SYSTIMAX 360™ 1U, 2U and 4U Ultra High Density (UHD) Fiber Optic Shelf Instructions

General

The **SYSTIMAX 360**™ fiber optic shelves UHD-1U, UHD-2U and UHD-4U are 19-inch (483mm) wide rack mounted, ultra high density (UHD) shelves that accommodates **360 InstaPATCH**® MPO modules and **360 DP** panels. The 1U shelf includes one sliding tray that accommodates four modules. The 2U shelf includes three sliding trays that accommodate four modules each for a total of twelve modules. The 4U shelf includes six sliding trays that accommodate four modules each for a total of twenty four modules. The **360 InstaPATCH**® modules are equipped with keyed single/duplex multi-port LC adapters on the front and MPO adapters on the rear. This product is intended for indoor use or can be used outdoors in a suitable protective enclosure.

Ordering information is listed below:

Material ID	Part No.	Description
760173674	UHD-1U	**SYSTIMAX 360G2** 1U modular cassette shelf
760173682	UHD-2U	**SYSTIMAX 360G2** 2U modular cassette shelf
760173690	UHD-4U	**SYSTIMAX 360G2** 4U modular cassette shelf

SYSTIMAX 360™ UHD-1U, UHD-2U and UHD-4U Fiber Optic 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:

  - Within the United States, contact your local account representative or technical support at 1-800-344-0223. Outside the United States, contact your local account representative or Authorized Business Partner.

  - Within the United States, report any missing/damaged parts or any other issues to CommScope Customer Claims at 1-866-539-2795. Outside the United States, contact your local account representative or Authorized Business Partner.

at work

For RoHS Inquiries:
CommScope Inc.
Corke Abbey, Bray
Co. Dublin, Ireland
Attn: Legal Department

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Tools Required

- Phillips head screwdriver
- Isopropyl alcohol
- Lint-free wipes or tissues.

Separately Orderable Parts

Verify parts against the parts list below:

Material ID	Part Number	Description
760161463	UHD-CBL-BRKT-3/8-NPT	Shelf mounted bracket for 3/8" cables
760161471	UHD-CBL-BRKT-1/2-NPT	Shelf mounted bracket for 1/2" cables
760058685	RMB-6-3/8 BRACKET	Rack mounted bracket (RMB) for 3/8" cables
760058677	RMB-6-1/2 BRACKET	Rack mounted bracket for 1/2" cables
760058701	RMB-5-3/4 BRACKET	Rack mounted bracket for 3/4" cables
Various	Various (see note)	**360 InstaPATCH** MPO module
Various	Various (see note)	**360 DP** panels
760159822	N/A	12-pair designation label

Note: Contact your local account representative for ordering numbers for modules.

⚠️ **CAUTIONS**

- 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.

- 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.

Step 1 – Verify Parts

| Loose Parts Furnished with Shelf	
Quantity	Description
1	Rear door
2	Hardware covers
4	12-24 x 3/8 screws
4	M6 x 12 screws
1	Hook-and-loop kit
2	Port designation labels
2	Adapter designation labels
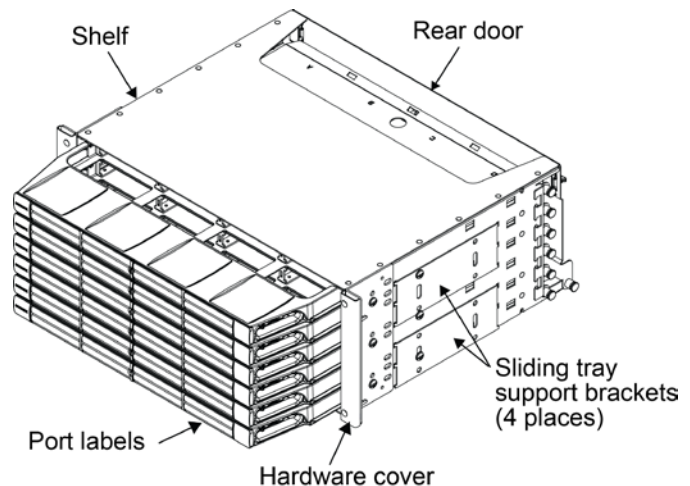
1. Verify parts shipped with this unit against the parts listed in the table and shown in figure above (4U shelf shown).

