ANDUIT

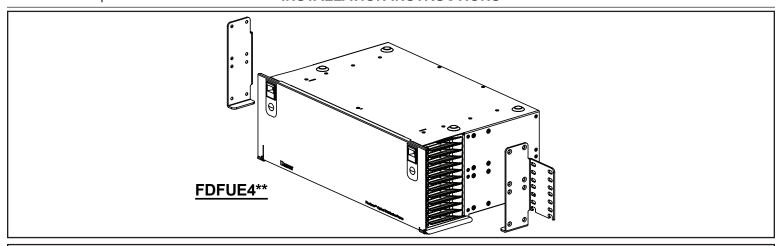
FlexCore™ 4RU Universal Enclosure

Part Number(s): FDFUE4BL, FDFUE4GY

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INSTALLATION INSTRUCTIONS

FS203



CONTENTS:

1 - Enclosure

8 - Pan-Ty Cable Ties

1 - Laser Warning Label

8 - #12-24 x 1/2" Screws

20 - Tak-Tys, 6" pcs

16 - #10-32 x 1/4" Screws

8 - M6 x 1.0 x 15mm Screws

1 Fiber Caution Label

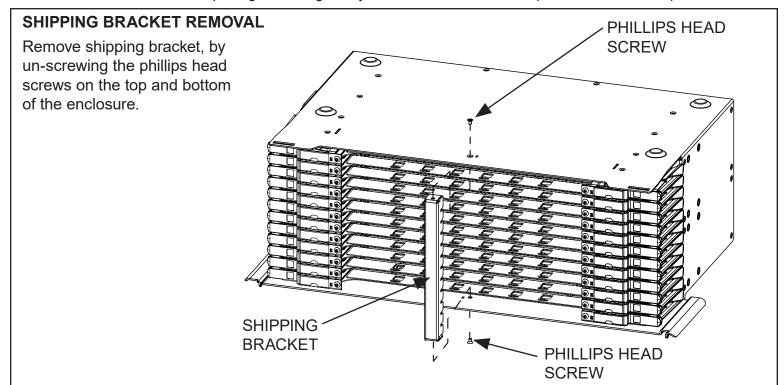
1 - Sheet of C125X030FJJ Labels

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.

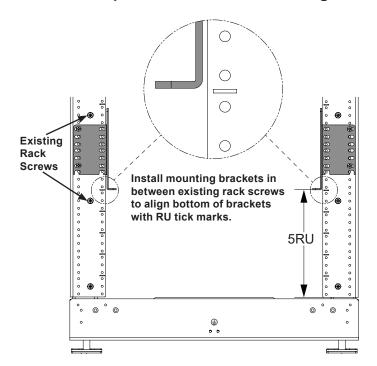
Care should be taken when opening or closing a fully loaded drawer in order to protect the fiber components.



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.

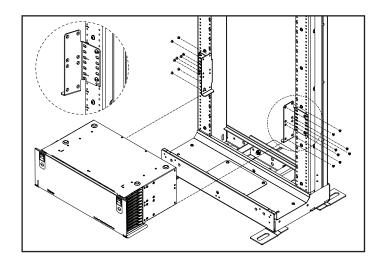
Installation Option 1: Pre-Install Mounting Brackets to Rack



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 Flexcore 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.

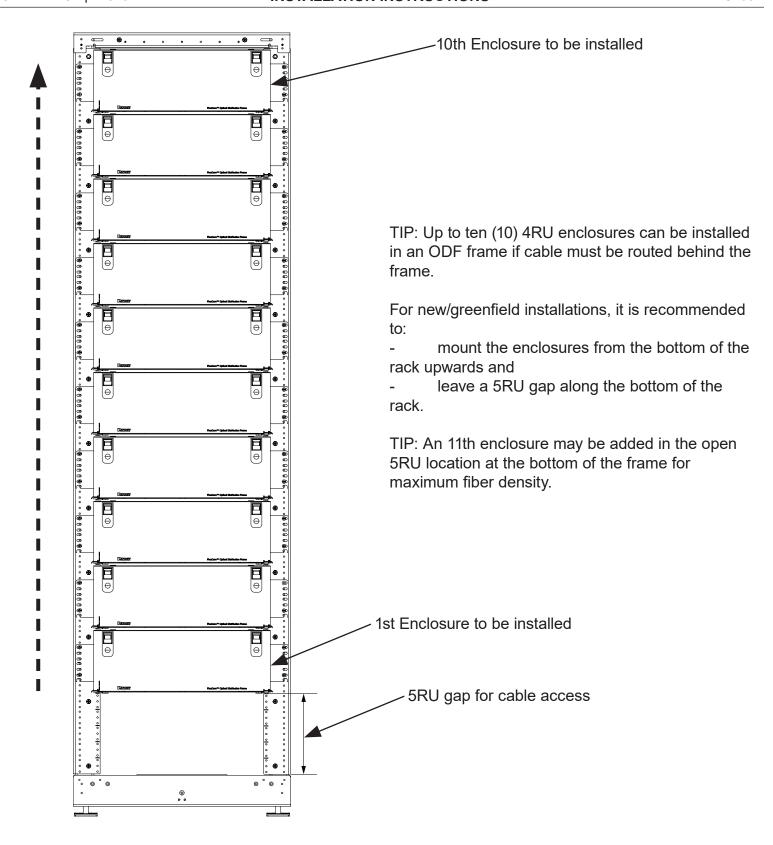
TIP: For new installations, it is preferred to mount the enclosures from the bottom of the rack upwards. Locate the first set of enclosure brackets to leave 5RU of space between the bottom flange of each bracket and bottom of the rack, as shown.



