PANDUIT

FlexCore™ 4RU Universal Enclosure
Part Number(s) : FDFUE4BL, FDFUE4GY

FDFUE4**

CONTENTS:

1 - Enclosure	8 - #12-24 x 1/2" Screws	1 Fiber Caution Label
8 - Pan-Ty Cable Ties	20 - Tak-Tys, 6" pcs	8 - M6 x 1.0 x 15mm Screws
1 - Laser Warning Label	16 - #10-32 x 1/4" Screws	1 - Sheet of C125X030FJJ Labels

WARNING: UN MATED CONNECTORS MAY EMIT INVISIBLE LASER RADIATION. DO NOT LOOK DIRECTLY INTO THE END OF THE CONNECTOR. DO NOT INSPECT WITH MAGNIFYING DEVICES. MAINTAIN DUST CAPS ON UN MATED CONNECTORS.
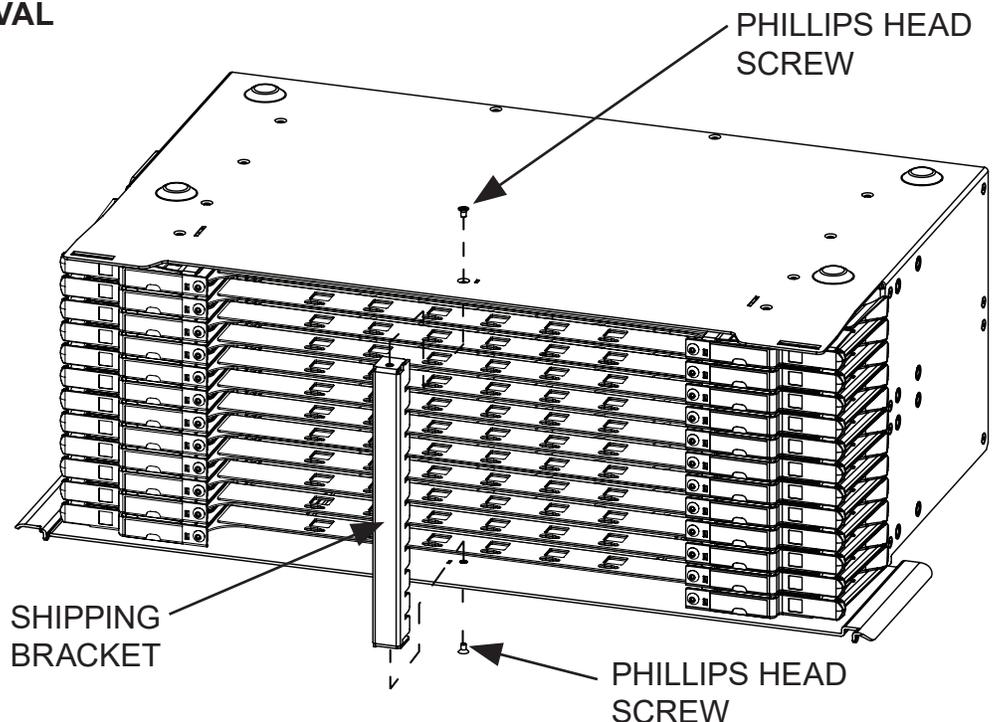
CAUTION:

Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the manufacturer's cable specification sheet for the specific cable in use.

Follow TIA/EIA-568-A, 569, 606, and 607 installation guidelines where applicable.

Care should be taken when opening or closing a fully loaded drawer in order to protect the fiber components.
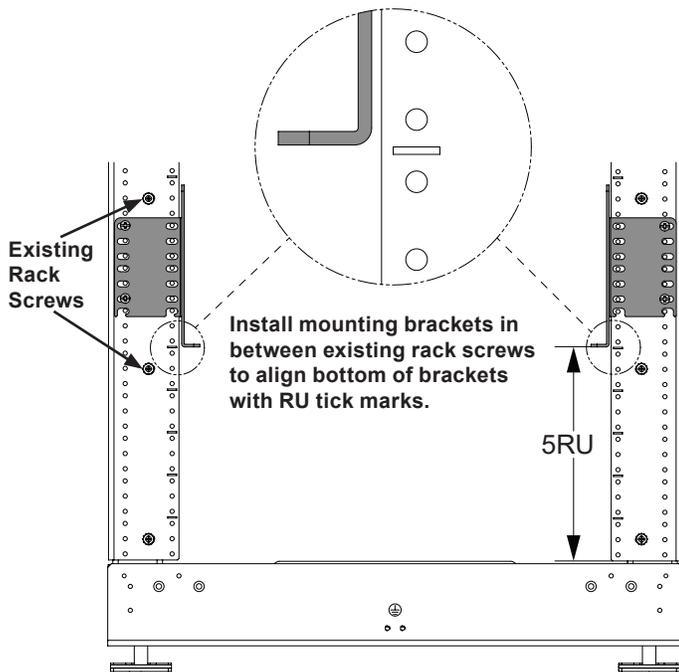
SHIPPING BRACKET REMOVAL

Remove shipping bracket, by un-screwing the phillips head screws on the top and bottom of the enclosure.

PHILLIPS HEAD SCREW

SHIPPING BRACKET

PHILLIPS HEAD SCREW

Preparation and Rack Mounting

Installation Option 1 below is the preferred method to install the enclosure to the rack, as it can be easily assembled by one (1) person. For new/greenfield installations, it is preferred to mount the enclosures from the bottom of the rack upwards using Installation Option 1. For existing/brownfield installations, Installation Option 1 must be used if there is NO RU space open above the desired enclosure location.
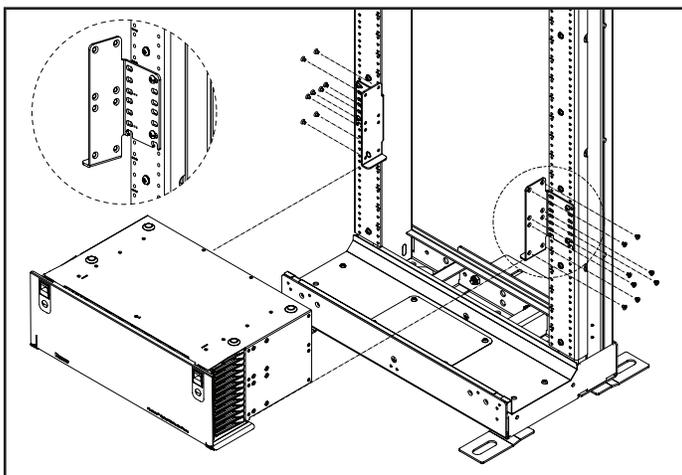
Installation Option 1: Pre-Install Mounting Brackets to Rack

Existing Rack Screws

Install mounting brackets in between existing rack screws to align bottom of brackets with RU tick marks.