Note: **If shelf is fully assembled, remove tray support brackets on both sides of shelf prior to installation. If the shelf is unassembled, refer to the instructions on page 8.**

Step 2 – Configure Mounting Brackets and Mount Shelf to Equipment Rack

Note: The illustrations in this instruction sheet show the 4U shelf.
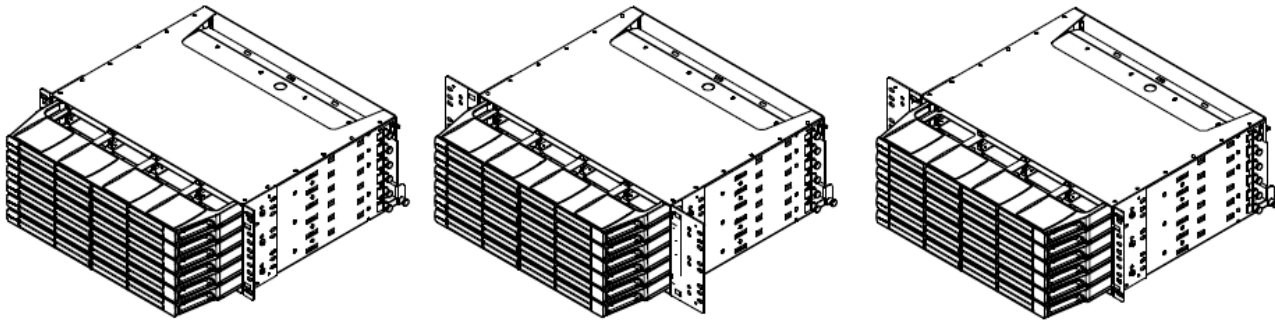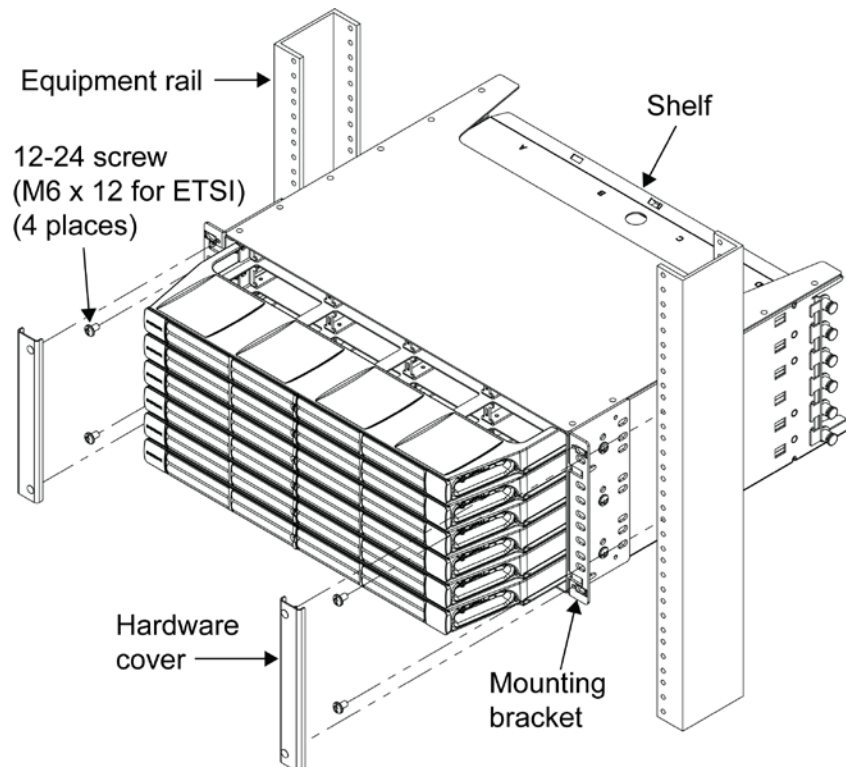

Configuration for:

**19" (483mm) Rack**   **23" (584mm) Rack**   **ETSI Rack**

1. If shelf is fully assembled, remove tray support brackets on both sides of shelf prior to installation.
2. Configure mounting brackets on shelf to match type of equipment rack shelf is being installed on.

