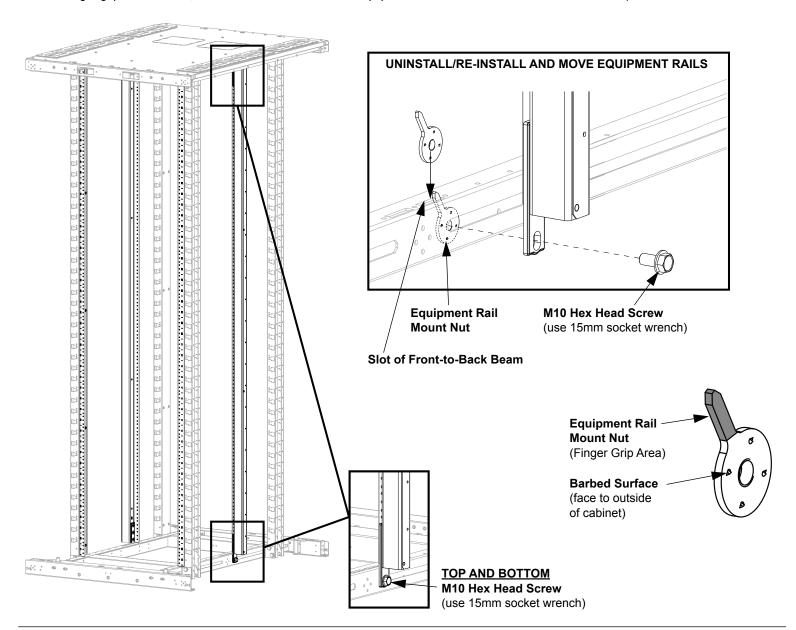
Equipment Rail Adjustment

- Loosen M10 Hex Head Screw at top and bottom of rear equipment rail
- · Adjust equipment rail to desired position
- Tighten M10 Hex Head Screw to 30.0 +/- 5.0 N-m [22.1 +/- 3.7 Ft-lbs]

NOTE: Front equipment rails are in a fixed position

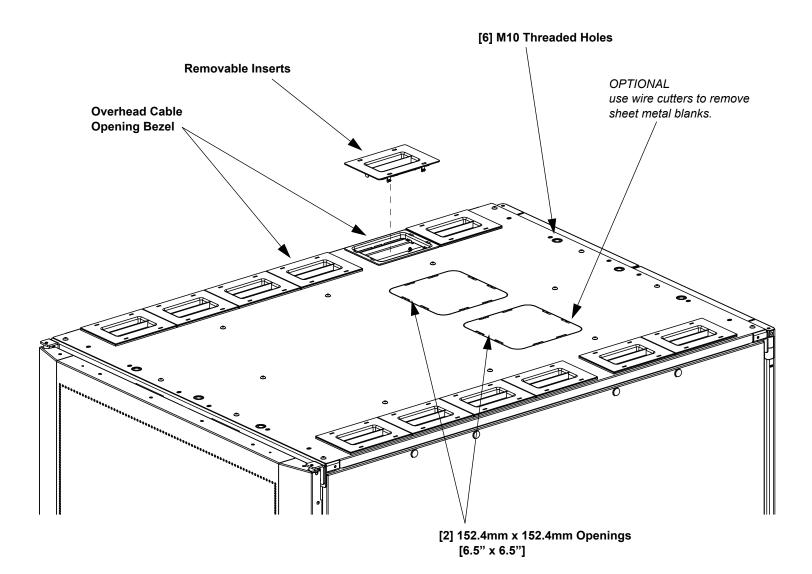
<u>Uninstall/Re-install and Move Equipment Rails</u> (Top and Bottom Locations)

- Remove [2] M10 Hex Screws at top and bottom of Equipment Rail
- Remove [2] Equipment Rail Mount Nuts through slots of Front-to-Back Beam
- REVERSE STEPS to re-install Equipment Rails (insert Equipment Rail Mount Nuts through slots of Front-to-Back beam while holding finger grip of mount nut; ensure that barbed surface of Equipment Rail Mount Nut faces outside of cabinet)



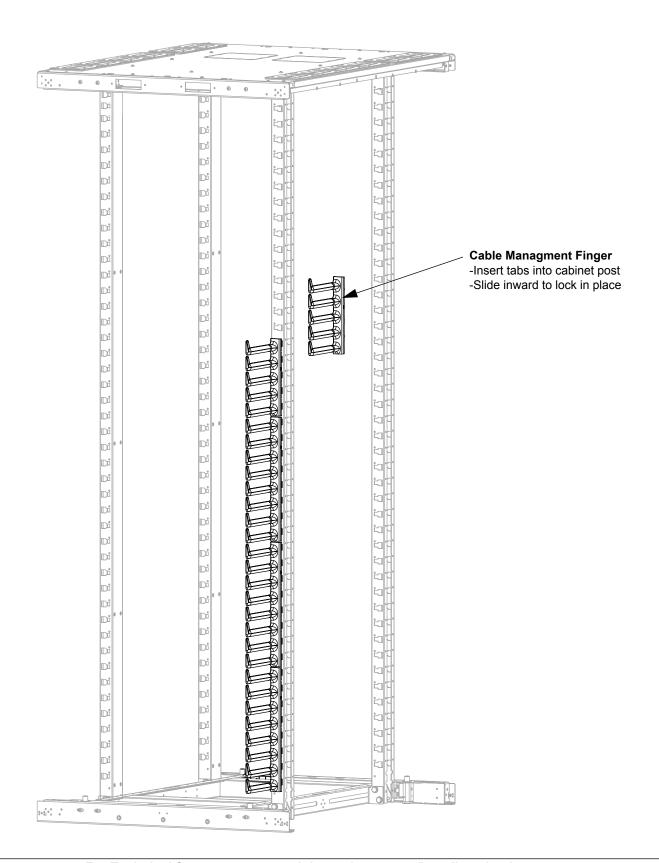
Overhead Cable Openings

- · Remove Bezel Insert to allow for overhead cable entry
- Cut [8] tabs with wire cutter to open large cable openings OPTIONAL
- Install M10 threaded rod into [6] tapped holes, if desired
- [2] 165.1mm x 165.1mm [6.5" x 6.5"] openings can be used to route power overhead
- PANDUIT COOL BOOTTM products can be used to seal around cables/fiber to prevent hot air recirculation



