PANDUIT

Hyperscale Fiber Wall Enclosure
Part Number(s) : *FWMHSS*S-3456*, *FWMHSS*S-6912*

FWMHSS*S-3456

FWMHSS*S-6912

Components included:
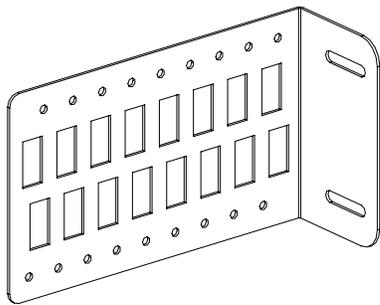
Vertical Cable Guide

FWMHSS*S-3456
QTY. 4
FWMHSS*S-6912
QTY. 8
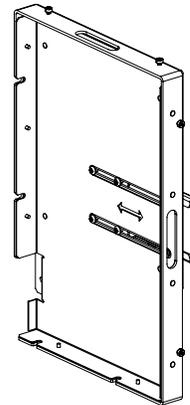
Work Tray

FWMHSS*S-3456
QTY. 1
FWMHSS*S-6912
QTY. 1
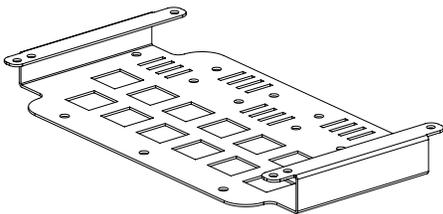
Incoming Cable Plate

FWMHSS*S-3456
QTY. 2
FWMHSS*S-6912
QTY. 3
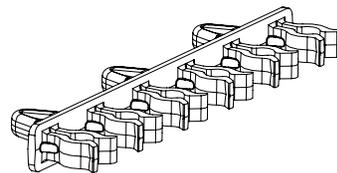
Plastic Snap

FWMHSS*S-3456
QTY. 5
FWMHSS*S-6912
QTY. 10

(*) in part numbers
represents color options.
G- Gray, B- Black, W- White

For Technical Support: www.panduit.com/resources/install_maintain.asp
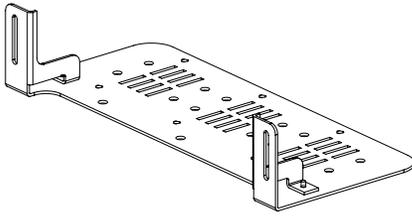
Incoming Cable Bracket

FWMHSS*S-3456
QTY. 1
FWMHSS*S-6912
QTY. 2
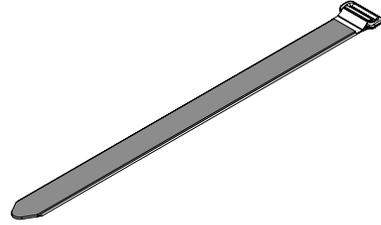
UCT12S-XO
Hook and Loop Cinch Tie

FWMHSS*S-3456
QTY. 1
FWMHSS*S-6912
QTY. 2
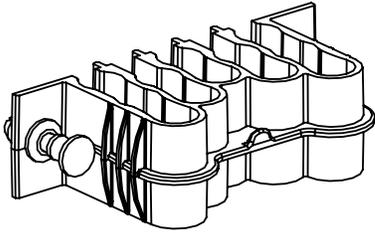
FLEX-CLIP12
Flex Clip

FWMHSS*-3456
QTY. 4
FWMHSS*-6912
QTY. 8
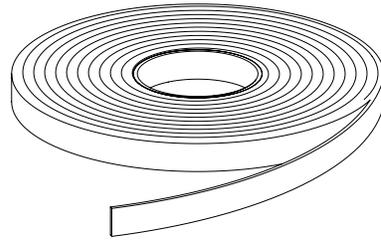
TAK-TY

FWMHSS*S-3456
QTY. 15 FT
FWMHSS*S-6912
QTY. 15 FT
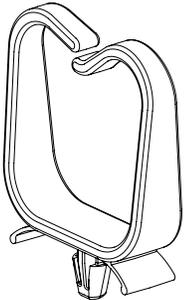
VWS106
Saddle Clip

FWMHSS*S-3456
QTY. 20
FWMHSS*S-6912
QTY. 40

Optional accessories not included in FWMHSS*S-3456, FWMHSS*S-6912:

-ACGKX, ACGK, Armored cable grounding
-FWMHSS*-12X32 KIT, Top and Side Cover Kit with Qty-12: 32mm holes
-FBKSL-M05-KIT, Fiber Breakout Sleeve
-SE25PSC-TR0, Fray Resistant Expandable Sleeving
-FWMHSS-ICAK, Incoming Cable Anchor Post
-FLEX-CM12C, HD Flex Rear Cable Manager
-FWMHSS*-STOR, Cable Storage Box
-FWMHSS*-GROUND, Grounding Kit
-FST48, HD Fusion Single Fiber Splice Tray Kit
-FST144R, HD Fusion Ribbon Fiber Splice Tray Kit
-FWMHSS - CG613 - Cable Gland 6mm - 13mm cable range
-FWMHSS - CG1321 - Cable Gland 13mm - 21mm cable range
-FWMHSS - CG2135 - Cable Gland 21mm - 35mm cable range
-FWMHSS - CG3448 - Cable Gland 34mm - 48mm cable range

Tools required:

- Phillips screw driver
- Socket (11/32) for hex nuts

(*) in part numbers
represents color options.
G- Gray, B- Black, W- White

For Technical Support: www.panduit.com/resources/install_maintain.asp

Table of Contents

Door removal

- Open door 90 degrees
- Lift up and away from chassis frame
- Reverse steps for Installation
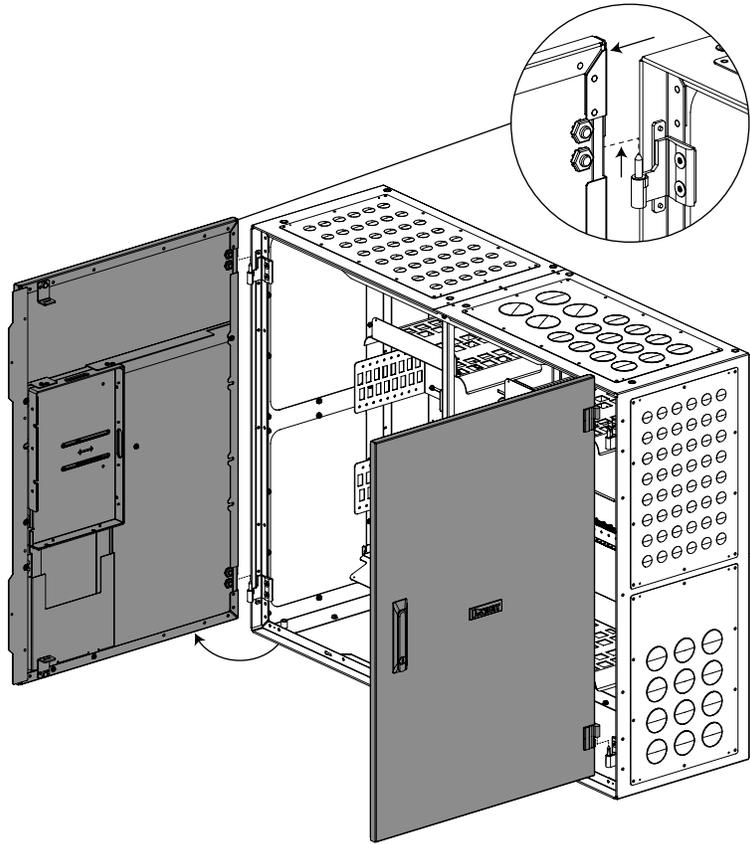
Top, Bottom and Side Cover removal

- Remove #8-32 lock nut from chassis frame
- Remove top, bottom or side covers
- Reverse steps for installation
- Top and Bottom plates are all interchangable. Side plates are all interchangeable.