5RU

Position the enclosure mounting brackets in between the existing rack screws, as shown, such that the bottom horizontal flanges protrude into the rack space and align with the RU tick marks.

Attach each of two enclosure brackets to the FI-excore ODF rack with two (2) #12-24 screws from FLEX-KIT. Only hand tighten all four (4) enclosure brackets screws at this time – do NOT completely tighten –to allow the enclosure to be aligned properly in the next step.
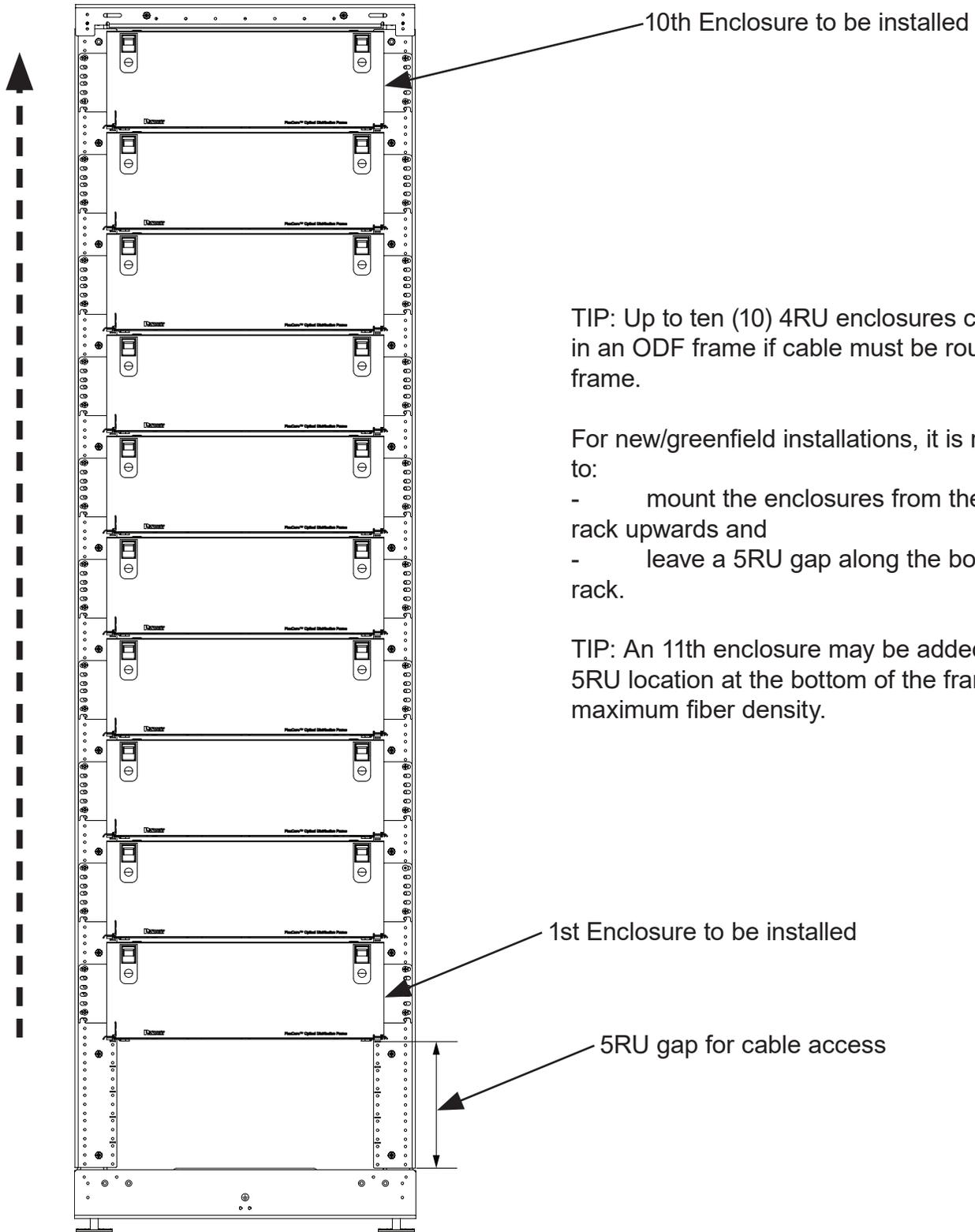
TIP: For new installations, it is preferred to mount the enclosures from the bottom of the rack upwards. Locate the first set of enclosure brackets to leave 5RU of space between the bottom flange of each bracket and bottom of the rack, as shown.

Carefully slide the enclosure onto the bottom horizontal flanges of the mounting brackets, making sure the enclosure is slid fully into place.

Install and tighten eight (8) #10-32 x ¼" flat head screws thru each mounting bracket to the enclosure (16 screws total).

Fully tighten the four (4) #12-24 screws that secure the mounting brackets to the rack.