Cable Management Fingers (SN15F, SN25F)

- Insert tabs of Cable Management Finger into mounting slots of cabinet post
- Slide Cable Management Finger inward to lock into place



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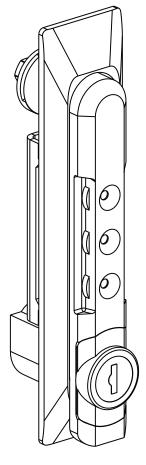
CCL3 - Combination Lock Swing Handle Installation

Combination Lock Swing Handle Operation

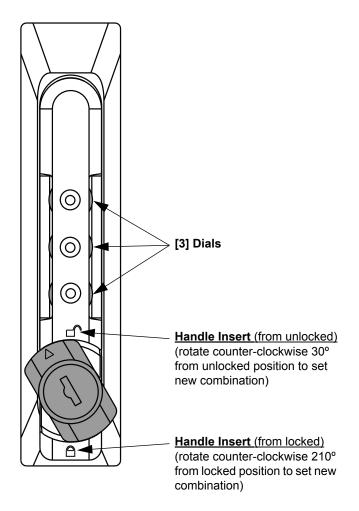
- Default combination: "0,0,0"
- Set [3] dials to correct combination, or use key to open handle

SET NEW COMBINATION

- · Open swing handle
- Rotate handle insert counter-clockwise 30° (from unlocked position) or 210° (from locked position)
- Set [3] dials to desired combination
- Return handle insert to original position
- Close swing handle



NOTE
Entire handle assembly
must be removed from door
prior to installation of CCL3

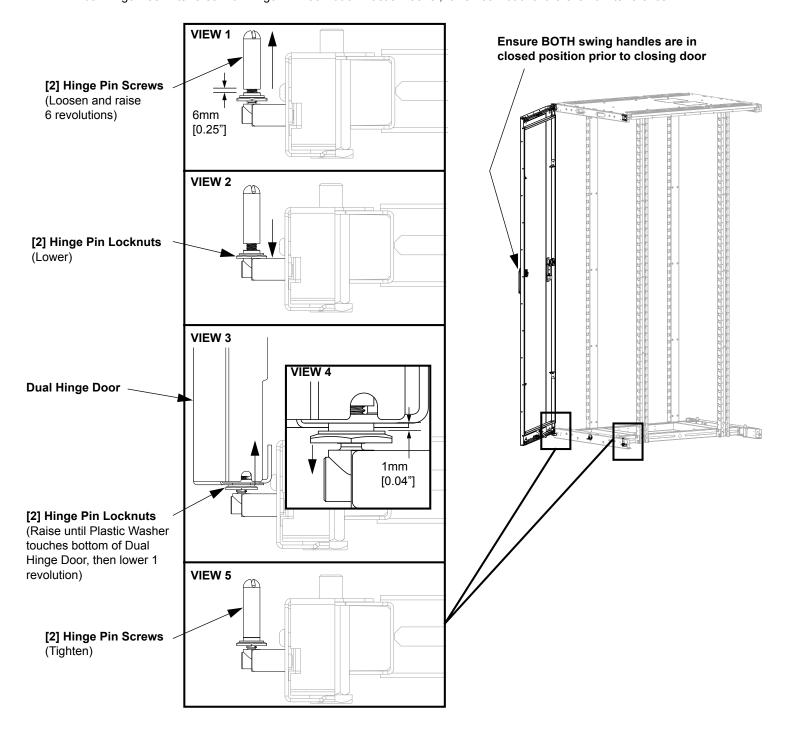


Dual Hinge Door (Operation)

NOTE: Door is push-to-close. PANDUIT recommends closing handle after opening door and simply push door when closing

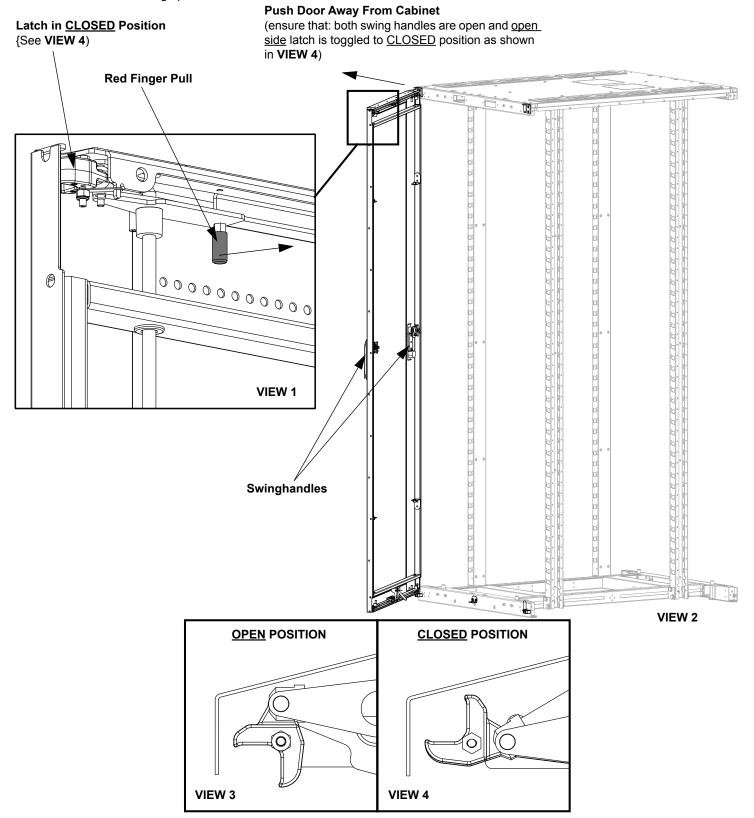
Door Function Adjustment (optimize door operation)