Top Cover

#8-32 Lock Nut 12 Places

Side Cover

#8-32 Lock Nut 10 Places

Bottom Cover
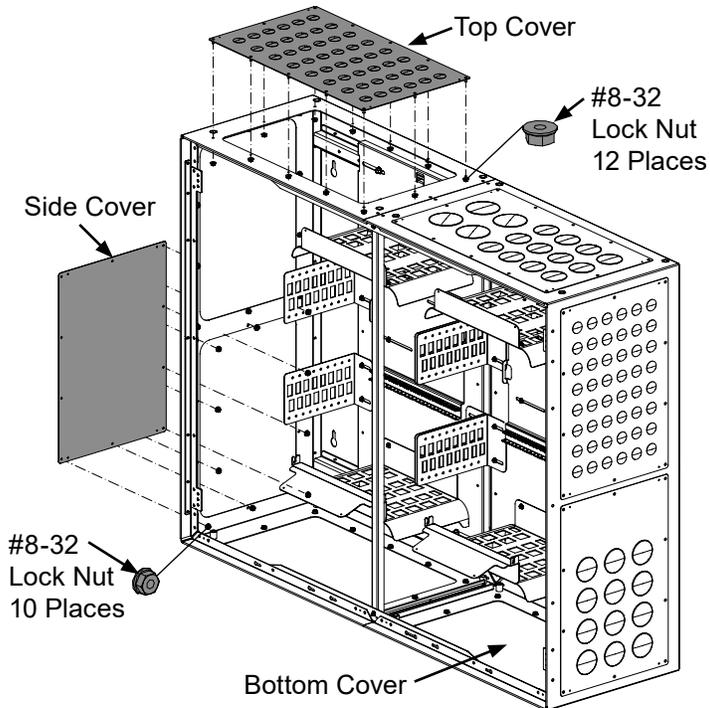
Plastic Locking Plug removal

- Pinch sides of plug
- Push toward outside of chassis frame
- Reverse steps for installation

Locking Plug (2.5" Hole)

Locking Plug (2.0" Hole)

Locking Plug (.88" Hole)

Locking Plug (2.0" Hole)
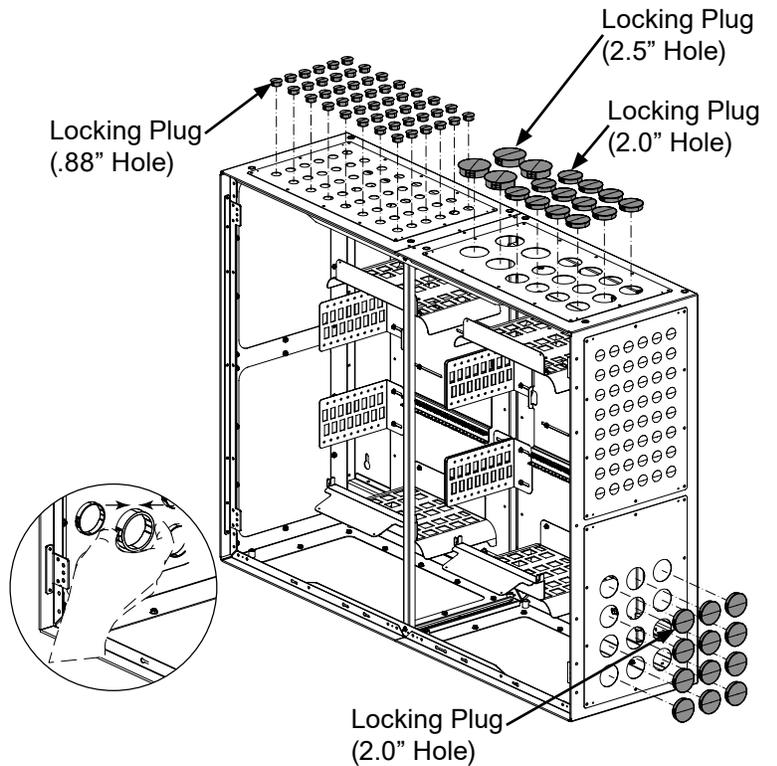
Work Tray removal and installation

- Loosen #10-32 x 1/2" Screw
- Slide work tray toward larger opening of key hole slot
- Work tray extender can be adjusted using (4) #10-32 x 1/2" Screws (Tighten before installing of frame)
- Install work tray on chassis frame engaging shoulder bolts into slot
- FWMHSS*S-6912 work tray can be installed left, center, and right

Work tray extender fully extended

(4) #10-32 x 1/2" Panhead Machine Screws

#10-32 x 1/2" Panhead Machine Screw
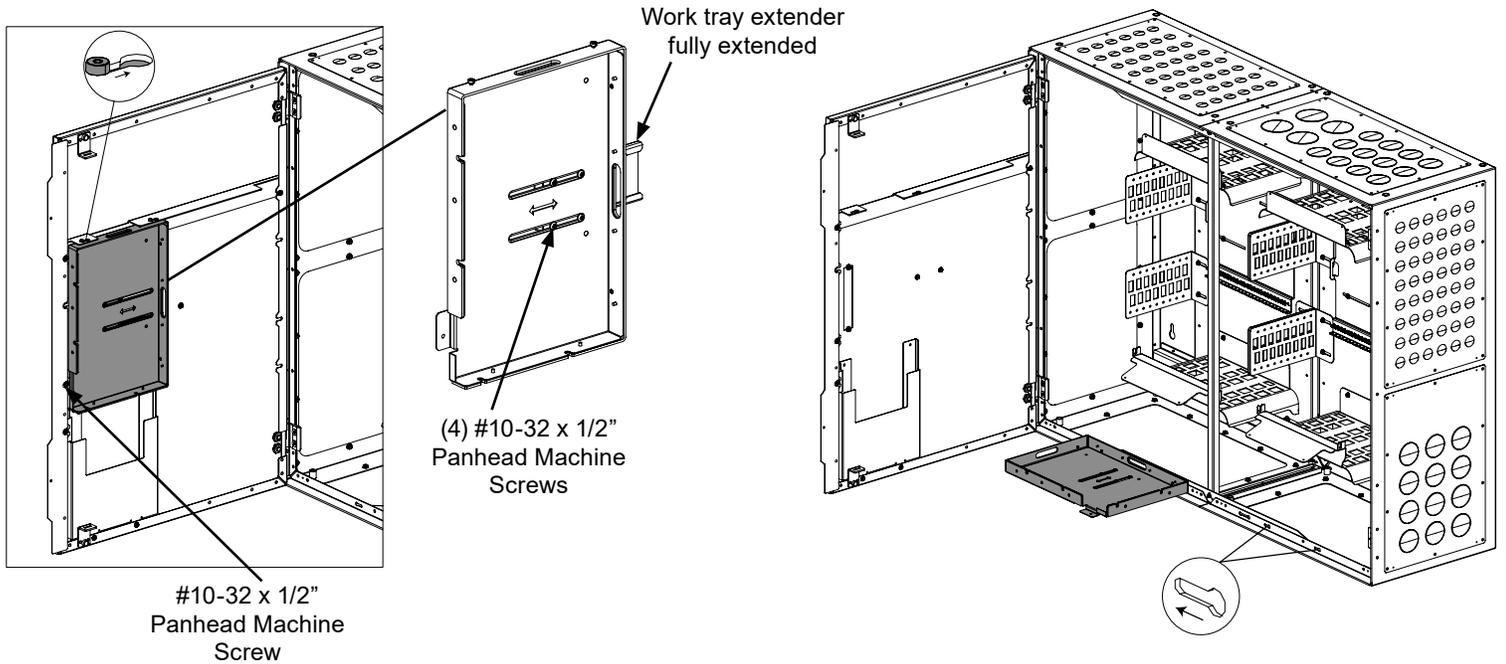
Mount Enclosure on the wall

- Mount enclosure to wall using the appropriate location guide on this page. Mounting hardware not included.
- Wall must be flat to prevent distortion of the enclosure when tightened to a wall. This could prevent the doors from aligning properly. If wall is not flat, shims may be required.

