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Ultra-Density Fixed Fiber Shelf

General

The CommScope ultra-density fixed fiber shelves come equipped with a fixed bulkhead, fiber management trough, and steel top cover. Shelf will accommodate G2 and InstaPATCH® 360 distribution modules. These shelves are intended for indoor use, but may be used outdoors in a suitable enclosure.

Ordering information is listed below:

Material ID	Part No.	Description
760218461	UD-2U-FX	Modular UD 2U shelf, fixed with door and trough
760218479	UD-4U-FX	Modular UD 4U shelf, fixed with door and trough



UD-2U-FX



UD-4U-FX

Ultra-Density Fixed Fiber Shelves

How to Contact Us

- To find out more about **CommScope®** products, visit us on the web at <http://www.commscope.com>
- For technical assistance, use our online interface to filter by problem and location: <http://www.commscope.com/SupportCenter>
- To report any missing/damaged parts: within the United States, contact **CommScope** Customer Claims at 1-866-539-2795 or email to claims@commscope.com; outside the United States, contact your local account representative or **PartnerPRO** Network Partner.

Tools Required

- Phillips-head screwdriver



Parts List

Verify parts against the parts list below:

Quantity	Description
1	Shelf assembly
1	Hook-and-loop strip cable retainer kit
4	#12-24 x 1/2-inch screws for 19-inch (483mm) and 23-inch (584mm) rack mounting
4	M6 x 12mm screws for ETSI rack mounting
1	Instruction sheet

Separately Orderable Components

Material ID	Part No.	Description
760039883	G2-23BRKT	Mounting bracket accessory kit for 23-inch (584mm) rack and ETSI rack