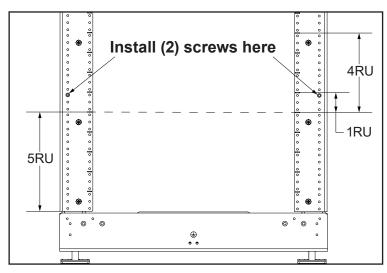
Carefully slide the enclosure onto the bottom horizontal flanges of the mounting brackets, making sure the enclosure is slid fully into place.

Install and tighten eight (8) #10-32 x $\frac{1}{4}$ " 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.



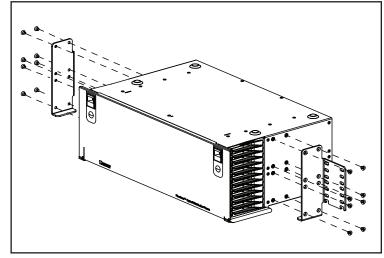
Installation Option 2: Pre-Install Mounting Brackets to Enclosure This installation option is preferred if RU space is NOT open above the desired enclosure location



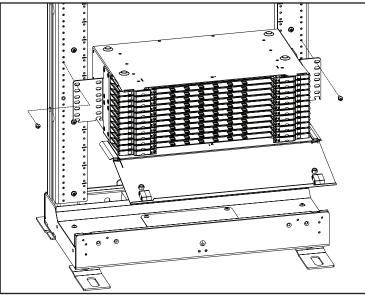
Locate two (2) #12-24 screws from FLEX-KIT to attach the enclosure mounting brackets to the Flex-core ODF rack.

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



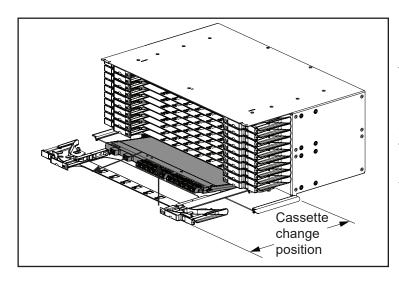
Place enclosure into rack from the front and allow enclosure mounting bracket slots to rest on the two partially installed screws previously installed.

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.

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

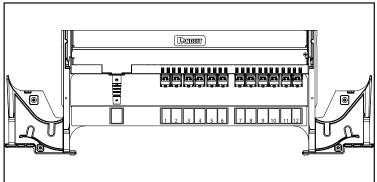
FlexCore[™] Cassette Installation and Replacement (all cassettes sold separately)



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.

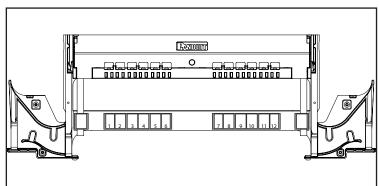
FlexCore™ Cassette Labeling (labeling provided with Cassettes)

LC-to-Tethered Cassette Style

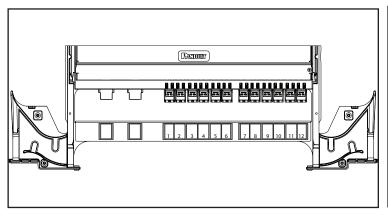


Clean tray surface with alcohol. Install labels onto tray surface shown according to cassette purchased.