Remove center shipping bracket on 6912 unit after installation to the wall.

42.5"

.35" DIA Keyslot

24.0"
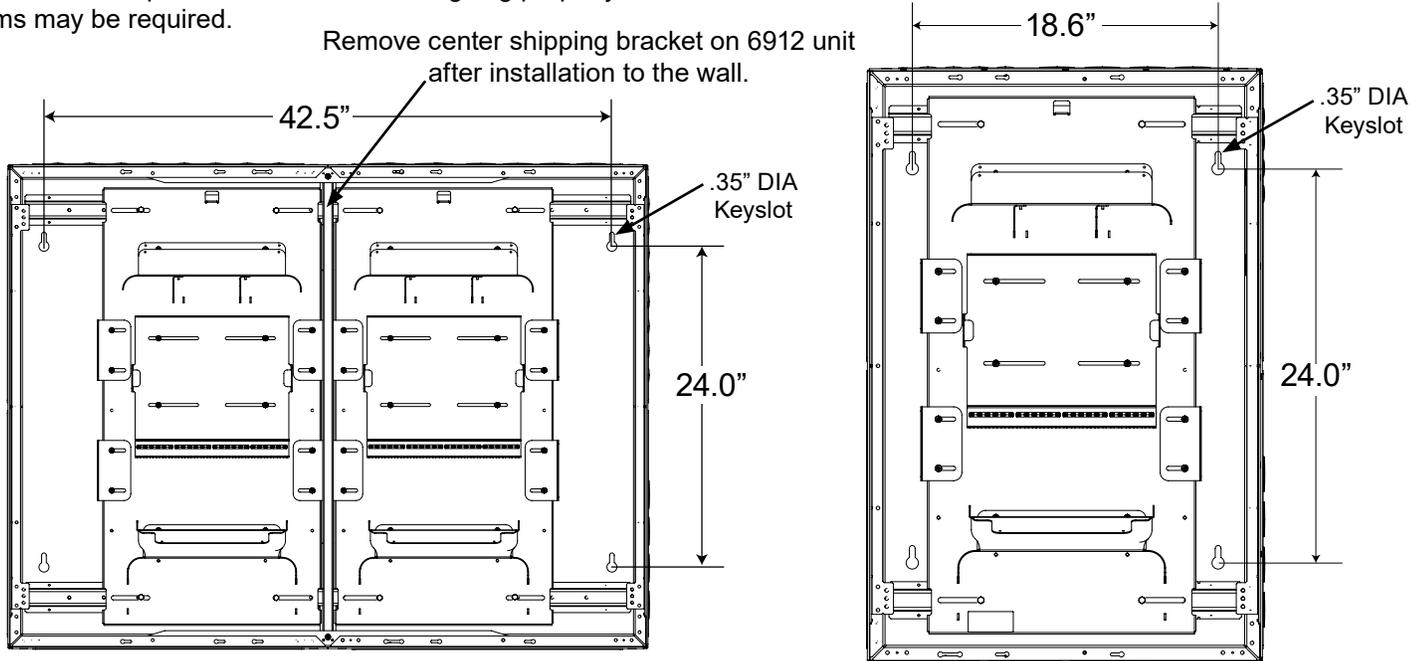
*FWMHSS*S-6912*
Location Guide

18.6"

.35" DIA Keyslot

24.0"

*FWMHSS*S-3456*
Location Guide

Internal Cable Management component set up

The internal Cable Management components can be configured depending on application and cable entry points.
The backplate can be adjusted from left to right, by removing the backplate screws and sliding the backplate to the desired location and reinstalling the backplate screws.
The splice tray holder can be adjusted from left to right, by loosening the mounting screws and sliding the splice tray holder to the desired location. The lower cable support can be installed in the lower position to allow more fiber slack space. To reposition the lower cable support vertically, remove the two mounting screws and install in the adjacent mounting location.

Backplate Screws (4)

Upper Cable Support

Splice Tray Holder

Backplate

Lower Cable Support
(in upper position)

Lower Cable Support
(in lower position)

Center positioned cable management   Right positioned cable management
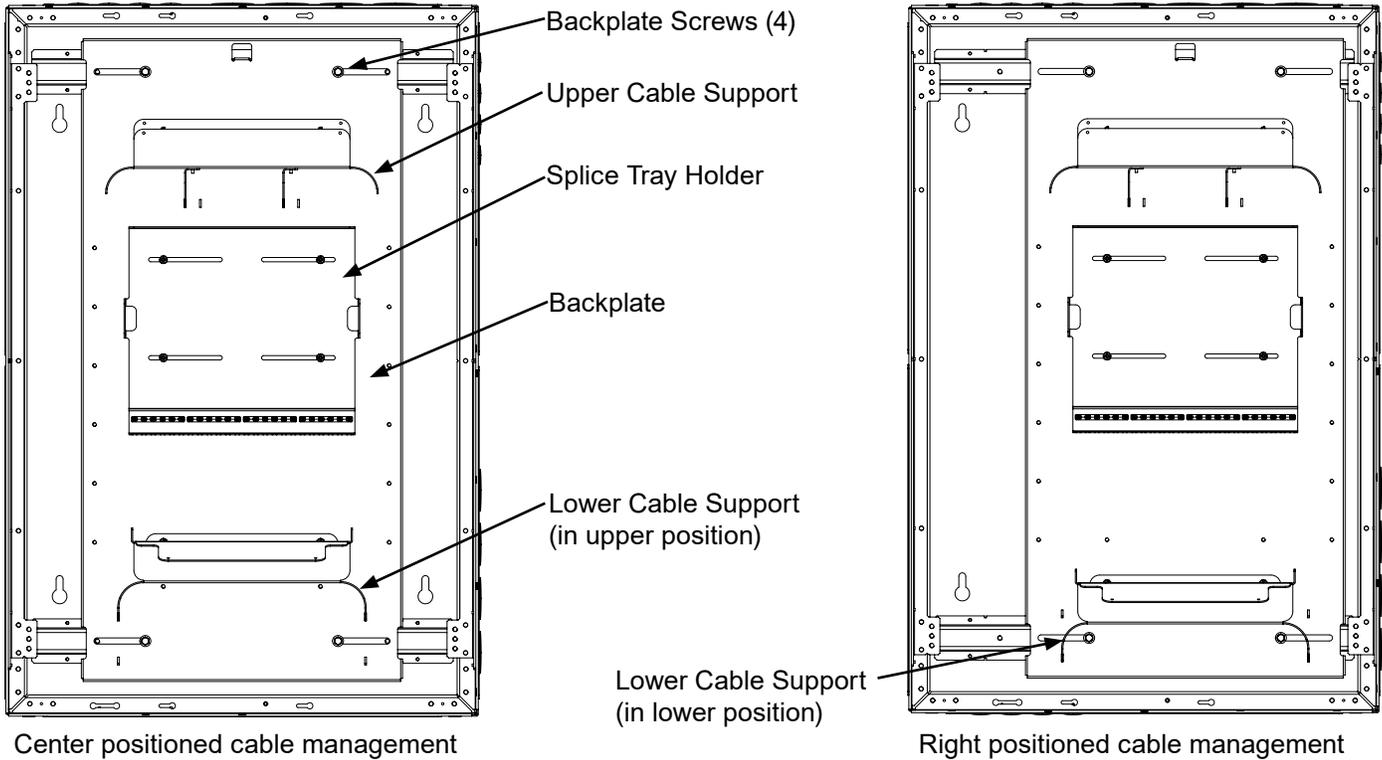
Up to four vertical cable guides (included) can be installed on each backplate using 10-32 screws and star washers (included).
These brackets can be used to manage internal fiber using Tak-Ty or cable saddle clips (Included. Panduit part no: VWS106)
Press the four plastic snaps into the splice tray holder as shown below.