- Remove Dual Hinge Door from cabinet (or open one side at a time)
- VIEW 1 Loosen [2] Hinge Pin Screws at bottom of cabinet and raise by approximately 6 revolutions (6mm [0.25"])
- VIEW 2 Lower [2] Hinge Pin Locknuts to bottom of Hinge Pin Post Screw (if nut is not lowered; factory setting of nut is fully-lowered)
- Reinstall Dual Hinge Door (see page 16)
- VIEW 3, VIEW 4 Raise [2] Hinge Pin Locknuts until Plastic Washers touch bottom of Dual Hinge Door, then lower locknut 1 revolution
- VIEW 5 Open each side of Dual Hinge Door and tighten [2] Hinge Pin Screws
- · Close Dual Hinge Door
- · If Dual Hinge Door interferes with Hinge Pin Locknut or Plastic Washer, lower locknut until there is no interference



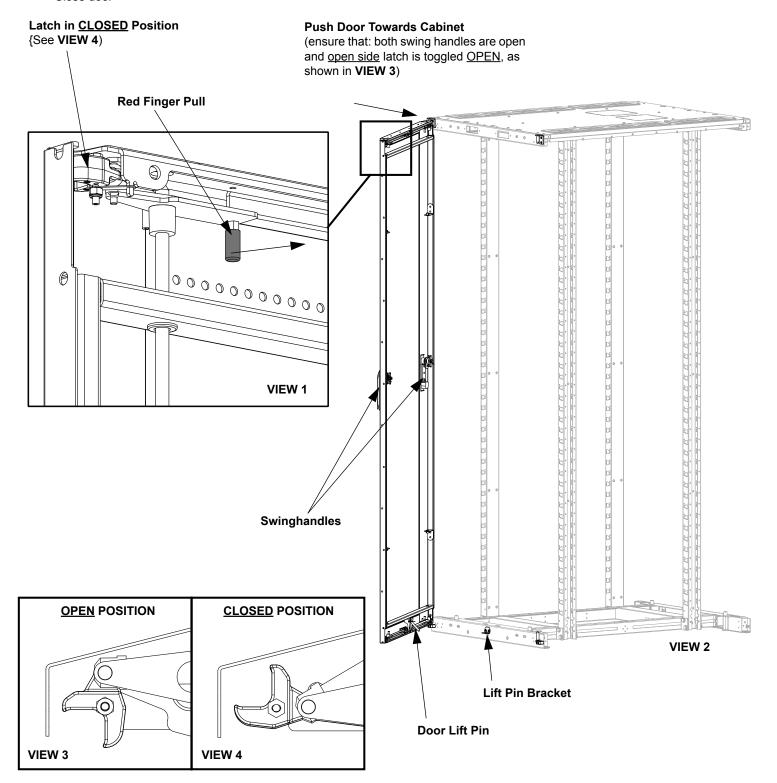
Dual Hinge Door (Removal)

- · Open both swing handles
- VIEW 1 While supporting weight of door, pull red finger handle to toggle latch of open side of door to CLOSED position (VIEW 4)
- VIEW 2 Remove door from cabinet frame by pushing top of hinged side of door away from cabinet
- Lift door off bottom hinge pin



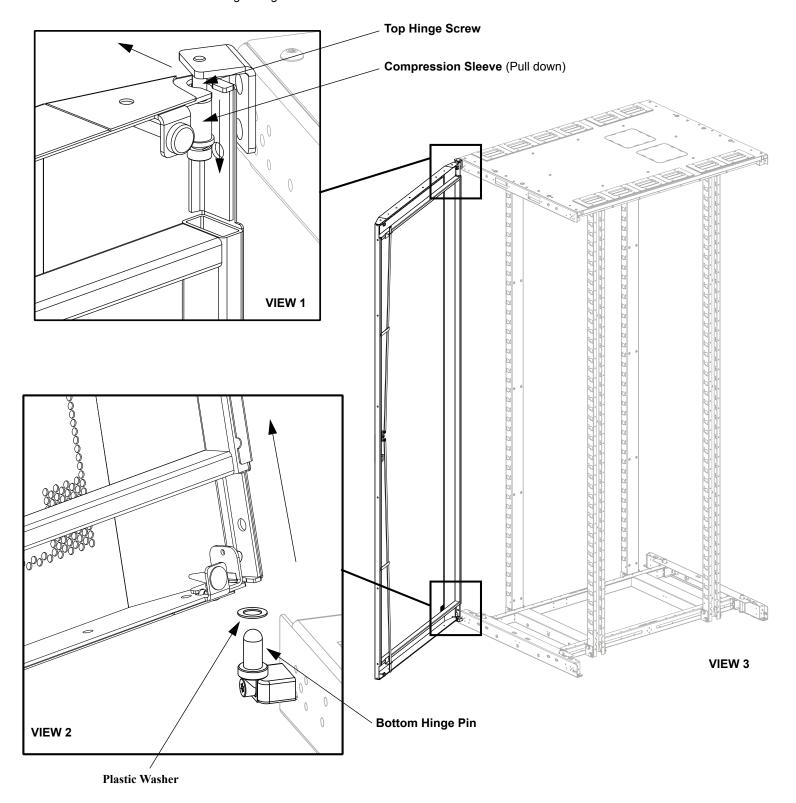
Dual Hinge Door (Installation)

- · Open both swing handles
- VIEW 1 Ensure one top latch is <u>OPEN</u> (VIEW 3) and the other is <u>CLOSED</u> (VIEW 4; pull red finger handle to toggle latches)
- Lift door (with <u>CLOSED</u> bottom latch) onto bottom hinge pin
- VIEW 2 While supporting weight of door, align OPEN top latch with cabinet and push door against cabinet until latched
- VIEW 1 Pull red finger handle to toggle top latch of open side to OPEN (VIEW 3) position
- Close both swing handles
- · Close door



Single Hinge Door (Removal and Installation)

- VIEW 1 Pull down Compression Sleeve at top door hinge
 VIEW 1 Pull Single Hinge Door away from cabinet so that Top Hinge Screw fits through cutout of door
- VIEW 2 Lift bottom of door off Bottom Hinge Pin
- **REVERSE STEPS** to install Single Hinge Door