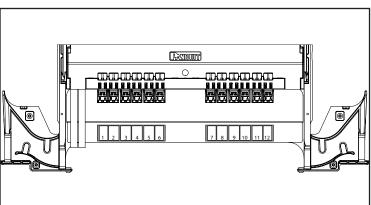
Fusion Splice Cassette without LC Adapters



LC-MPO Cassette Style



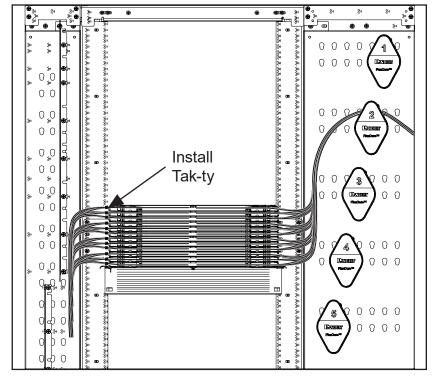
Fusion Splice Cassette with LC Adapters



Incoming

Cable Side

Install Patch Cords and Cabling

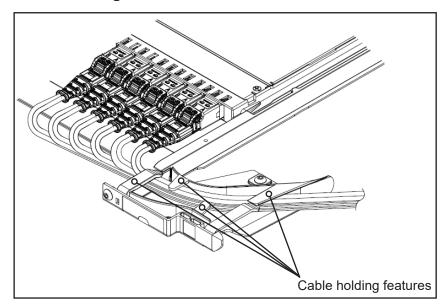


Outgoing Patchcord Side

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

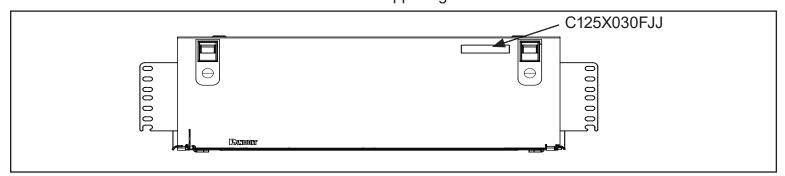


Route the cables under the cable holding features, as shown.

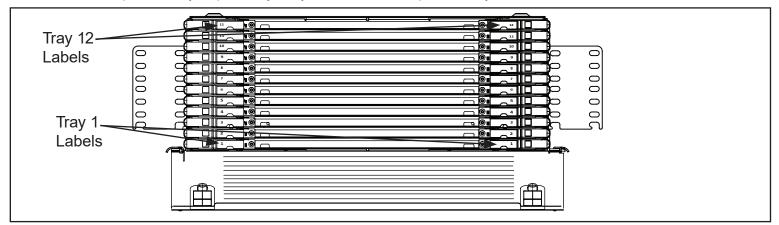
When installing fusion splice cassettes, add Tak-Ty hook and loop to cables – this keeps cable exiting the cassette from touching the door.

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.



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.

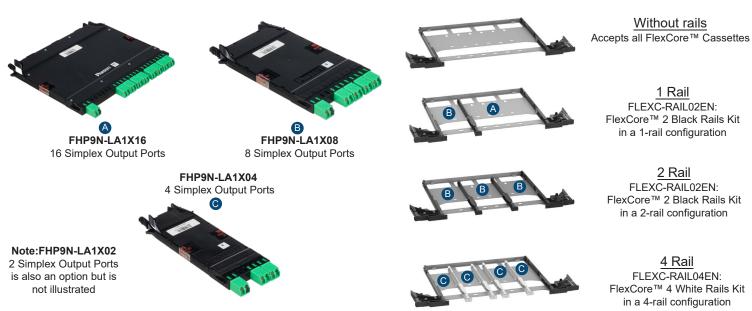


Blank part # C125X030FJJ labels provided may be applied to the inside of the front door - these labels coincide with the tray and port labeling previously installed above. The labeling layout for the enclosure is shown below for typical application. Panduit label part #C061X030FJJ [1] can be used for 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.

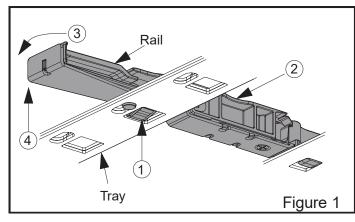


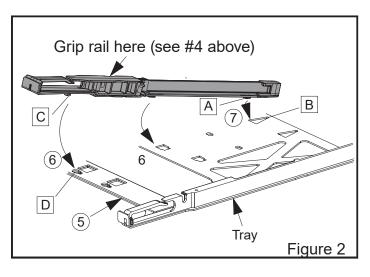
For Technical Support: www.panduit.com/resources/install_maintain.asp

Tray Rails for Modular Cassette Installation (Rails Sold Separately)



Rail Removal and Installation





RAIL REMOVAL STEPS (See Figure 1)

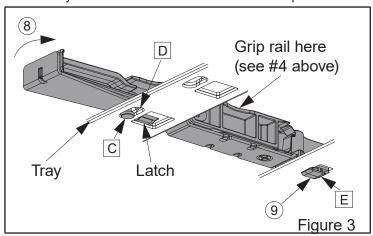
- 1. Depress latch upward from underneath.
- 2. Grip by finger rail grips.
- 3. Push rail to the left.
- 4. Lift rail up and away from enclosure.