Plastic snap
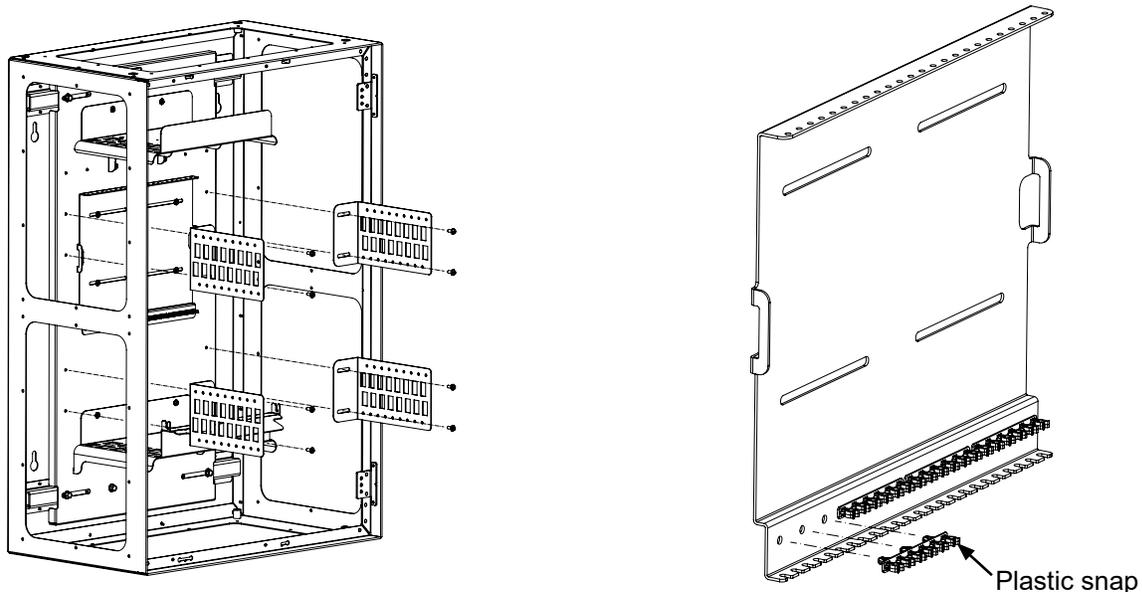
For Technical Support: www.panduit.com/resources/install_maintain.asp

## Incoming and outgoing Cable Management

Cable glands are to be used to secure incoming fiber cable to the enclosure. Circular cutouts in the top, bottom and side cover plates are designed to fit cable glands. The cable glands listed below are sold separately:

Panduit Part Number	Cable Range	Required Cutout Diameter
FWMHSS-CG613	6 – 13 mm (1/4" – 1/2")	22.5 mm (7/8")
FWMHSS-CG1321	13 – 21 mm (1/2" – 13/16")	32 mm (1 1/4") (requires FWMHSS'C'-12X32 plates)
FWMHSS-CG2135	21 – 35 mm (13/16" - 1 3/8")	51 mm (2")
FWMHSS-CG3448	34 – 48 mm (1 3/8" – 1 7/8")	64 mm (2 ½")

The enclosure is supplied with cover plates with 22.5mm, 51mm and 64mm cutouts (FWMHSS*S-6912 Only). To install a cable gland, remove the plastic plug and replace with a cable gland. For large incoming cables, the Incoming Cable Plate should be aligned with the incoming cable, at a sufficient distance from the cable gland to allow ample work space. Install the Incoming Cable Plate using the mounting nuts of side or top/bottom cover plates. Strip off the outer cable jacket to expose at least 20 feet of fiber to route within the enclosure (for typical routing diagram, as shown on page 9) and the splicing trays. Tighten the cable gland near the cut end of the cable jacket as shown. Remove the buffer tubes, leaving 2-3 inch stubs.

It is recommended that fiber inside the enclosure is broken down into subunits of up to 144 ribbonized fibers or 48 single fibers. The fibers in each subunit should be protected using a breakout sleeve, (Panduit part number: FBKSL-M05-KIT), or bulk expandable sleeving, (Panduit part number: SE25PSC-TR0) (Both sold seperately). Tape the ends of each grouping of fibers to prevent individual fibers from poking through the protective sleeve. Feed the bare fiber in groupings into the protective sleeving, until the sleeving should reaches the end of the buffer tube. Pull the sleeving over the buffer tube, with a ½ inch overlap. Secure the sleeving to the buffer tube with heat shrink tubing (not included). If breakout sleeves are used, the FLEX-CLIP12 (included) should be installed in the Incoming Cable Plate, and the transition tube snapped into the FLEX-CLIP12. If bulk expandable sleeving is used, the sleeving can be attached to the square cutouts in the Incoming Cable Plate using Tak Ty. An Incoming Cable Anchor Post (Panduit part number: FWMHSS-ICAK) can be attached to the Incoming Cable Plate to strain relief the cable central strength member. Additional Incoming Cable Plates can be purchased if needed (Panduit Part number: FWMHSS*-ICP)