10th Enclosure to be installed

TIP: Up to ten (10) 4RU enclosures can be installed in an ODF frame if cable must be routed behind the frame.
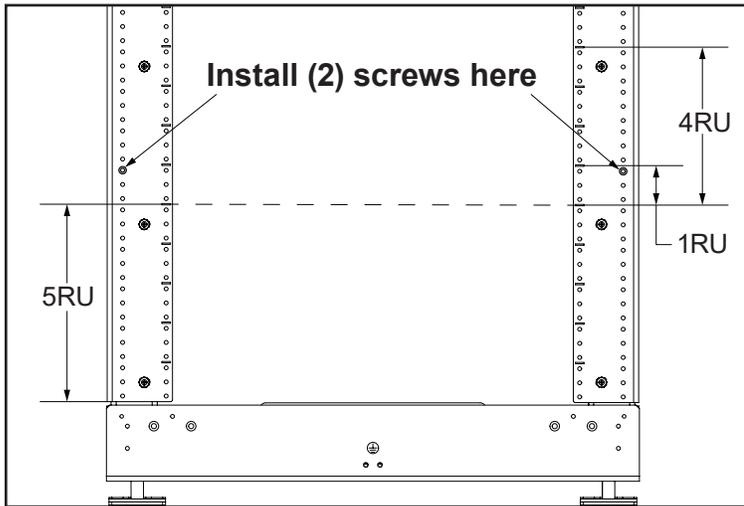
For new/greenfield installations, it is recommended to:
- mount the enclosures from the bottom of the rack upwards and
- leave a 5RU gap along the bottom of the rack.

TIP: An 11th enclosure may be added in the open 5RU location at the bottom of the frame for maximum fiber density.

1st Enclosure to be installed

5RU gap for cable access

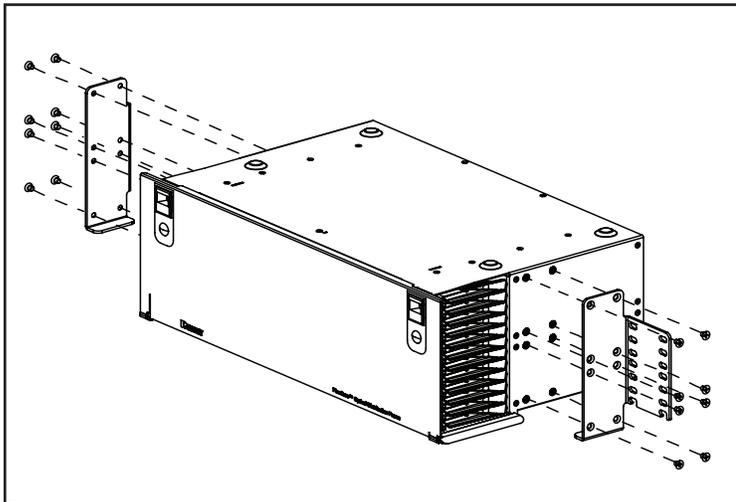## Installation Option 2: Pre-Install Mounting Brackets to Enclosure
This installation option is preferred if RU space is NOT open above the desired enclosure location
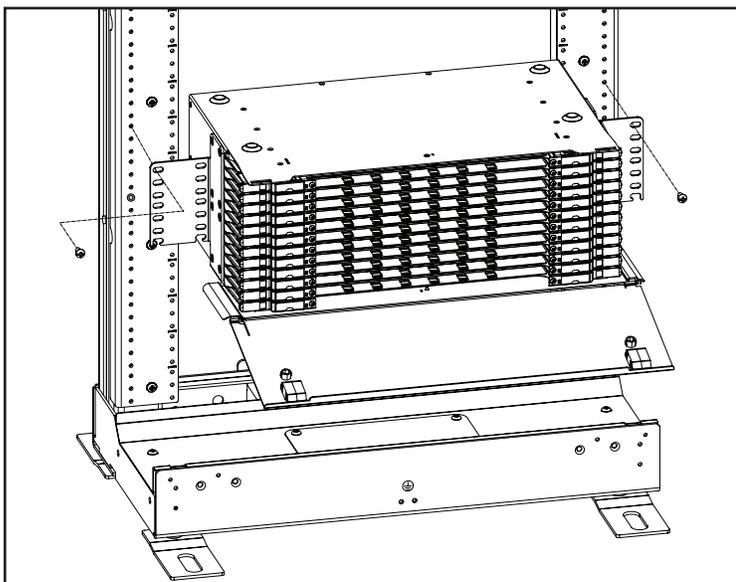
Locate two (2) #12-24 screws from FLEX-KIT to attach the enclosure mounting brackets to the Flex-core ODF rack.

Partially pre-install these two (2) screws, one on each side of the rack, in the top hole location of the bottom-most 1RU of the 4RU rack position desired, as shown. (These two partially installed screws will assist in mounting the enclosure to the rack.)

Install enclosure mounting brackets onto the two partially installed screws, such that enclosure aligns with tick marks on rack as shown.

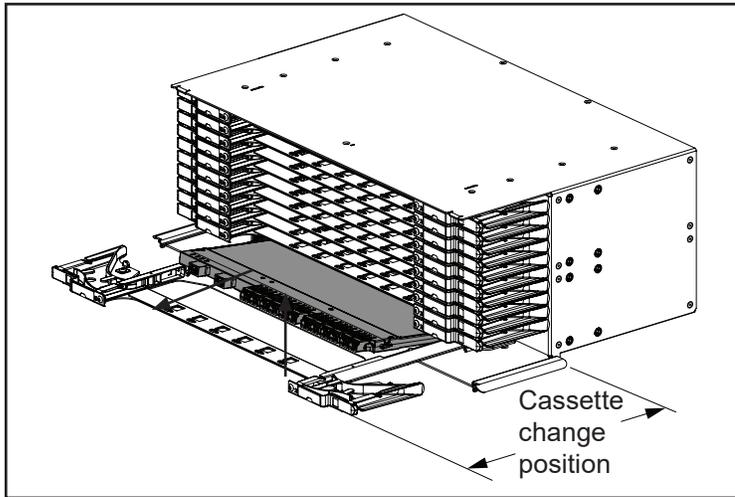Install mounting brackets using (16) #10-32 x 1/4 Flat head screws

Place enclosure into rack from the front and allow enclosure mounting bracket slots to rest on the two partially installed screws previously installed.