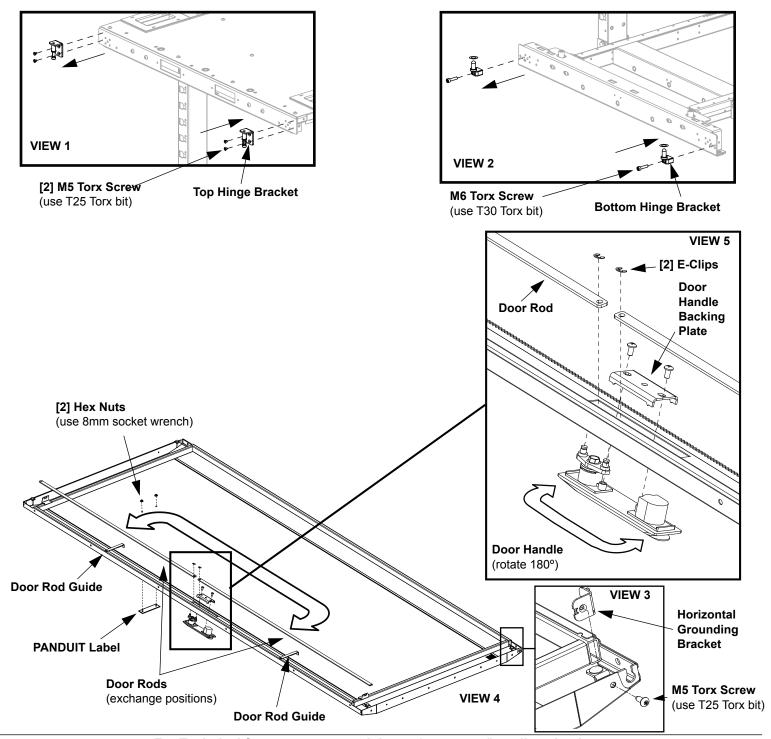


Single Hinge Door (Door Handle Direction Reversal)

- VIEW 1, 2 Remove Top and Bottom Hinge Brackets from current location (remove top hinge screw, if necessary)
- · VIEW 1, 2 Install Top and Bottom Hinge Brackets on opposite side of cabinet (re-install top hinge screw, if necessary)
- VIEW 3, 4 Remove Horizontal Grounding Bracket and reinstall on opposite side of door.

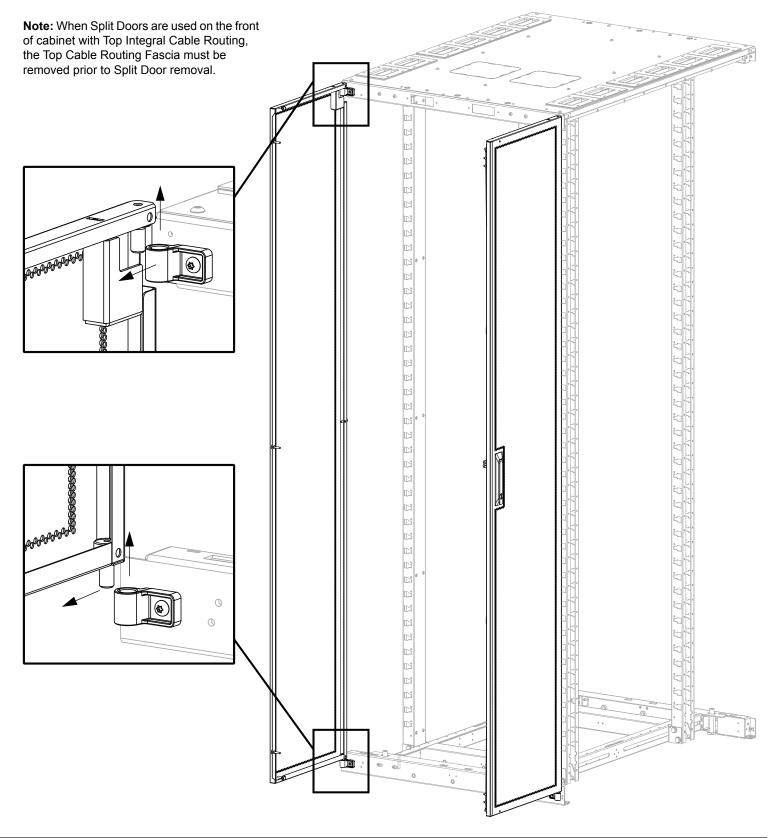
Door Handle Reversal (Lay door on a flat surface) - VIEW 4, 5

- · Remove [2] E-clips from Door Handle Cam and exchange positions of Top and Bottom Door Rods
- Remove Door Handle Backing Plate and rotate position of Door Handle 180°
- With Door Handle repositioned, secure Door Handle Backing Plate to Door Handle
- Attach Top and Bottom Door Rods to Door Handle Cam with [2] E-clips (ensure that door rods are behind door rod guides)
- Remove PANDUIT label and re-attach in correct orientation near top of door
- Reinstall Single Hinge Door per instructions on Page 17



Rear Split Doors (Removal and Installation)

- Open Rear Split Doors to approximately 90° Lift Rear Split Doors up pull doors away from cabinet frame
- REVERSE STEPS to install Rear Split Doors