**Note**: Shelf brackets are factory configured for 19-inch (483mm) rack mounting.

3. Align tabs on mounting brackets (two per bracket) with holes on front of equipment rails.
4. Install shelf to front of equipment rails and secure with supplied hardware; four 12-24 x 3/8" screws for 19-inch (483mm) rack and 23-inch (584mm) racks and four M6 x 12 screws for ETSI racks.
5. Snap hardware covers over front of mounting brackets.

Step 3 – Tray Features and Functions

Tray 6

Forward
position

Spring stop
latch

Tray 1

Rear position

Spring plunger
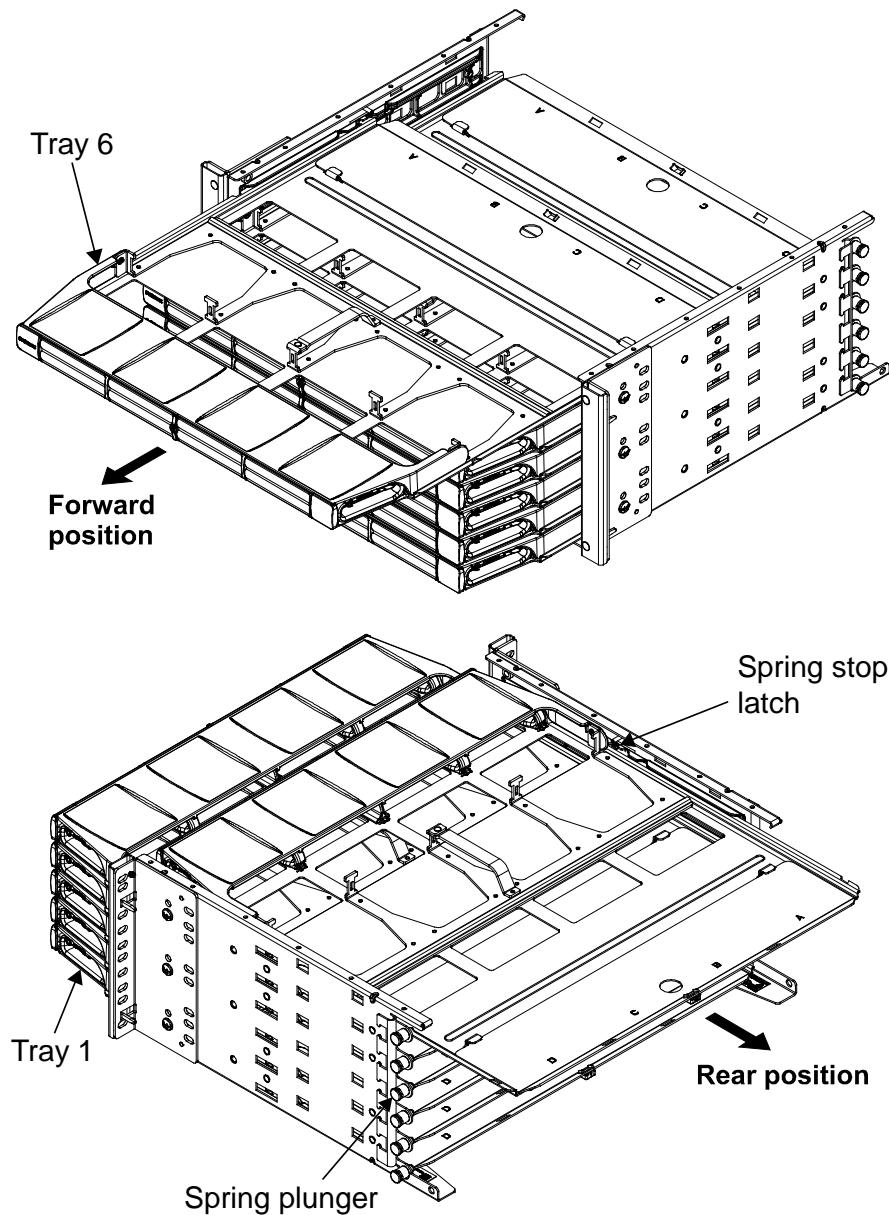
1. The **1U** shelf utilizes one sliding tray that can accommodate four modules. The **2U** shelf utilizes three sliding trays that can accommodate four modules each. The **4U** shelf utilizes six sliding trays that can accommodate four modules each. Each tray can slide to the front and to the rear. The trays have three positions; home, forward, and rearward and have a built-in mechanism to prevent them from being pulled too far either way.