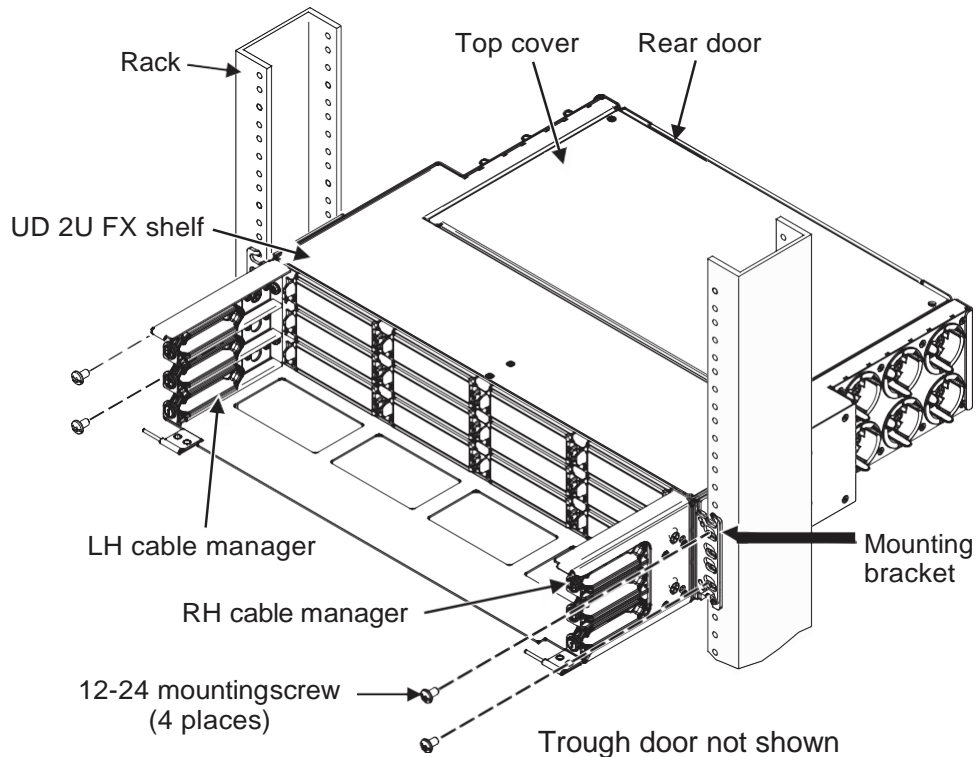
Important Safety Cautions

- To reduce the risk of fire, electric shock, and injury to persons, read, understand, and adhere to the following instructions as well as any warnings marked on the product.
- Remote risk of electric shock. Never install the product in wet locations or during lightning storms. Never touch uninsulated communication wires or terminals.
- Disconnected optical components may emit invisible optical radiation that can damage your eyes. Never look directly into an optical component that may have a laser coupled to it. Serious and permanent retinal damage is possible. If accidental exposure to laser radiation is suspected, consult a physician for an eye examination.
- Wearing safety glasses during installation of this shelf is recommended. Although standard safety glasses provide no protection from potential optical radiation, they offer protection from accidental airborne hardware and cleaning solvents.

Precautions

- Fiber optic trunk cable and jumper performance is sensitive to bending, pulling, and crushing. Minimum bend radius must be maintained during installation per the manufacturer's specification. Appropriate pulling grips must be used during installation, and pulling forces shall not exceed manufacturer's recommendations. Use caution to avoid kinking trunk cables.
- All wiring that connects to this equipment must meet applicable local and national building codes and network wiring standards for communication cable.
- **IMPORTANT:** Dust covers are installed in the ports to protect the fibers connected to the back of the ports. Do not remove a dust cover from a port until you connect a patch cord to that port. If you remove a patch cord later, replace dust cover in the port.
- Prior to installation, clean the trunk cable and jumper connectors per the manufacturer's recommendations.
- Isopropyl alcohol is flammable, and can cause eye irritation on contact. If eye contact occurs, flush with water for at least 15 minutes. In case of ingestion, consult a physician. Use only in well ventilated areas.
- Care should be taken not to compromise the stability of the rack by installation of this equipment.
- To be installed in restricted access areas only.

Step 1 – Mount Shelf to Rack



1. Determine the rack size and desired mounting location.

- First remove the shipping brackets, assembled in the mounting brackets.
- For 19-inch (483mm) rack – Mount shelf to rack using the pre-installed mounting brackets and four #12-24 x 1/2-inch screws (provided) as shown.
- For a 23-inch (584mm) rack, use the G2-23BRKT accessory kit (ordered separately) and install conversion brackets on each side of shelf using four 10-32 screws included in the kit. Mount shelf to rack using four 12-24 screws provided.