Cable Gland

Incoming Cable Plate

Incoming Cable Anchor Post

Incoming Cable

Incoming Cable Buffer Tubes

Protective Sleeving

Cable Gland

Heatshrink

Transition Tube

FLEX-CLIP12

Breakout Sleeve
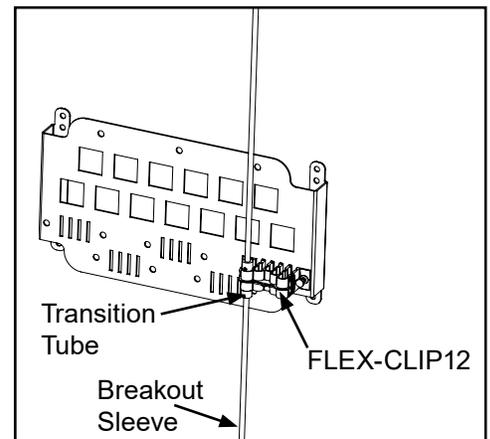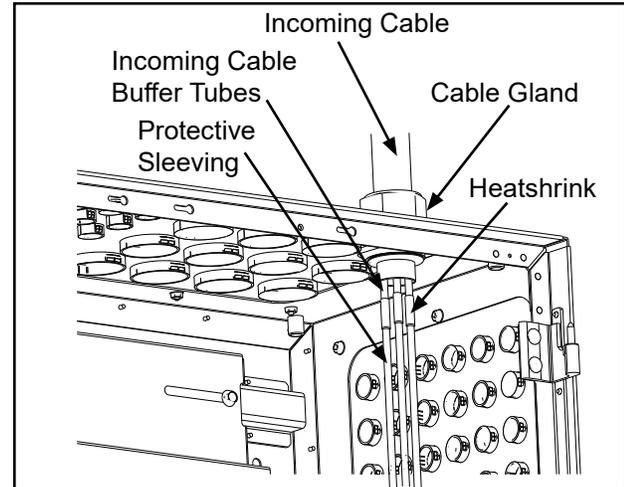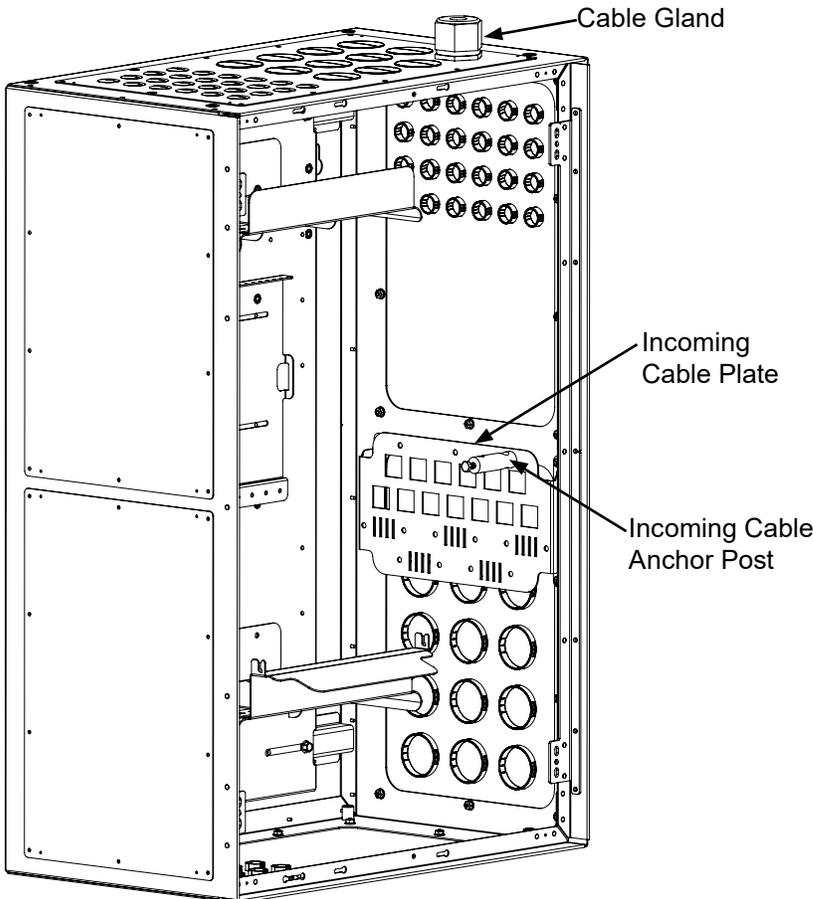
Depending on the application, the incoming cable bracket can be used in place of the incoming cable plate The Incoming Cable Bracket should be attached using the mounting nuts of side or top/bottom cover plates to which the cable gland is mounted.
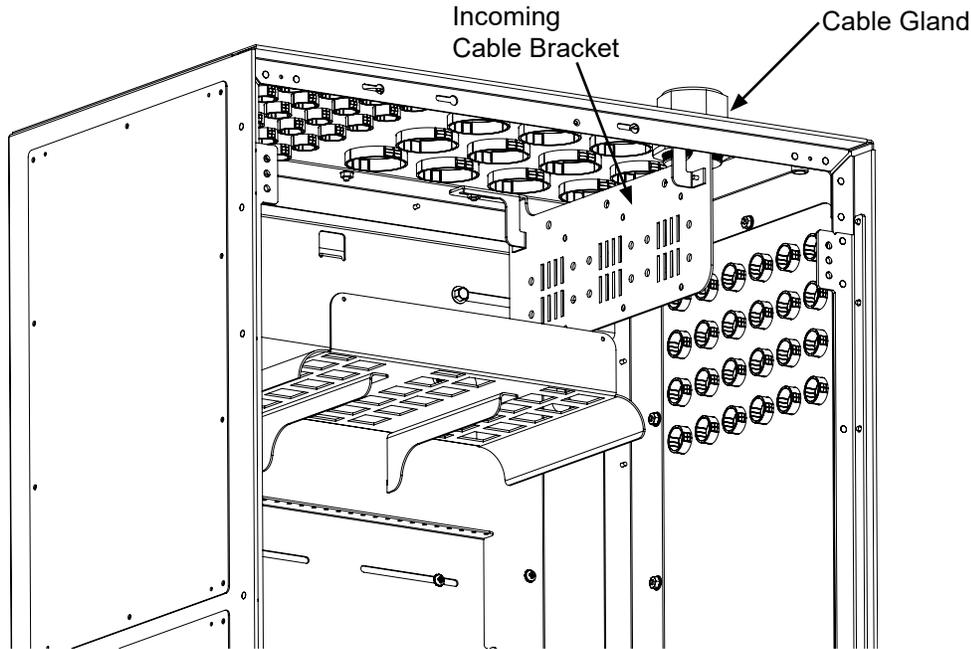
## Incoming Cable Bracket with sleeves