2. The recommended sequence for populating the trays is 1-3 for the 2U and 1-6 for the 4U. Tray 1 is at the bottom and tray 3 or 6 is at the top.

3. Pull spring plunger to slide a tray to the rear position until the tray stops.

4. Tray can be removed from the front by lifting the spring stop latch located at the right center of the shelf (when viewed from rear).

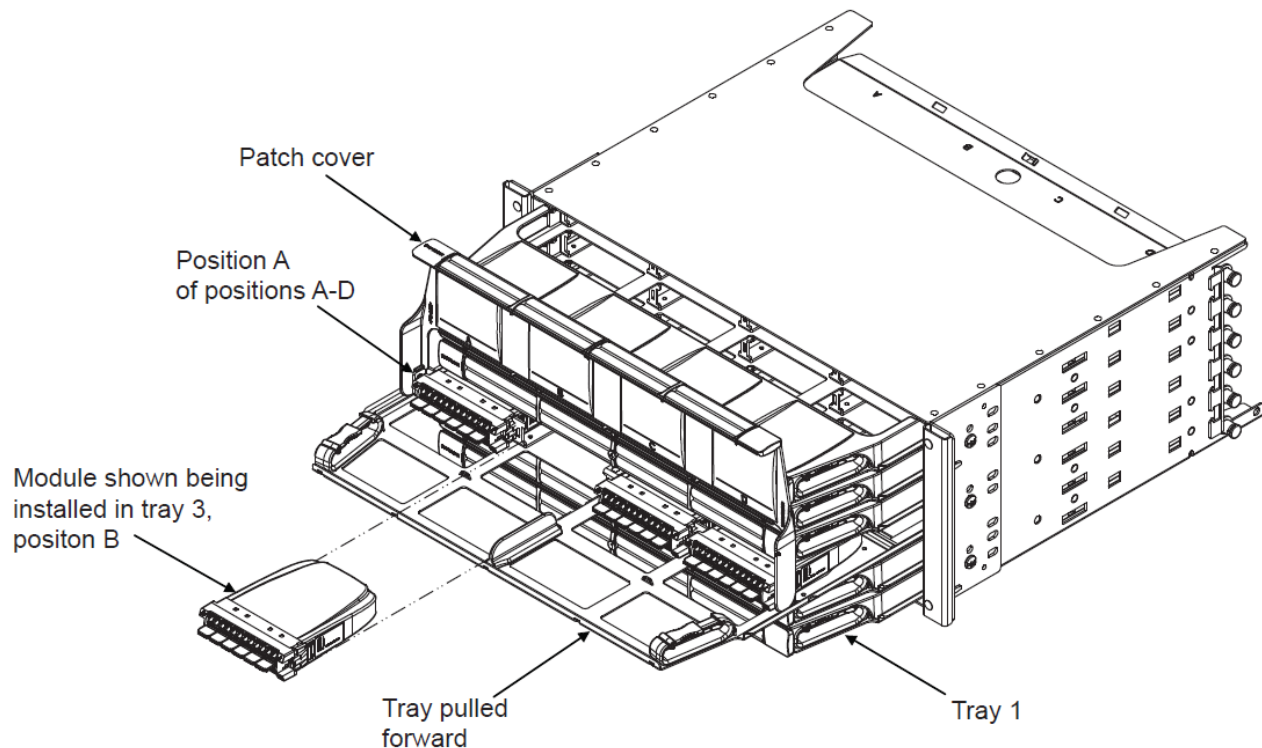## Step 4 – Configure and Install 360 InstaPATCH® Plus Modules