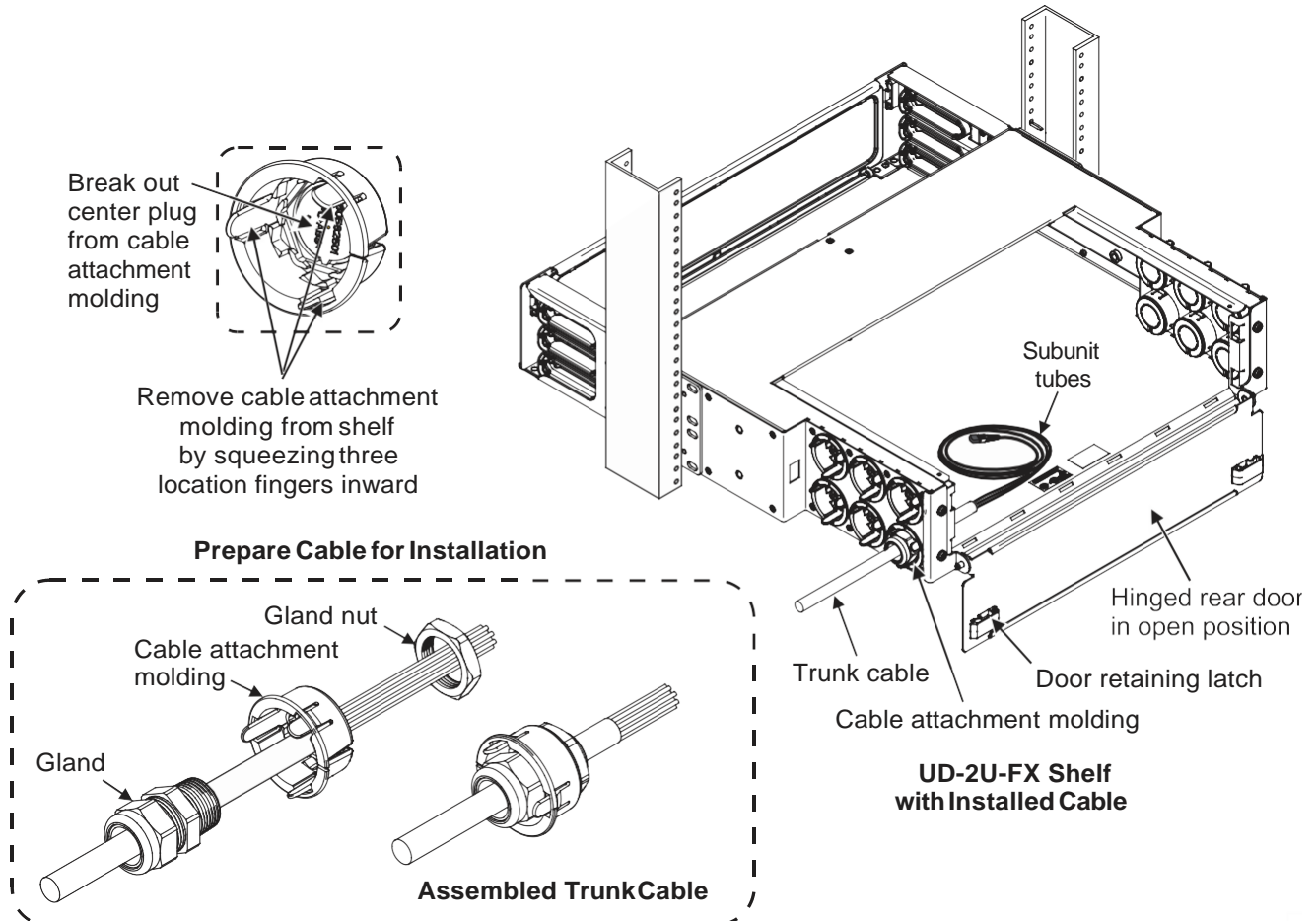
Note: 2 accessory kits to be used for a 2U shelf and 4 accessory kits are required for a 4U shelf.

- For an ETSI rack, use the G2-23BRKT accessory kit (ordered separately) and install one conversion bracket on one side of shelf using two of the four 10-32 screws included in the kit. Mount shelf to rack using four M6 x 12mm screws (provided). The shelf will not be centered in the rack.

Note: 1 accessory kit to be used for a 2U shelf and 2 accessory kits are required for a 4U shelf.

Step 2 – Attach Fiber Trunk Cable to Shelf

Note: This shelf is designed for direct connection of fiber cables using cable glands inserted into cable attachment moldings provided. Another method for securing fiber cables is the use of optional rack mounted brackets, which is not covered here. See instruction sheet 860380781 when using rack mounted brackets.