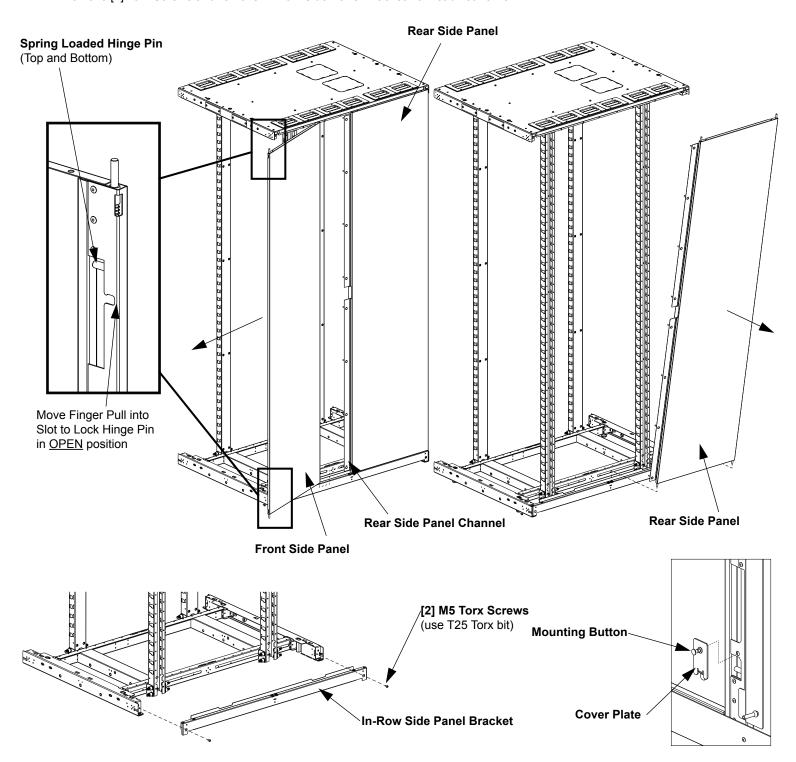


In-Row Side Panel (Removal and Installation)

- Remove Rear Split doors prior to Removal and Installation of Side Panels
- Pull and lock [2] front Spring Loaded Hinge Pins to swing Front Side Panel open.
- Pull and lock rear top Spring Loaded Hinge Pin and lift Front Side Panel from cabinet frame.
- Pull [2] top Spring Loaded Hinge Pins and lift Rear Side Panel from cabinet frame
- REVERSE STEPS to install In-Row Side Panels. Install Rear Side Panel First

In-Row Side Panel Bracket Removal

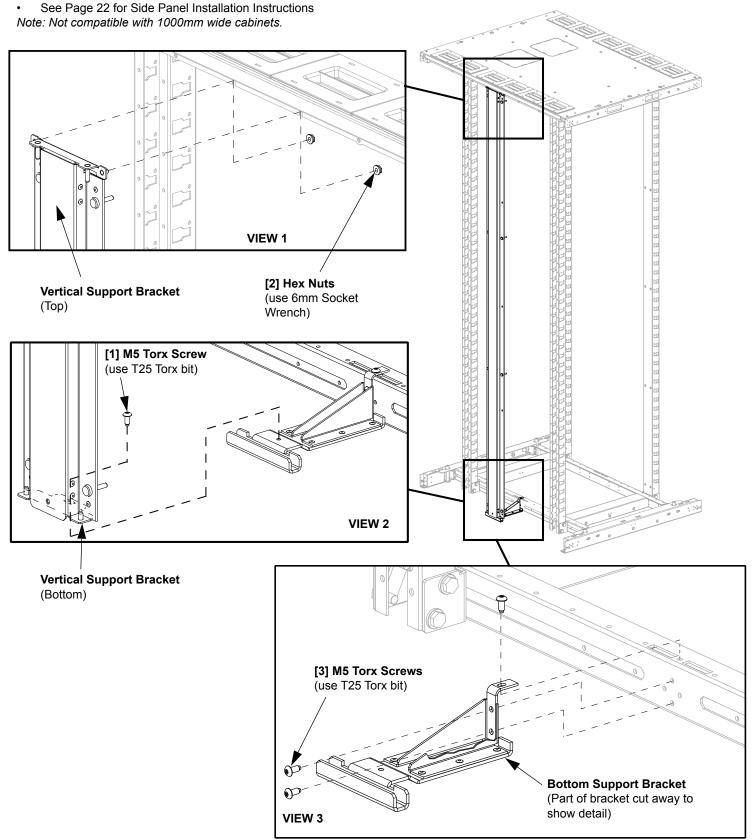
Remove [2] Torx Screws and remove In-Row Side Panel Bracket from cabinet frame



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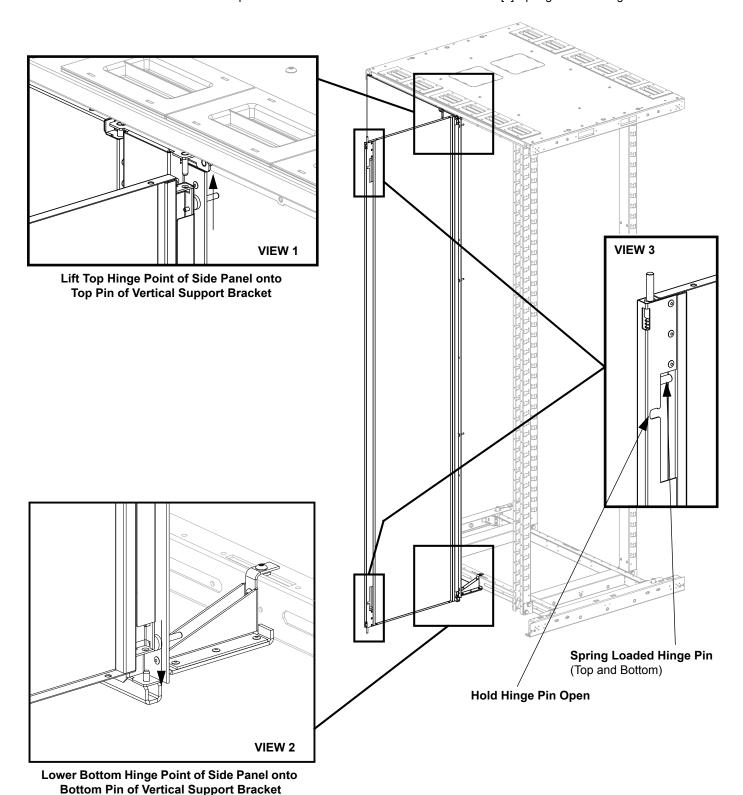
End of Row Side Panels (Removal and Installation)

- VIEW 3 Secure Bottom Support Bracket to cabinet frame with [3] M5 Torx Screws
- VIEW 1, 2 Secure Vertical Support Bracket to cabinet frame and bottom support bracket with [1] M5 Torx Screw and [2] Hex Nuts



End of Row Side Panels (Removal and Installation)