The enclosure door needs to be open to access all screw hole mounting locations. To open door, hold latches down and swing door open.

Make sure to install four (4) #12-24 screws from FLEX-KIT and tighten all screws to properly secure the enclosure to the rack.
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FlexCore™ Cassette Installation and Replacement (all cassettes sold separately)
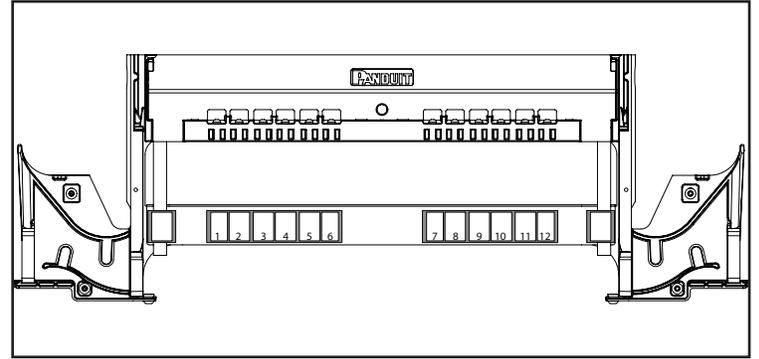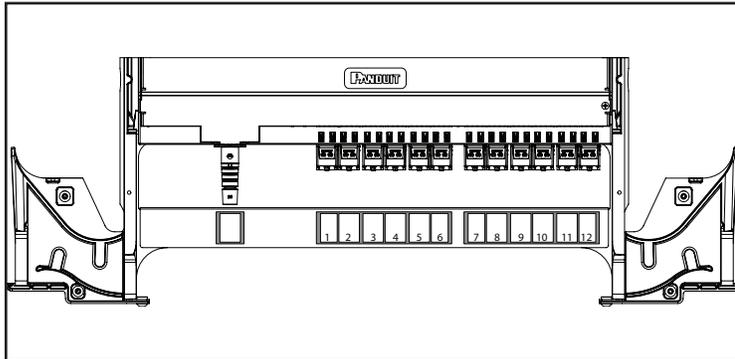

Cassettes can be installed and removed from the front of the enclosure as needed for replacement or migration. Open door and slide tray out slowly until it clicks into the second stop position, the cassette change position. Disconnect patch cords from the front of the cassette if replacing/removing cassette. Lift cassette up from the front to disengage it from the tray and remove.

FlexCore™ Cassette Labeling
(labeling provided with Cassettes)

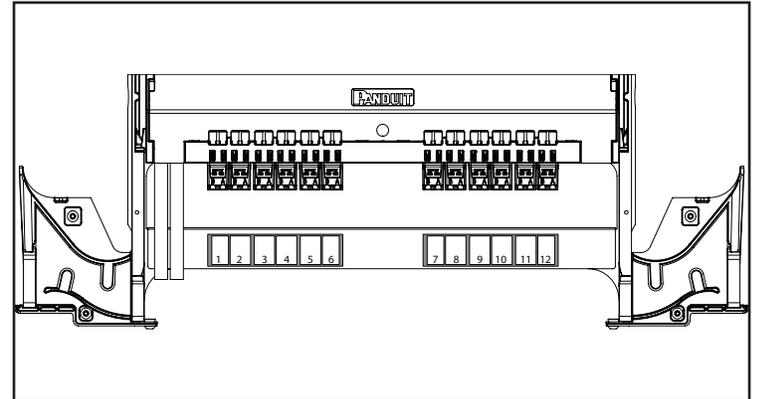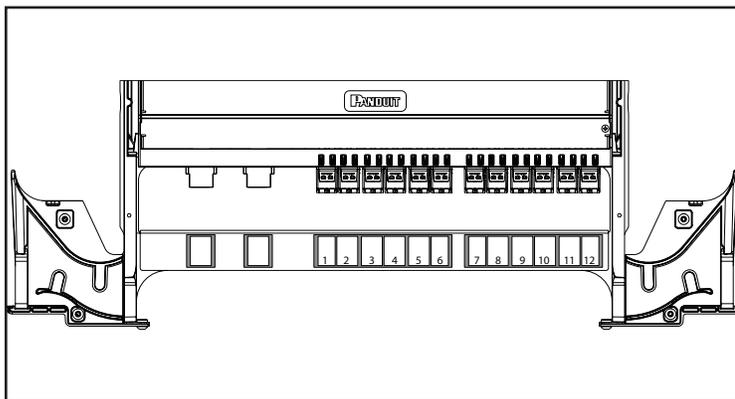Clean tray surface with alcohol. Install labels onto tray surface shown according to cassette purchased.