ALPHA label

Front

BETA label

Front

Rear

Rear
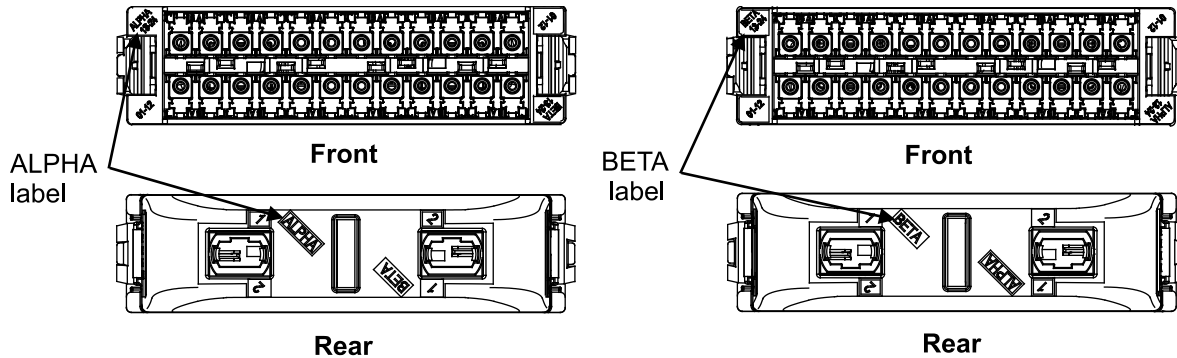
MPO Module in ALPHA Configuration   **MPO Module in BETA Configuration**

Note: MPO modules **must** be configured as shown for proper polarity. Identical modules are used at both ends of trunk cable, but module orientation is inverted from end to end. Module at one end of trunk cable **must** be oriented in "ALPHA" configuration, while module at opposite end of trunk cable **must** be oriented in "BETA" configuration.

1.   Orient modules in the "ALPHA" or "BETA" configuration as shown above before installation.

Patch cover

Position A of positions A-D

Module shown being installed in tray 3, positon B

Tray pulled forward

Tray 1

Note: Modules are not included and must be ordered separately.

2.   Slide tray forward and lift patch cover to the open position.
3.   Starting at the left-most position in tray 1, slide module into position labeled "A" in bulkhead.
**Note:** Illustration shows module being installed into tray 3, position B.

Step 5 – Terminate Trunk Cables
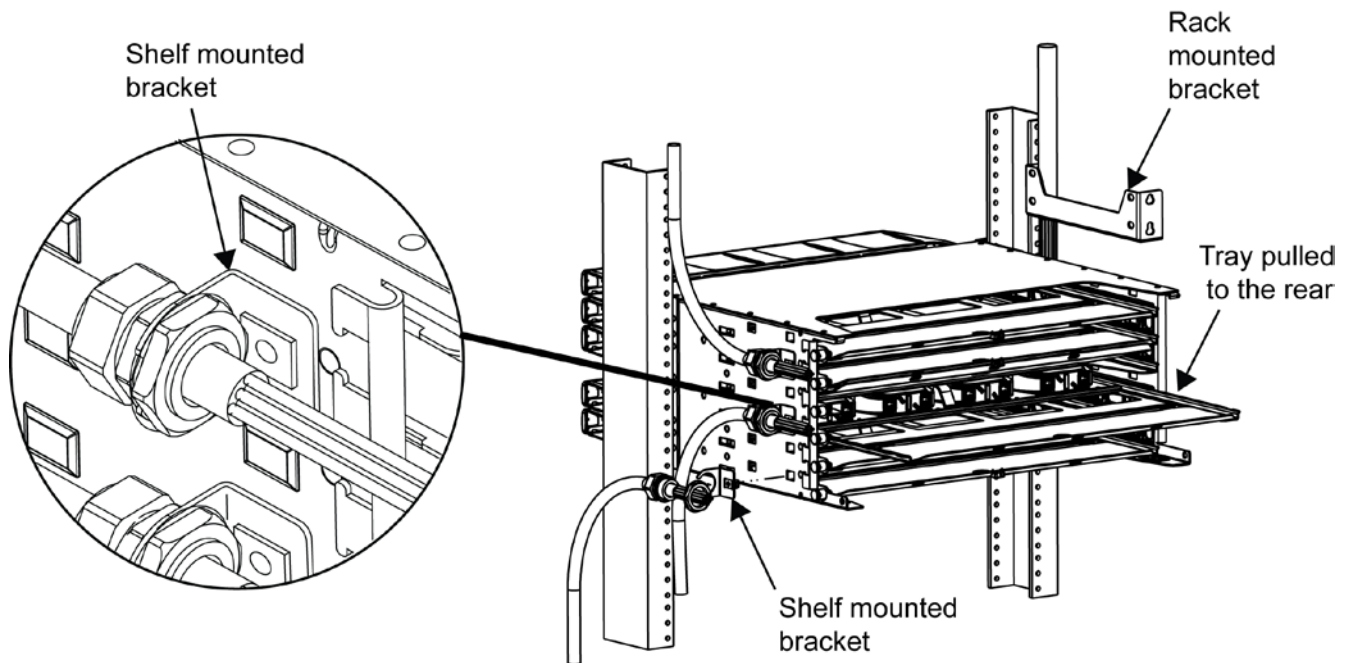
1. Secure incoming cables to 4U shelf using either the separately orderable shelf mounted brackets or the rack mounted brackets (RMB). For rack mounted brackets, follow instructions included with the brackets.
2. Mount trunk cables to rack mounted brackets or shelf mounted brackets as shown above.
3. Pull sliding tray to the rear to terminate trunk cable fanouts.