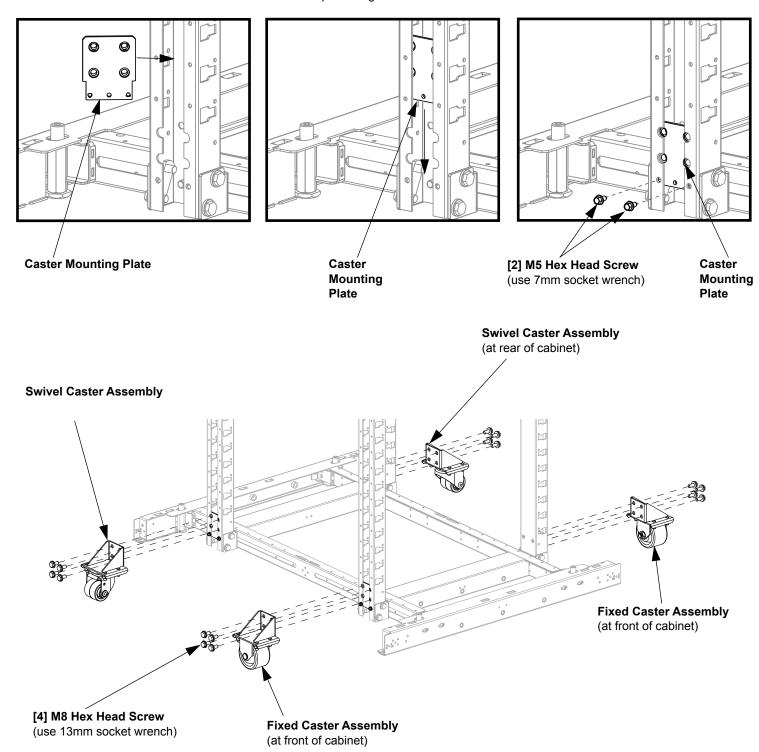
- Open Side Panel to approximately 90°
- VIEW 1 Lift Top Hinge Point of Side Panel onto top pin of Vertical Support Bracket
- VIEW 2 Lower Bottom Hinge Point of Side Panel onto bottom pin of Vertical Support Bracket
- VIEW 3 Close Side Panel and secure top and bottom of Side Panel to cabinet frame with [2] Spring Loaded Hinge Pins



Caster Kit Installation (NCSTR4)

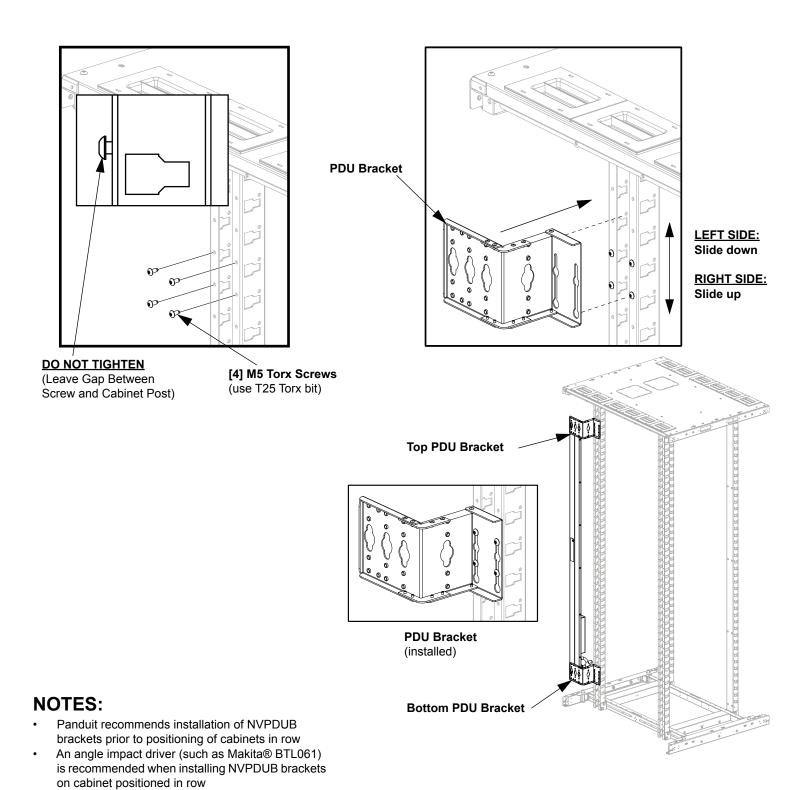
- Install [4] Caster Mounting Plates into posts of cabinet (insert bracket into post in an angled position from above mounting location, rotate bracket, and align bracket with mounting holes)
- Install [2] M5 screws into bottom holes of Caster Mounting Plate through cabinet post (as shown below)
- Secure [4] Caster Assemblies to Caster Mounting Plates

NOTE: Ensure that fixed casters and swivel casters are paired together at front and rear of cabinet



PDU Bracket Kit Installation (optional)

- Install [4] M5 Torx Screws into desired top location of cabinet post, as shown below
- Do not tighten screws Leave a gap between screw and cabinet post for bracket thickness
- Place Top PDU Bracket over screw heads and slide up (or down, depending on mounting side of cabinet)
- Install Bottom PDU Bracket at desired distance from Top PDU Bracket
- Tighten [8] M5 Torx Screws