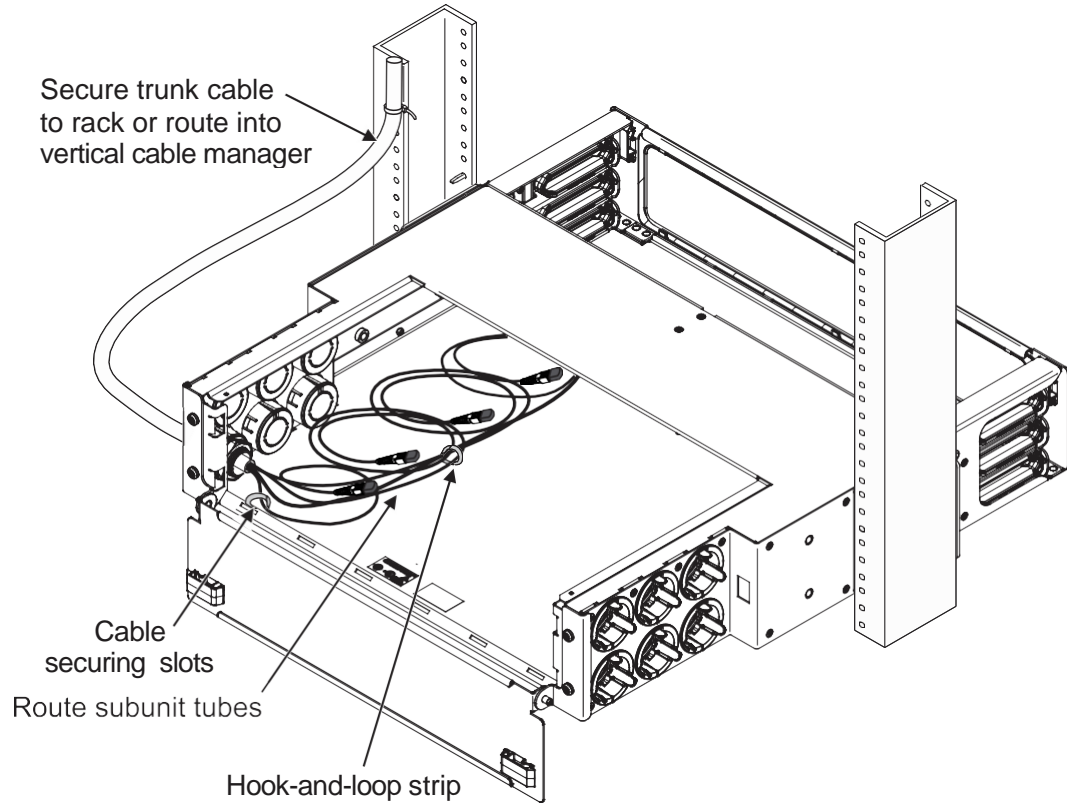
Cable Assembly

1. Open rear door.
2. Slide top cover back to remove cover for access to cable routing.
3. Remove cable attachment molding from shelf as shown.

Note: Number of moldings is specific to shelf size. 2U shelf has twelve cable attachment moldings and 4U has twenty-four cable attachment moldings.

4. Break out center plug from cable attachment molding as shown.
5. Remove gland nut from cable gland.
6. Slide cable attachment molding onto cable and secure threaded gland nut to hold molding in place as shown.
7. Install assembled cable onto shelf as shown. Snap cable attachment molding back in shelf wall opening.

Step 3 – Route and Secure Trunk Cable



1. Feed cable assembly through cable attachment opening on side of shelf from outside of side wall and push until the assembly is seated. Molding snaps into place and secures trunk cable to shelf as shown on previous page.

Note: Fiber cables may enter shelf from right side and left side of shelf.

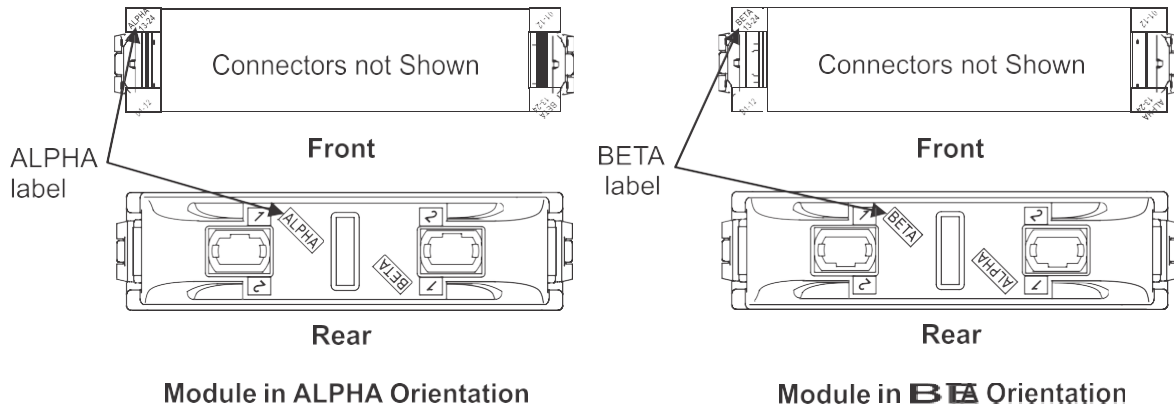
2. Loosely secure trunk cable to equipment rack upright approximately 3 inches (76mm) above or below shelf using cable ties. Leave approximately 48 inches (2.1m) length of cable/subunit tubes to route into shelf.
3. Loop subunit tubes inside shelf as shown or according to local practices. Secure loose fibers together using the provided hook-and-loop strips.