Step 6 – Route Trunk Cable Fanouts

Cable Fanouts to Modules A and B   **Cable Fanouts to Modules C and D**
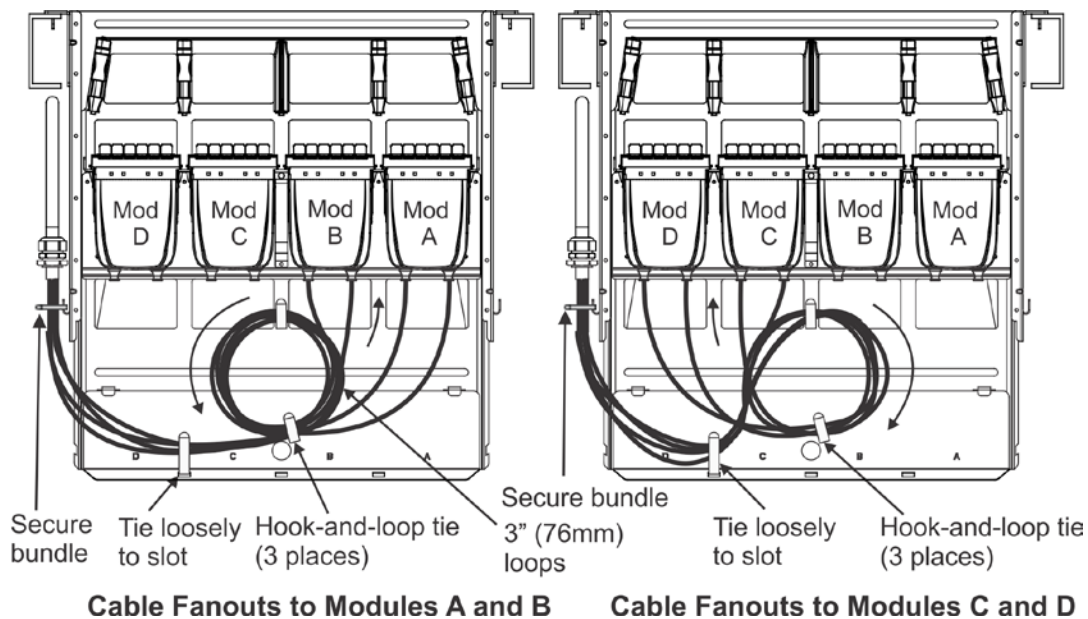
1. Mate MPO connector(s) on module with those on trunk cable or ruggedized fan out.
2. Create 3-inch (76mm) loops with cable to manage excess slack. Create 3-inch (76mm) counter clockwise loops with cables feeding modules A and B, and clockwise loops with cables feeding modules C and D.
3. Secure cables with hook-and-loop ties and bundle with cable tie to "T" shape bend limiters on sides.