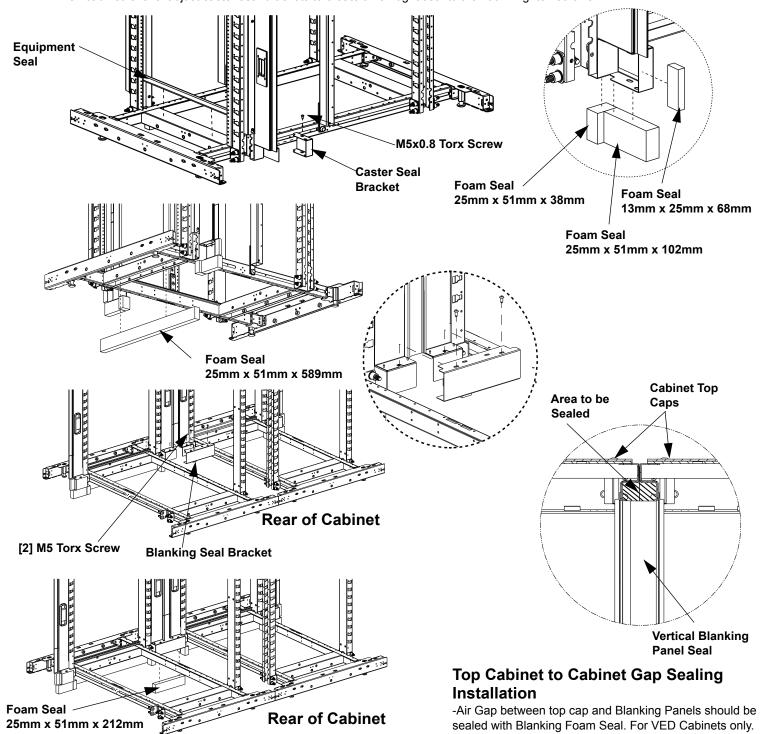


Cabinet Seal Kit Installation (optional)

- Install (2) Caster Seal Brackets (1 Left, 1 Right) to the bottom Vertical Blanking Panel assembly using (1) M5X0.8 button head torx screw. (do not tighten)
- Install Foam Seal to the caster seal brackets on the bottom flange.
- Install Equipment Seal to the top of the lower front side to side beam and to the bottom of the upper side to side beam, between the front E-rails.

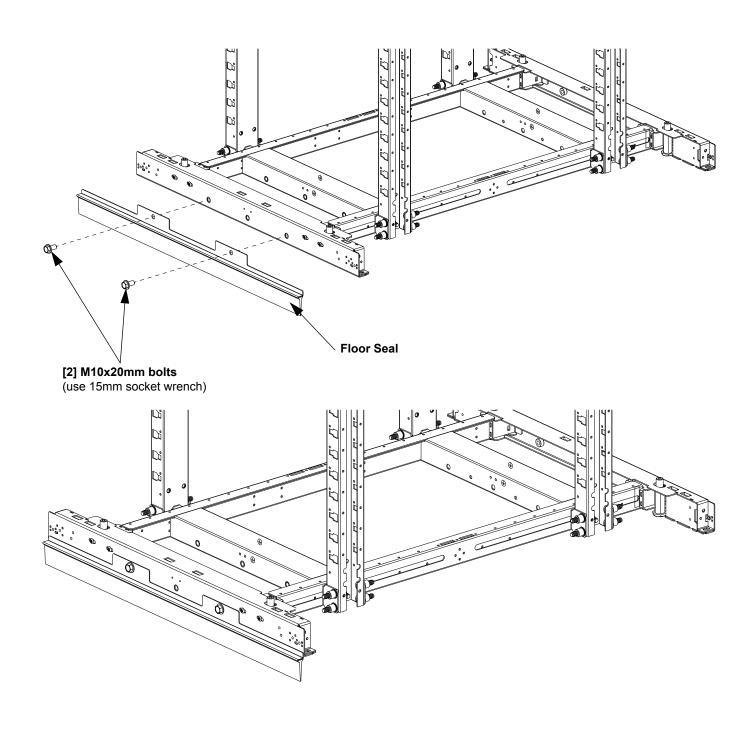
Note: The following instructions are when (2) two Cabinets without Side Panels are ganged together.

- Install foam seal to the rear flange of the front side to side beam.
- Install Blanking Seal Bracket to the Bottom Vertical Blanking Panel using (2) M5X0.8 button head torx screw.
- Apply Foam Seal to the bottom of the Blanking Seal Bracket to ensure an air tight seal.
 *When cabinet is level adjust caster seal brackets to create an air tight seal to the floor. Tighten screws.



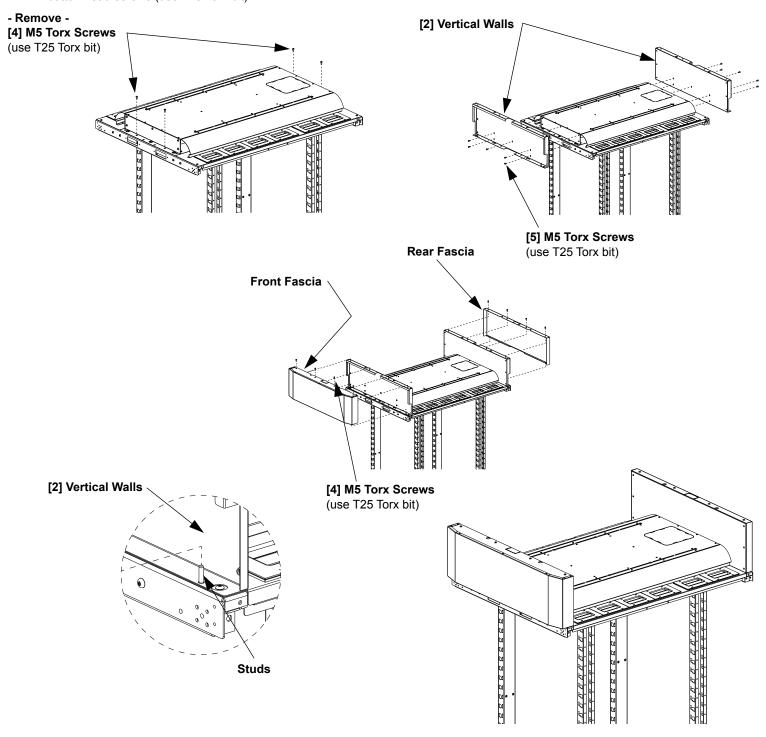
Front and Rear Floor Seal Installation (optional)

 Install Floor Seal to front or rear of cabinet frame using (2) M10x20mm bolts. (Flange on floor seal will face outward away from the cabinet.)