LC-to-Tethered Cassette Style
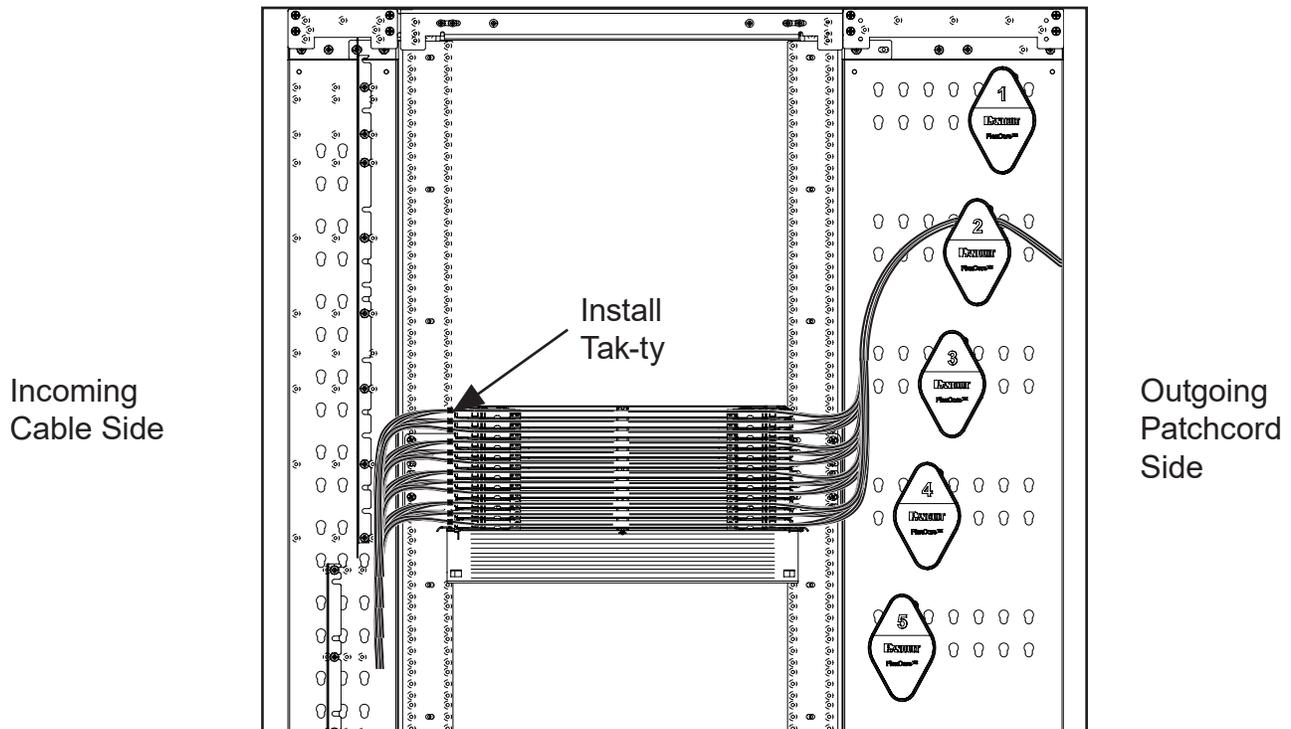

Fusion Splice Cassette without LC Adapters

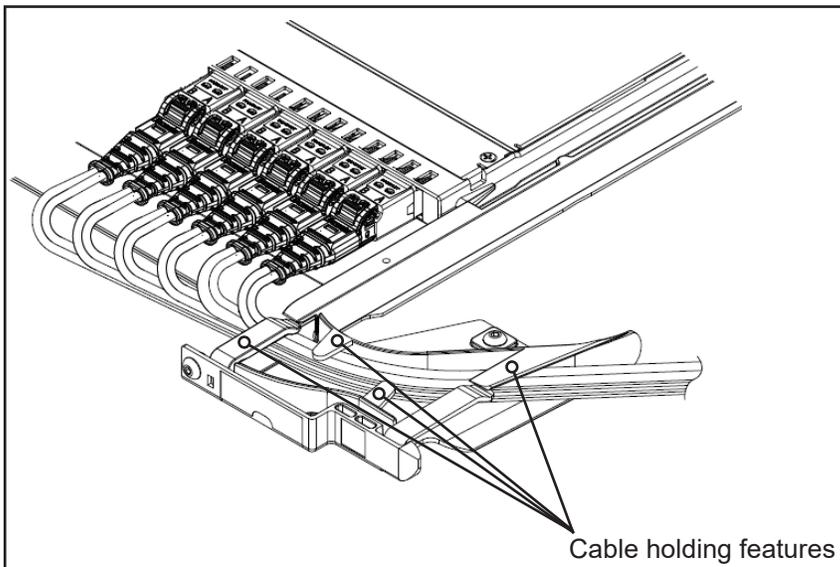LC-MPO Cassette Style

Fusion Splice Cassette with LC Adapters

Install Patch Cords and Cabling

Incoming Cable Side

Install Tak-ty

Outgoing Patchcord Side

In the configuration shown above, install patch cords into the front of the cassettes working from left to right, starting with the bottom most tray. It is recommended to populate each tray across before moving to the next tray above. Route patch cord upward to corresponding spool. Repeat process until all patch cabling is installed. Route incoming cables per FS206 and patchcords per FS204.

Install pieces of Tak-ty around all incoming cable in positions shown above close to tray cable manager. Group together all incoming cables going to each cassette. Installing Tak-ty in this position will eliminate any snagging of cables when cycling trays to access cassettes. If cabling must be routed horizontally, instead of upward, it is recommended to install Tak-ty to bottom three trays of patch cords.
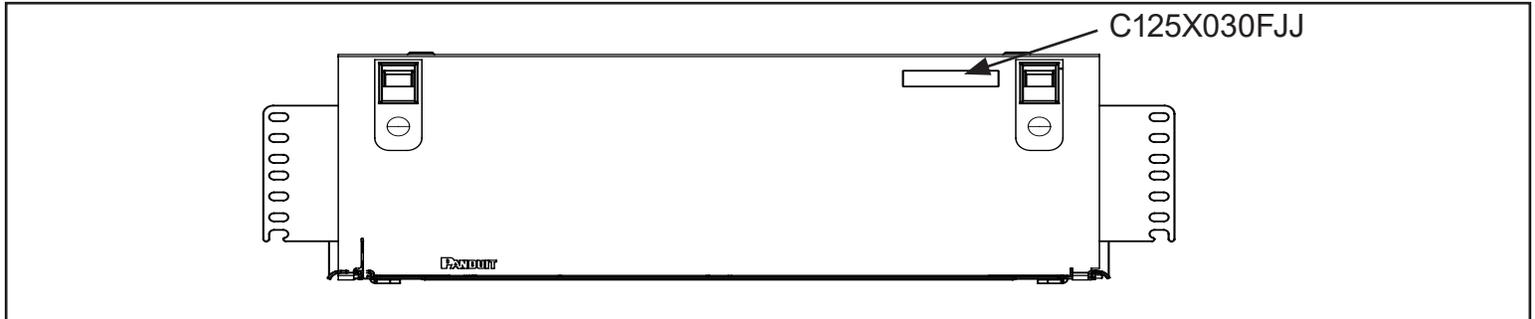
Cable Routing

Cable holding features

Route the cables under the cable holding features, as shown.