Step 7 – Install Rear Door
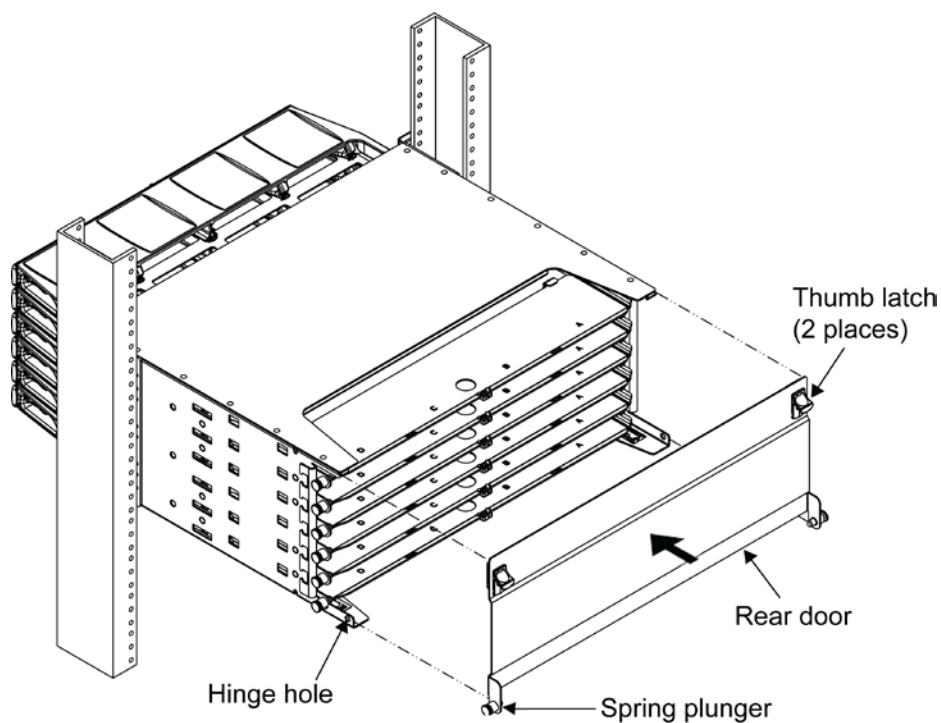
1. Mount rear door to shelf by lining up one spring plunger to hinge hole and snapping-in the opposite side.

## Step 8 – Install Port Designation Label
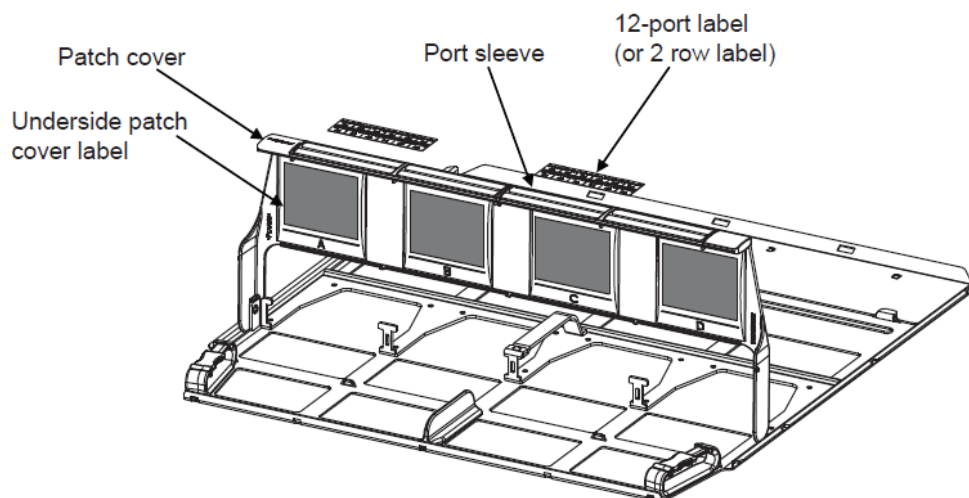
1. To print a designation label, go to www.commscope.com and navigate to the *UHD-4U Shelf Label*.
Note: Labeling website has three options for printing labels.
- 2-row label
- 12-port label
- Underside patch cover label
2. Use **Excel**® to record fiber routing information on designation label.
3. Print label on 8.5" x 11" (letter) paper.
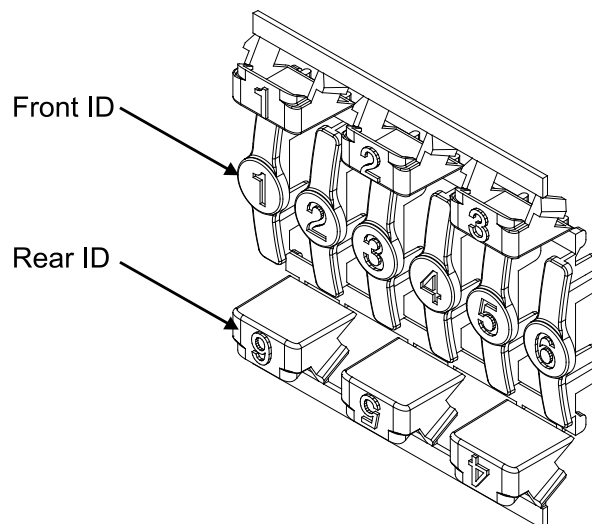4. Slide label into lens port sleeve located at the front of the patch cover.