Top of Cabinet Cable Manager Installation (optional)

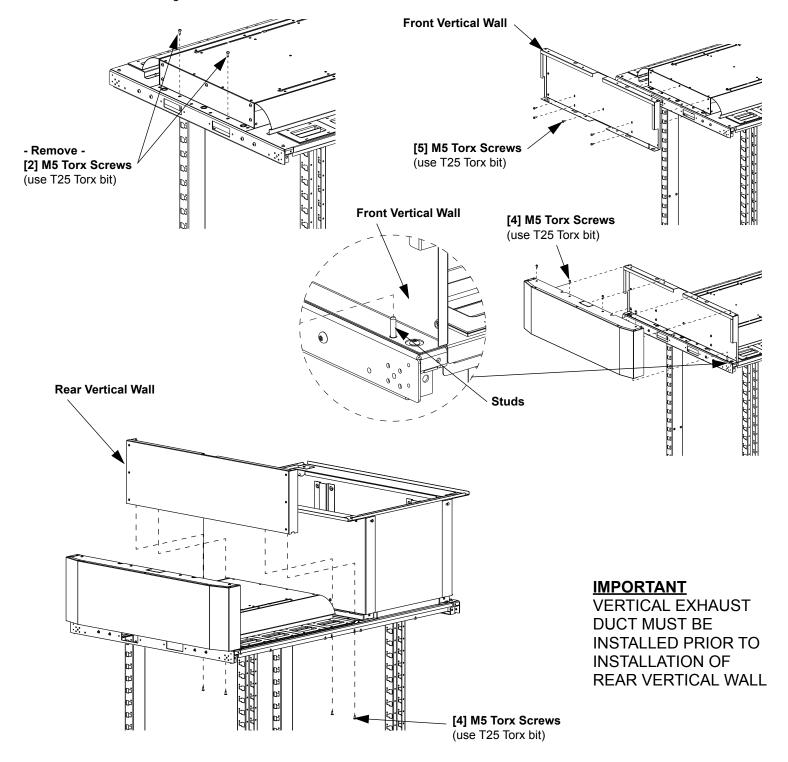
- Disassemble front fascia assemblies (packaged in cabinet) by removing (2) M5x0.8 button head screws (use T25 Torx bit).
- Remove (2) M5x0.8 button head screws (use T25 Torx bit) from front and rear of Cable Manager base.
- Install vertical walls on front and back of Cable Manager base using (5) M5x0.8 button head Torx screws (use T25 Torx bit).
 Re-install screws from previous step to secure to the frame.
- Attach front fascia to the front vertical wall by sliding fascia over studs in vertical wall.(see detail view). Tighten with (4) M5x0.8 button head screws (use T25 Torx bit).
- Attach rear fascia to the rear vertical wall by sliding fascia over studs in vertical wall (see detail view). Tighten with (4) M5x0.8 button head screws (use T25 Torx bit).



Top of Cabinet Cable Manager Installation (for vertical exhaust ducts)

IMPORTANT - INSTALL VERTICAL EXHAUST DUCT PRIOR TO INSTALLING REAR VERTICAL WALL

- Disassemble front fascia assemblies (packaged in cabinet) by removing (2) M5x0.8 button head screws (use T25 Torx bit).
- Remove (2) M5x0.8 button head screws (use T25 Torx bit) from front of Cable Manager base.
- Install vertical wall on front of Cable Manager base using (5) M5x0.8 button head Torx screws (use T25 Torx bit). Re-install screws from previous step to secure to the frame.
- Attach front fascia to the front vertical wall by sliding fascia over studs in vertical wall (see detail view). Tighten with (4) M5x0.8 button head screws
- Attach rear vertical wall to the Cable Manger with (4) M5x0.8 button head screws (use T25 Torx bit) from underneath Top of Cabinet Cable Manager.



Top and Bottom Door Sealing Post Bracket Installation

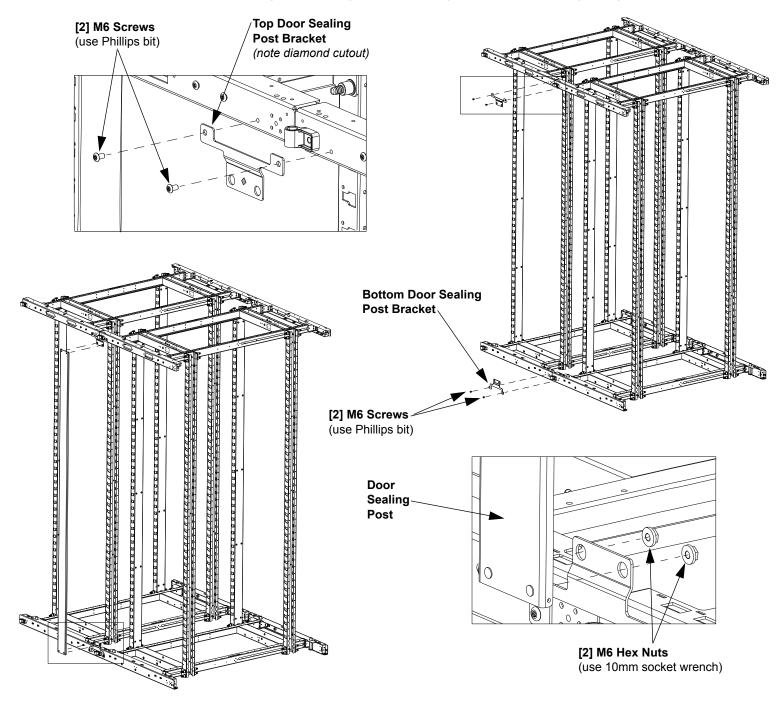
- -Align Top and Bottom Door Sealing Brackets with matching hole patterns of cabinet frames (top bracket is distinguished by diamond-shaped cutout)
- -Secure [2] Door Sealing Post Brackets to cabinet frame with [2] M6 Screws per bracket (use Phillips bit)

Note: It may be necessary to adjust position of cabinets to allow for brackets to properly align with cabinets

Note: Door sealing is only necessary whenever there are fewer than two side panels installed. For applications with only one side panel installed, the door sealing post may be flipped 180 degrees before attaching to ensure proper alignment.

- -Insert threaded studs of Door Sealing Post through top and bottom Door Post Sealing Brackets
- -Secure Door Sealing Post to brackets with [2] M6 Hex Nuts per bracket (use 10mm socket wrench)

ENSURE that top and bottom of Door Sealing Post sit flat against Door Sealing Post Brackets before tightening Hex Nuts



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For Instructions in Local Languages and Technical Support:



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