If breakout sleeves are used, the FLEX-CLIP12 (included) should be installed in the Incoming Cable Bracket, and the transition tube snapped into the FLEX-CLIP12. If bulk expandable sleeving is used, the sleeving can be attached to the rectangular cutouts in the Incoming Cable Bracket using Tak Ty. An Incoming Cable Anchor Post (Panduit part number: FWMHSS-ICAK) can be attached to the ¼" holes in Incoming Cable Bracket to strain relief the cable central strength member. To secure a larger number of cables, the Panduit Universal Cable Managers (Panduit Part number: FLEX-CM12C, not included) can be added to the Incoming Cable Plate. Additional Incoming Cable Brackets can be purchased if needed (Panduit Part number: FWMHSS*-ICB).
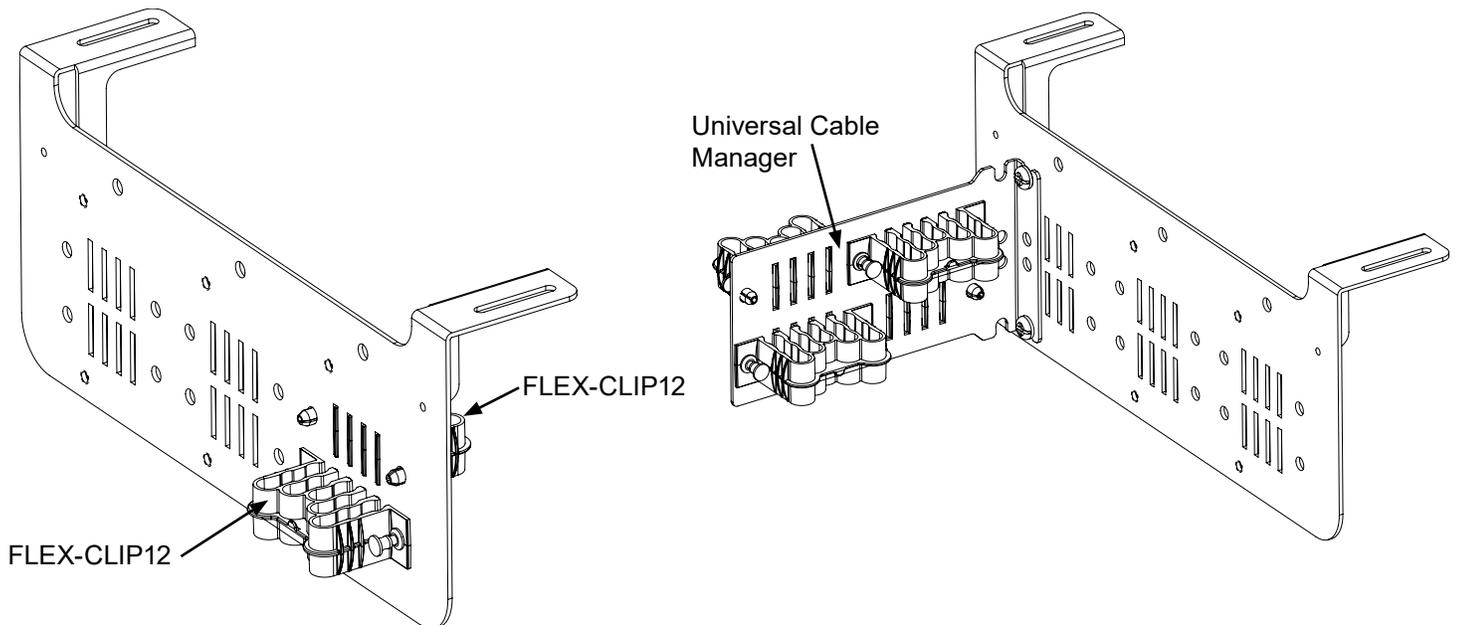
Subunitized cables

The subunitized cable routing will differ depending on the incoming cable entry location, but it should be supported by the upper and lower cable supports, as shown in the diagram below. The Red solid lines represent incoming cable and the green dashed lines represent outgoing cable. The cables should be secured to the cable supports using Tak Ty. Cable should be attached to the vertical cable guides only on straight vertical runs and be routed on the inside of the vertical cable guides. Cable should never be bent around the edges of the vertical cable guide. Incoming cable plates (included) can also be used to secure cables using Tak Ty.

Vertical Cable Guides

Incoming Cable Plates

Short loop of slack
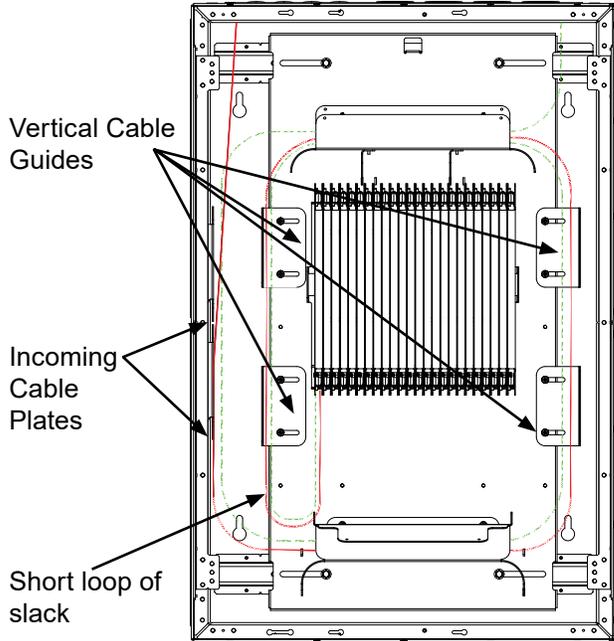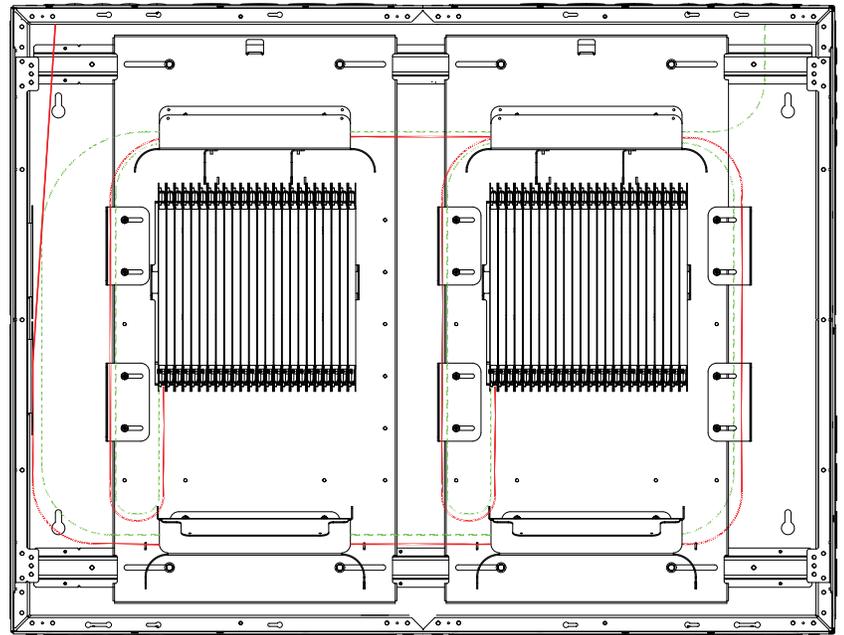
*FWMHSS*S-3456*   *FWMHSS*S-6912*

Splice Tray installation

Install Splicing Trays (Panduit Part number: FST48, FST144R not included) into storage position by first inserting the upper pin into the hole of the splice tray holder, then snapping the lower pin into the plastic snap holder. Up to 24 splicing trays can be installed into each splice tray holder. Follow Panduit instructions FS143 for splice tray fiber installation. The fiber should enter the splice tray near the lower pin with a short loop of slack which should be secured to the vertical cable guides using tak ty or saddle clips (included). Hook and Loop cinch tie (provided) can be used to cinch splice trays together. Place splicing tray labeling cards in the door pocket.