Caution: Do not exceed minimum bend radius of fiber.

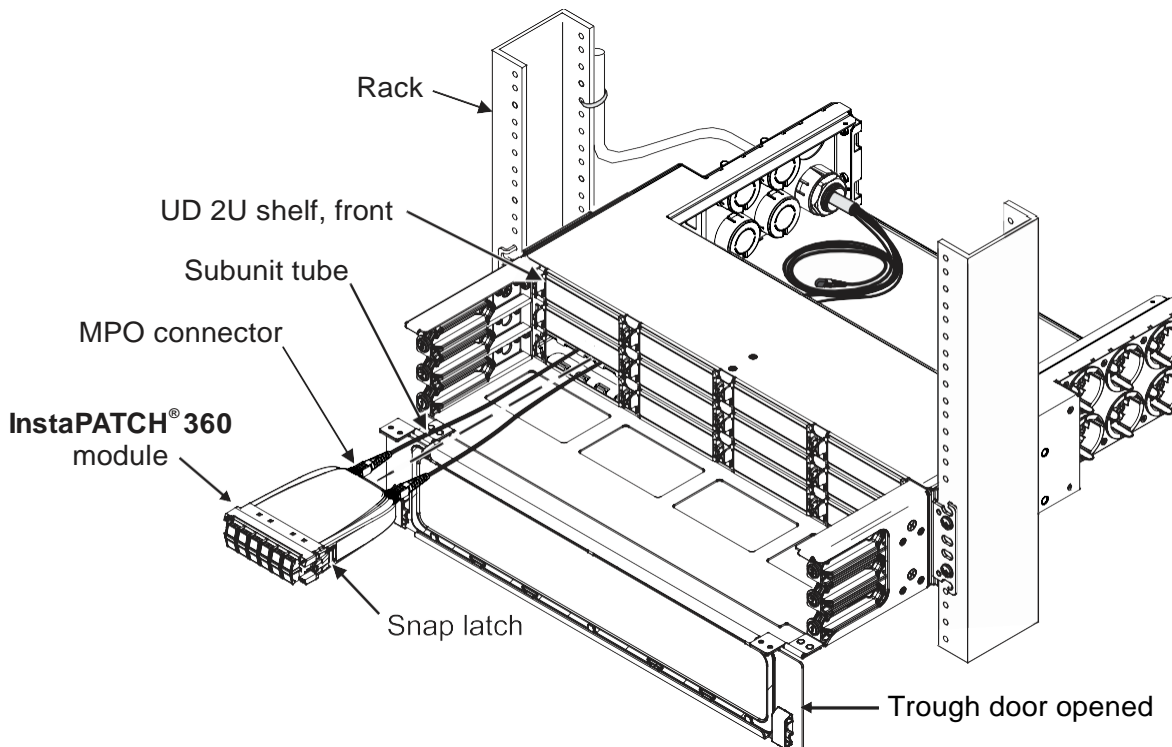
4. Fiber cable may be loosely secured to rear of shelf in slots provided using the additional hook-and-loop strips. Do not attach fiber bundles to floor of chassis.
5. Temporarily store slack subunit tubes on floor of chassis.