When installing fusion splice cassettes, add Tak-Ty hook and loop to cables – this keeps cable exiting the cassette from touching the door.
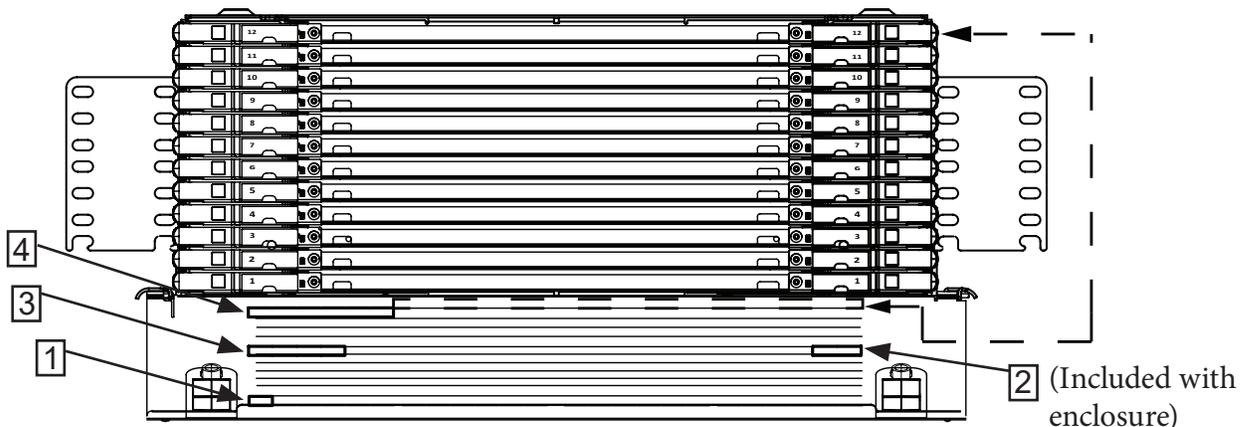
Labeling

Labeling options for the HD Flex Fiber Enclosures allow for identification to follow the EIA606-B labeling standards. Panduit labels, used in conjunction with Panduit Easy-Mark Labeling Software, simplifies label creation and allows for ease of editing and label replacement when necessary. Blank label part # C125X030FJJ (provided with enclosure) may be applied to the front of the door for enclosure identification - shown below is a view of this label installed in the upper-right hand corner of the enclosure.
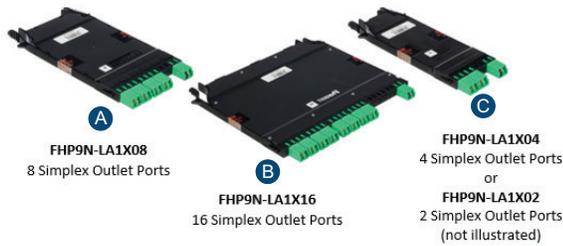

C125X030FJJ

Apply the 12 sets of pre-printed part # C125X030FJJ labels provided to both sides of each tray. Cassette port numbers may be printed onto these tray labels. Tray 1 is shown below as the lowermost tray and tray 12 is on the topmost tray. Optionally, tray 1 can be the topmost tray.
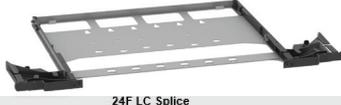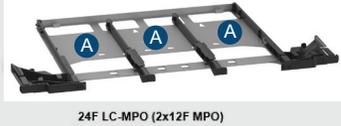

Tray 12 Labels

Tray 1 Labels

Blank part # C125X030FJJ labels provided may be applied to the inside of the front door - these labels coincide with the tray and port labeling previously installed above. The labeling layout for the enclosure is shown below for typical application. Panduit label part #C061X030FJJ [1] can be used for single port identification, Panduit label part # C125X030FJJ [2] (included with enclosure) can be placed in this area, Panduit label part # C252X030FJJ [3] for 4-port application, and Panduit label part # C379X030FJJ [4] for 6-port identification. Position the door labels across the spaces that correlate to the respective vertical tray position.
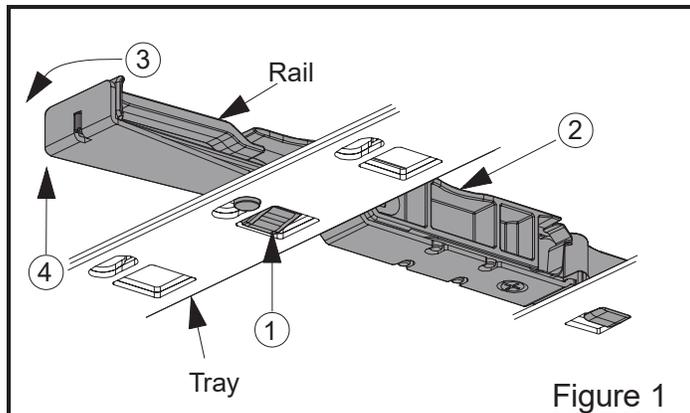

4

3

1

2 (Included with enclosure)

Tray Rails for Modular Cassette Installation (Rails Sold Separately)

FHP9N-LA1X08
8 Simplex Outlet Ports

FHP9N-LA1X16
16 Simplex Outlet Ports

FHP9N-LA1X04
4 Simplex Outlet Ports
or
FHP9N-LA1X02
2 Simplex Outlet Ports
(not illustrated)

FlexCore™ Field Adjustable Tray	Compatibility
24F LC Splice	Without rails Accepts all FlexCore™ Cassettes
24F/48F Splice Through (Discrete Splice/Ribbon Splice)	1 x Rail *Accepts HD Flex™ Cassettes FLEXC-RAIL01EN: FlexCore™ 1 Black Rails Kit
24F LC-MPO (2x12F MPO)	2 x Rails *Accepts HD Flex™ Cassettes FLEXC-RAIL02EN: FlexCore™ 2 Black Rails Kit
	4 x Rails *Accepts HD Flex™ Cassettes FLEXC-RAIL04EN: FlexCore™ 4 White Rails Kit