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

5. Hold the bottom of the tray while installing the rail to the tray.

IMPORTANT: HD Flex™ cassettes with front facing connectivity only, no rear facing connectors

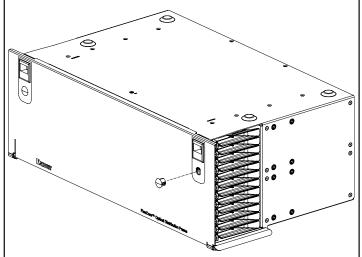
- 6. Engage triangular rail latch feature A into triangular opening B in tray.
- 7. While holding finger rail grips, install round rail feature C into slot opening D.
- 8. Push rail to the right to engage latch.
- 9. Verify central rail latch feature E is engaged.
- 10. Apply applicable port I.D. labels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



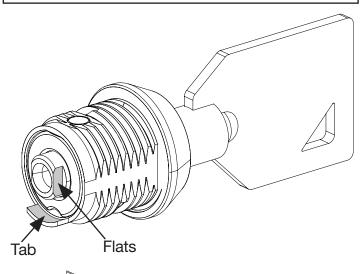
For Technical Support: www.panduit.com/resources/install_maintain.asp

Door Lock Installation

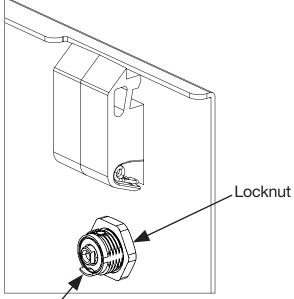
The optional locking kit (see Panduit Part Numbers below) is sold separately and includes two locks and four keys. Multiple styles of locking kits can be ordered to key enclosures differently from one another.



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



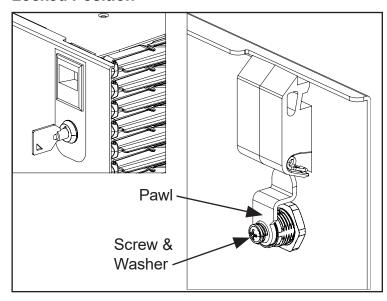
Rotate the key to align the flats of the cylinder with the tab of the lock body. Verify that the key can be removed. If the key cannot be removed in this orientation, rotate the key 180 degrees and verify that the key can be removed.



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.

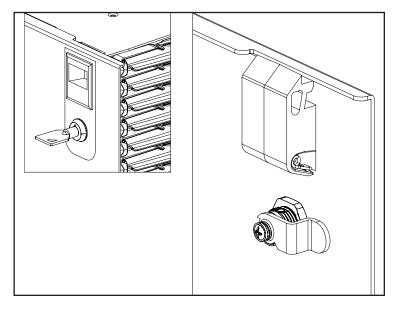
Locked Position



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



Optional Locking Kit Panduit Part Numbers:

FDFELS - Keyed alike, Unmarked Keys

FDFELS2 - Keyed alike, Marked Keys Option ID 2

FDFELS3 - Keyed alike, Marked Keys Option ID 3

FDFELS4 - Keyed alike, Marked Keys Option ID 4

Note: These different styles of locks have different (non-compatible) keys. For example, keys from FDFELS2 will work on locks from FDFELS2, not on locks from FDFELS4.

FlexCore™ System Installation Instructions

Installation Instruction Number	Panduit Part Number	Description
FS187	FOBKF**(Y/A)M1	Fiber Breakout Kit, Flat Ribbon Furcation Tube
<u>FS190</u>	FDFF45**	FlexCore™ Optical Distribution Frame
<u>FS191</u>	FDFVCM1545**	FlexCore™ 150mm Vertical Cable Manager
<u>FS192</u>	FDFVCM3045**	FlexCore™ 300mm Vertical Cable Manager
<u>FS193</u>	FDUFD**45*X**	FlexCore™ Single Hinge Front Doors
<u>FS194</u>	FDFEP45**	FlexCore™ End Panels
<u>FS198</u>	<u>FDUSP</u>	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
<u>FS203</u>	FDFUE4**	FlexCore™ 4RU Universal Enclosure
<u>FS204</u>	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



Page 11 of 11

Rev. 05 01/2023