Step 4 – Orient the InstaPATCH 360 Modules

Note: If the fiber shelf is shipped populated with InstaPATCH 360 modules, they will all be installed in the ALPHA orientation. The InstaPATCH 360 modules must be oriented for the proper polarity. Identical modules are used at each end of a trunk cable, but one module must be in the ALPHA orientation and the other module must be in the BETA orientation.



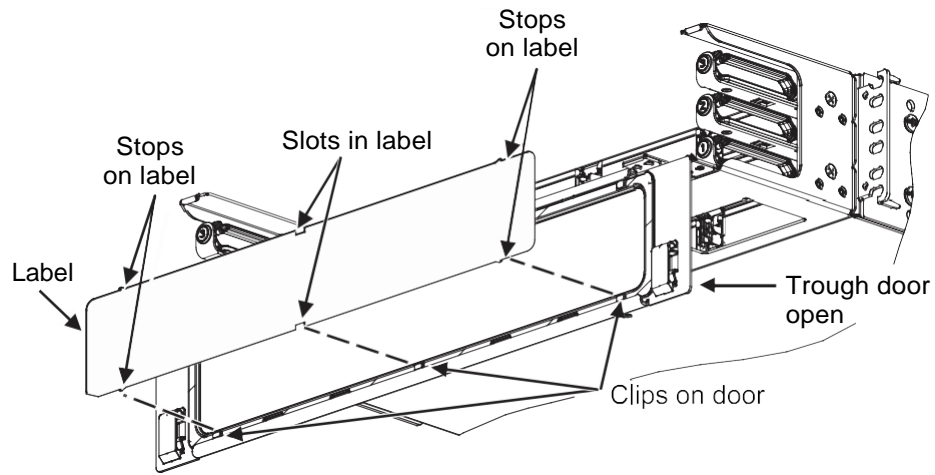
Step 5 – Terminate Fiber Cable Inside Shelf –InstaPATCH 360



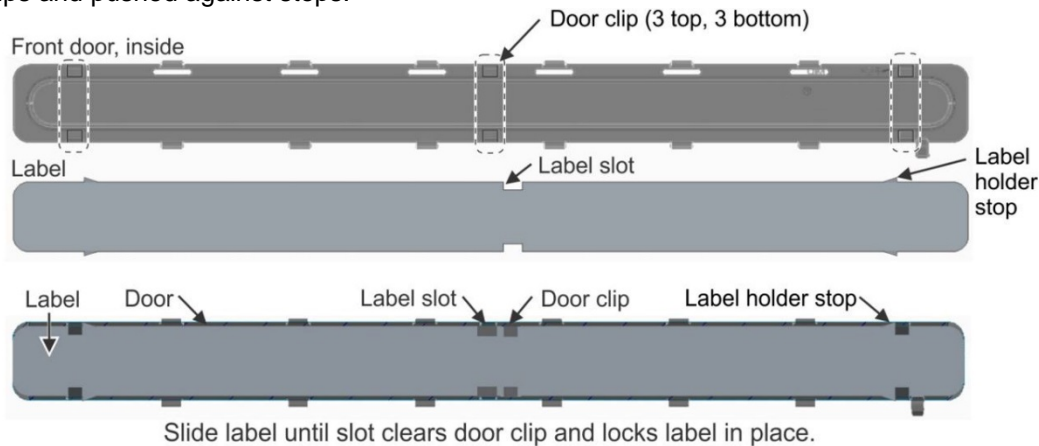
1. Pull subunit tubes with connectors through openings in front of shelf and plug MPO connectors into module.
2. Install InstaPATCH 360 modules into bulkhead. Verify that latches on either side of module snap into bulkhead opening with an audible click.
3. Route subunit tubes so that slack length is contained below the modules (as much as is possible) and so as to avoid tight bends as the connectors are terminated into the rear of the modules.

Note: Remove a module by using a small flat blade screwdriver to depress inner-most latch for release from bulkhead.

Step 6 – Install Label on Trough Door



1. The door may be fitted with labels visible through the door window when closed or may be visible when the door is opened.
2. Open door to 180°.
3. Align slots in label with center clips on door. Slide label to drop beneath center clips.
4. Slide label to one side to settle end under clips on end of door. Small stops on either end resist label sliding past door edge.
5. Bend label up to slide end of label under clips on other end of door. Label locks into place when positioned under clips and pushed against stops.