Hook and Loop Cinch Tie

Secure Fiber near Lower Pin
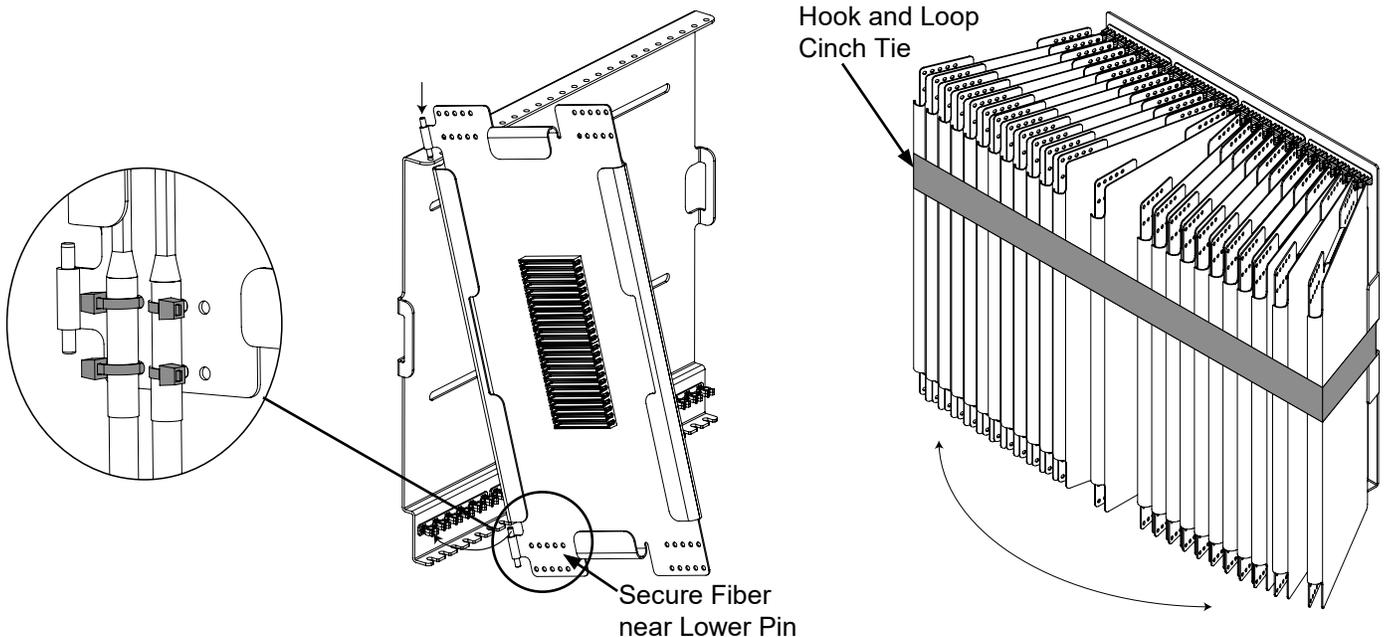
Splice Tray Work surface

The front part of the lower cable support serves as a tray work surface. Slip the pins of the splicing tray into the J-slots in the lower cable support to hold the splice tray in place.


J SLOTS

Splicing Tray
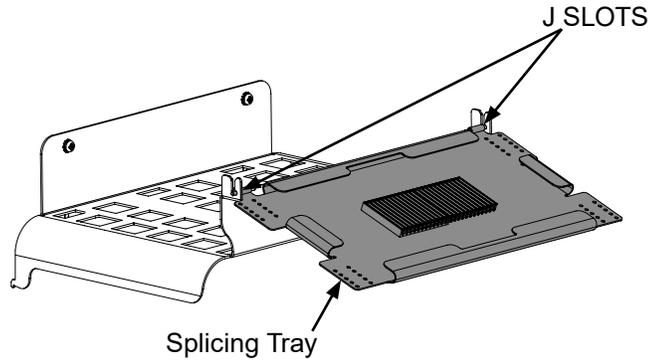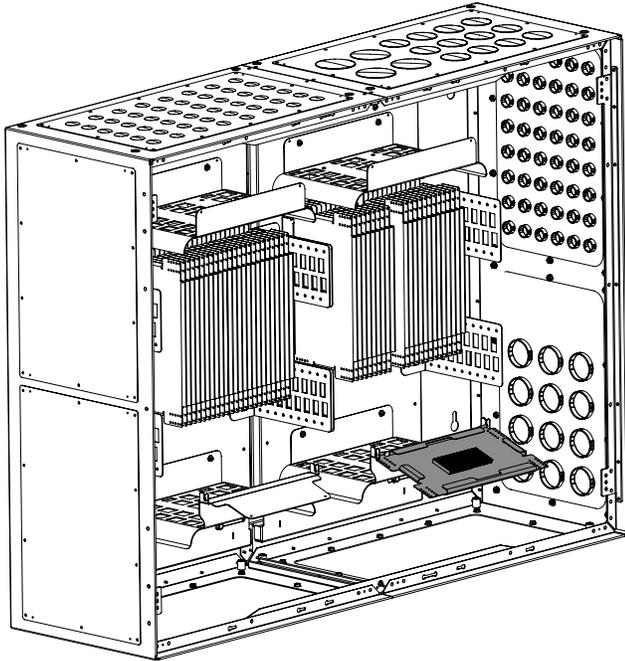
Grounding Kit installation

Remove (2) existing lock nuts and install grounding kit
Fasten #8-32 lock nuts to secure grounding kit to chassis
The grounding kit can be installed in multiple locations throughout the enclosure. A few examples are shown below.


#8-32
Lock Nut
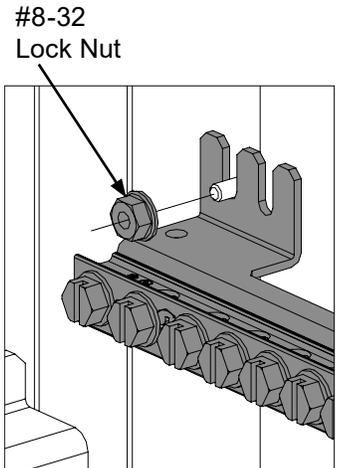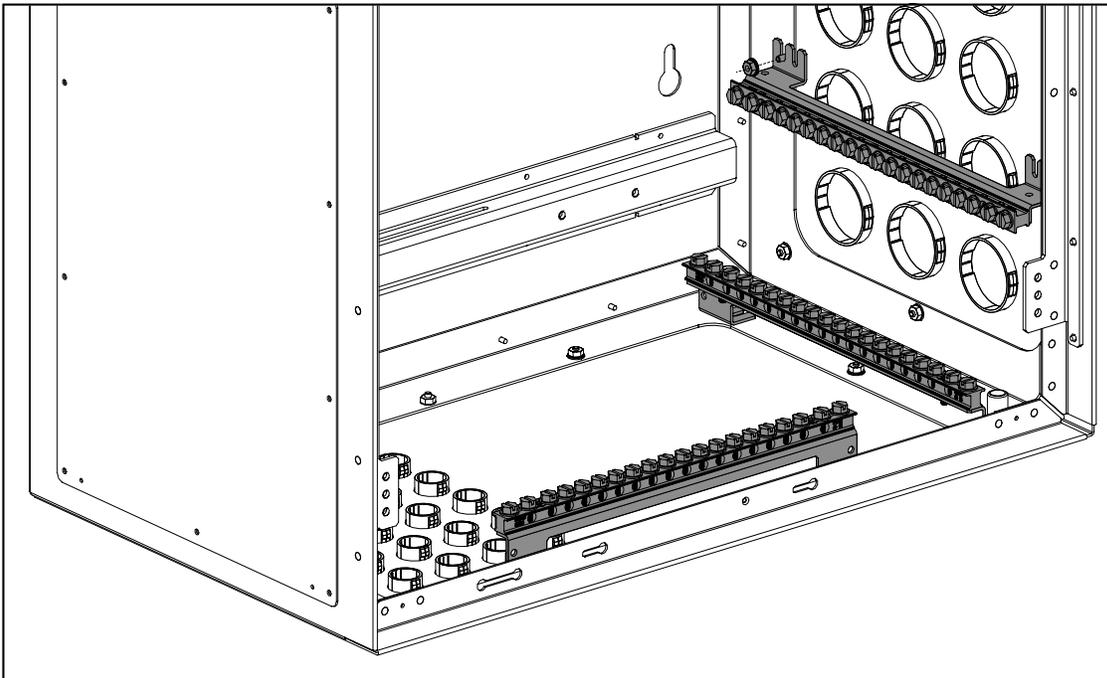
Cable Storage Box installation