*IMPORTANT: HD Flex™ cassettes with front facing connectivity only, no rear facing connectors
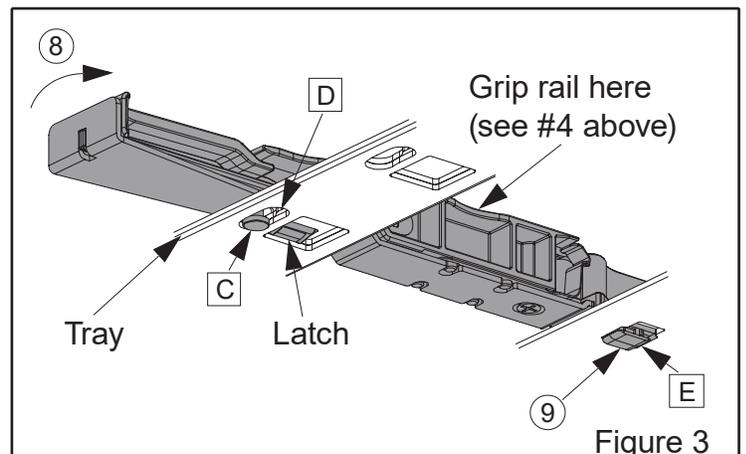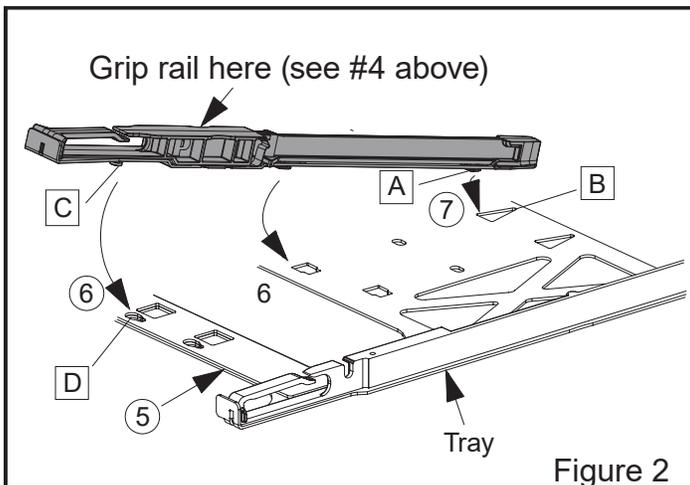
Rail Removal and Installation

Rail

Tray

Figure 1

RAIL REMOVAL STEPS (See Figure 1)

1. Depress latch upward from underneath.
2. Grip by finger rail grips.
3. Push rail to the left.
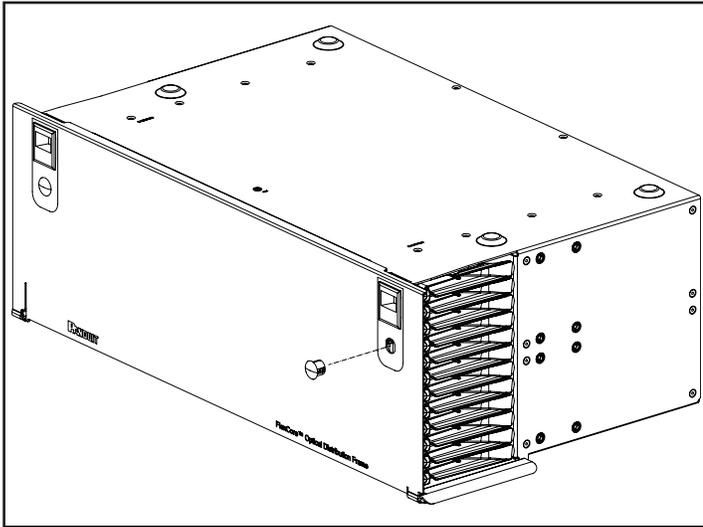4. Lift rail up and away from enclosure.

RAIL INSTALLATION STEPS (IF APPLICABLE) (See Figures 2 and 3)

5. Hold the bottom of the tray while installing the rail to the tray.
6. Engage triangular rail latch feature A into triangular opening B in tray.
7. While holding finger rail grips, install round rail feature C into slot opening D.
8. Push rail to the right to engage latch.
9. Verify central rail latch feature E is engaged.
10. Apply applicable port I.D. labels as needed.
11. Push tray back into the enclosure to the home position.

Grip rail here (see #4 above)

Tray

Figure 2

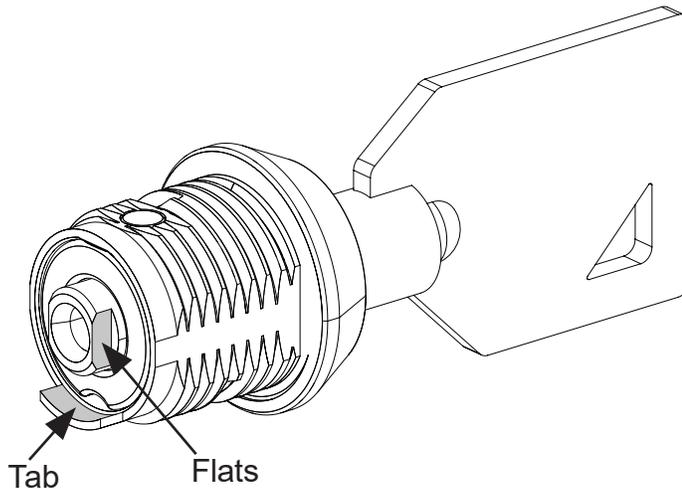Grip rail here (see #4 above)