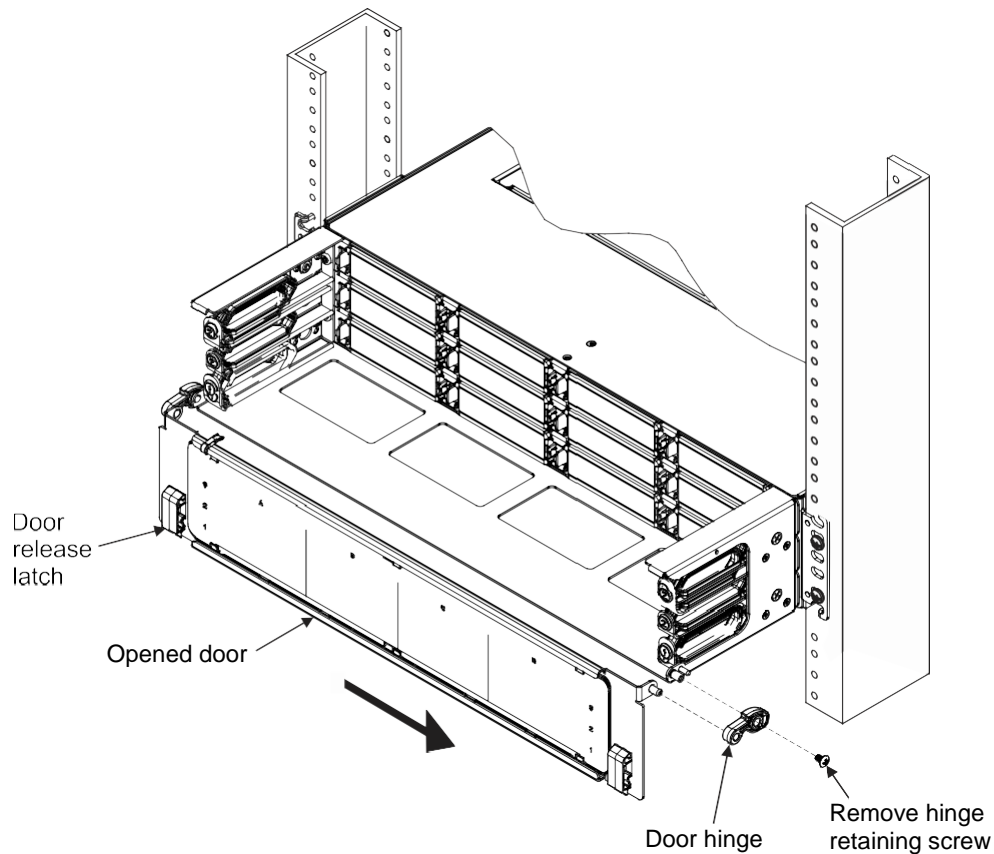


Install Label on Trough Door

6. Printable label templates are available on the **CommScope**® website, which can be used along with available label stock to create finished port numbering labels.

Note: To print a designation label, go to <http://www.commscope.com/Resources/Labeling-Templates>, scroll down to the UHD Fiber Shelf and select the appropriate label template.

Step 7 – Remove Trough Door (Optional)



1. Pull down on both door retaining latches and pull door forward to open.
2. Open door 180° as shown.
3. Remove retaining screw securing the hinge on either side of door and remove the one hinge as shown. Then slide door towards the detached hinge to disengage the opposite side and remove door.
4. To re-install door, orient door at open position of 180° and slide door pin into the attached hinge. While holding door in place, position loose hinge over pins on both door and trough and secure with retaining screw.

Step 8 – Cable Manager Removal (Optional)

1. Using a short Phillips-head screwdriver, remove the two flat head screws securing the left and right cable manager assemblies in position.
2. Remove cable managers from front of shelf as shown.