Remove top or bottom covers
Secure cable storage box to chassis using included (12) #8-32 lock nuts
Reinstall top or bottom cover on cable storage box using existing (12) #8-32 lock nuts
NOTE: Storage box should be installed on the opposite side of the enclosure from the incoming cable

Cable slack spooled up around cable management brackets within cable storage box

Loosen nut to adjust bracket along slot

#8-32 Lock Nut 12 Places

#8-32 Lock Nut 12 Places

FWMHSS*S-STOR
Installed
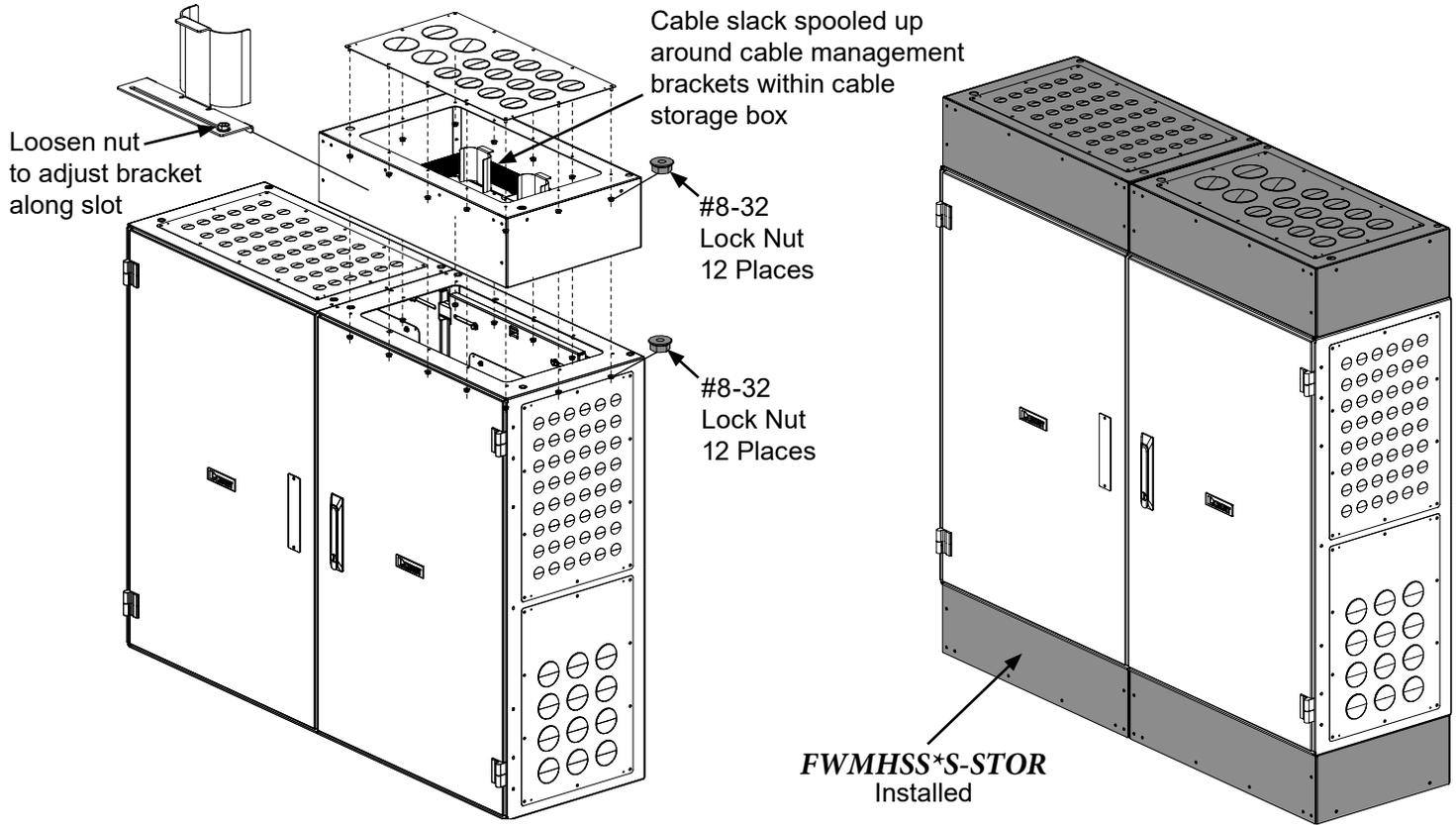
Enclosure ganging and overhead hanging

M10 threaded inserts can be used to hang enclosure, install leveling legs or install Panduit overhead cable management accessories. Remove covers before ganging enclosures to provide cable pass thru between enclosures.

M10 Threaded Insert

FWMHSS*S-6912 (16) places
FWMHSS*S-3456 (8) places

M10 Threaded Insert

FWMHSS*S-3456

FWMHSS*S-6912
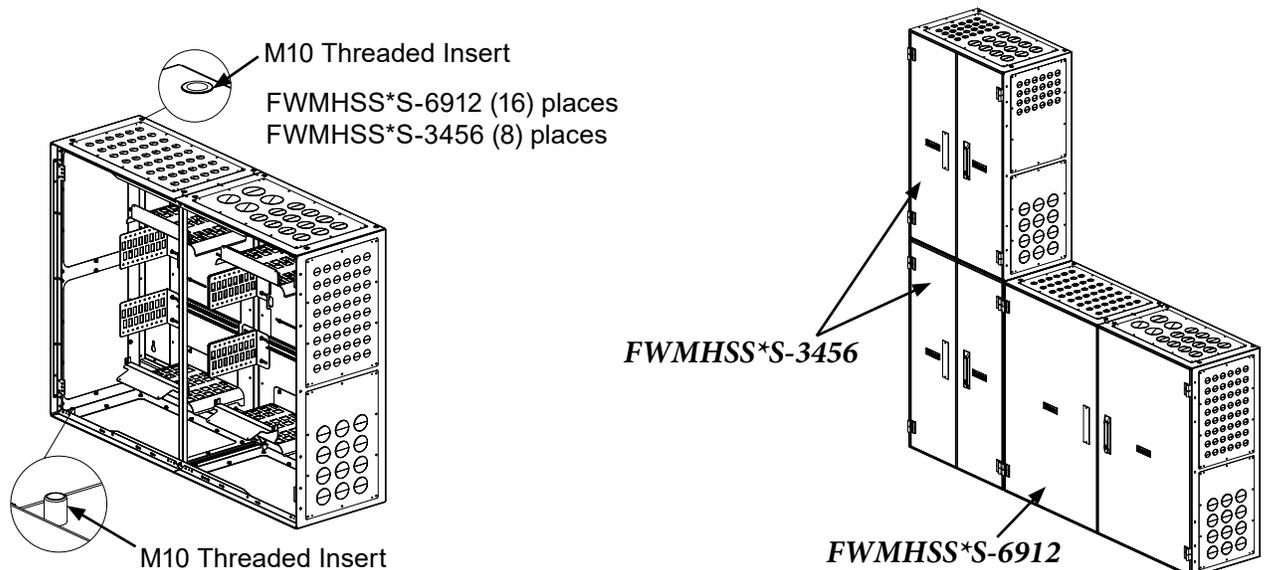
For Instructions in Local Languages and Technical Support:

www.panduit.com/resources/install_maintain.asp

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