Tray   Latch

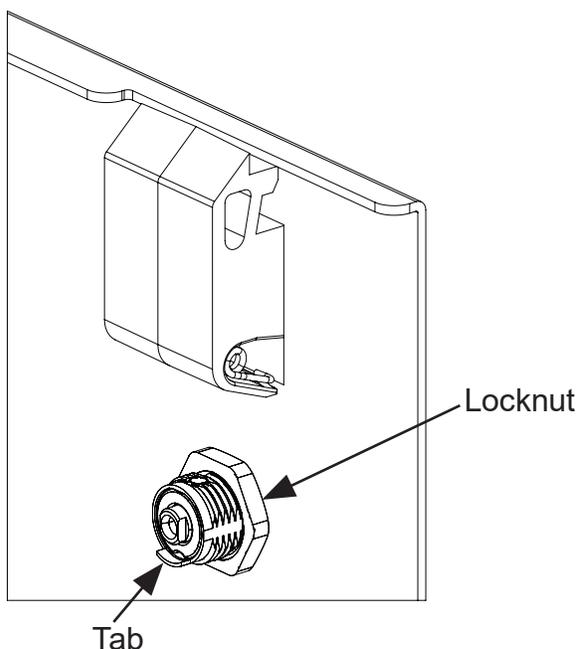Figure 3

Door Lock Installation

The optional locking kit (Panduit part number FDFELS) is sold separately as a kit which includes two locks

Remove the plug in the door to exposed the lock hole. The lock can be installed on either or both sides of the door.
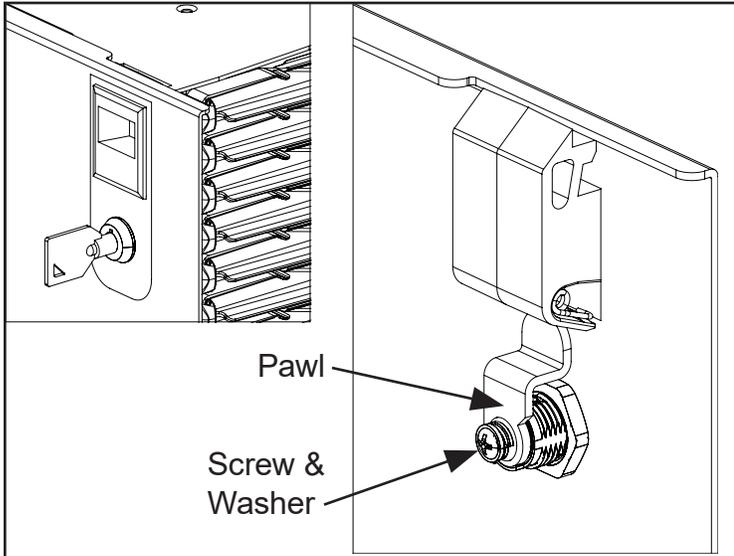

Tab   Flats

Rotate the key to align the flats of the cylinder with the tab of the lock body. Verify that the key can be removed. If the key cannot be removed in this orientation, rotate the key 180 degrees and verify that the key can be removed.

Locknut

Tab

On the rear door surface, install the lock in the lock hole, with the tab of the lock body in the bottom position, as shown. Secure the lock with with the locknut.
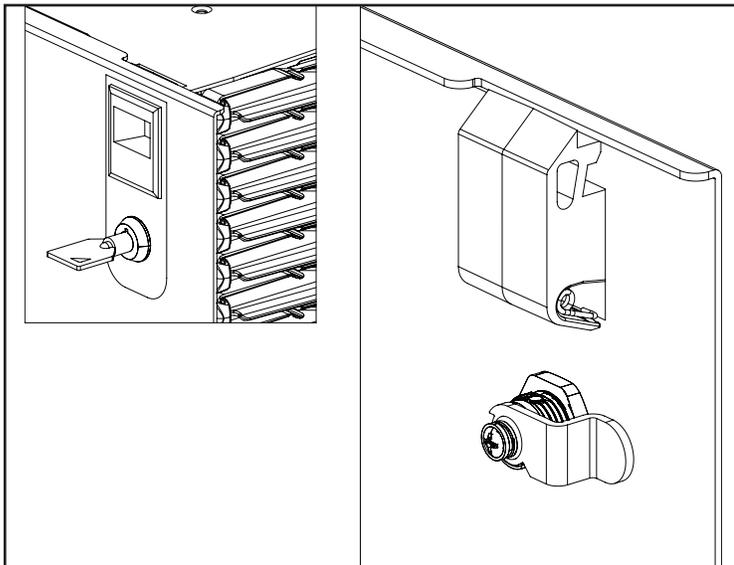
Locked Position

Pawl

Screw &
Washer

Install the pawl onto the flats of the cylinder and secure with the screw and washer.

Note: The key can only be removed in the locked position.

Unlocked Position

FlexCore™ System Installation Instructions

Installation Instruction Number	Panduit Part Number	Description
FS187	FOBKF**(Y/A)M1	Fiber Breakout Kit, Flat Ribbon Furcation Tube
FS190	FDFF45**	FlexCore™ Optical Distribution Frame
FS191	FDFVCM1545**	FlexCore™ 150mm Vertical Cable Manager
FS192	FDFVCM3045**	FlexCore™ 300mm Vertical Cable Manager
FS193	FDUFD**45*X**	FlexCore™ Single Hinge Front Doors
FS194	FDFEP45**	FlexCore™ End Panels
FS198	FDUSP	FlexCore™ Fiber Spool
FS199	FDUSP6	FlexCore™ Fiber Spool 6-pack Color Coordinated Kit
FS200	FDS**-24-***	FlexCore™ Fusion Splice Cassette - Cable to LC Adapter
FS201	FDSN-24	FlexCore™ Fusion Splice Cassette - Cable to Cable
FS203	FDFUE4**	FlexCore™ 4RU Universal Enclosure
FS204	N/A	FlexCore™ Front Access Optical Distribution Frame Patchcord Routing Guide
FS205	FDFRC45**	FlexCore™ Frame Rear Panel
FS206	N/A	FlexCore™ Front Access Ingress/Egress Cabling Guide

For Instructions in Local Languages and Technical Support:

www.panduit.com/resources/install_maintain.asp

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