Step 9 – Optional Shelf Assembly

Chassis

Tray guide
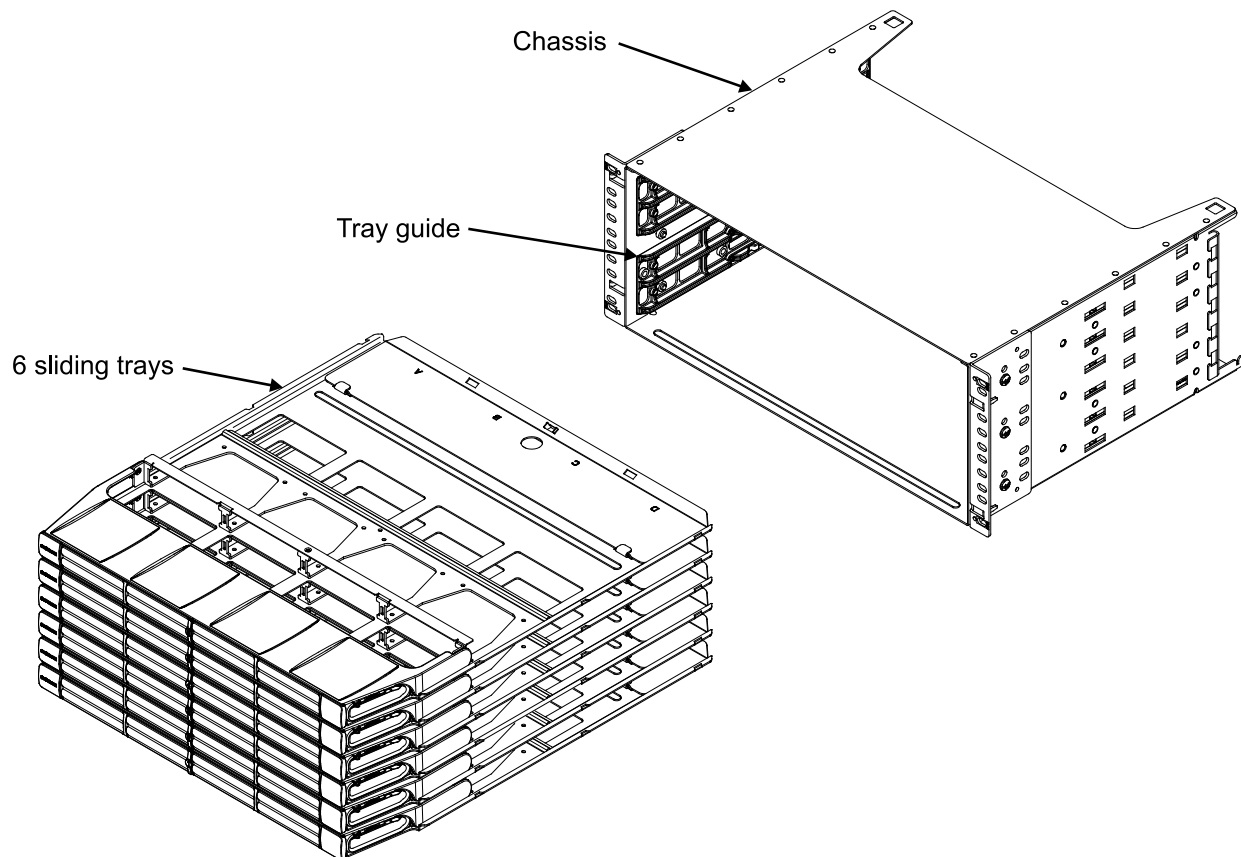
6 sliding trays

1.   If sliding trays are shipped separately from chassis, they must be inserted into the chassis.

Start with
bottom tray
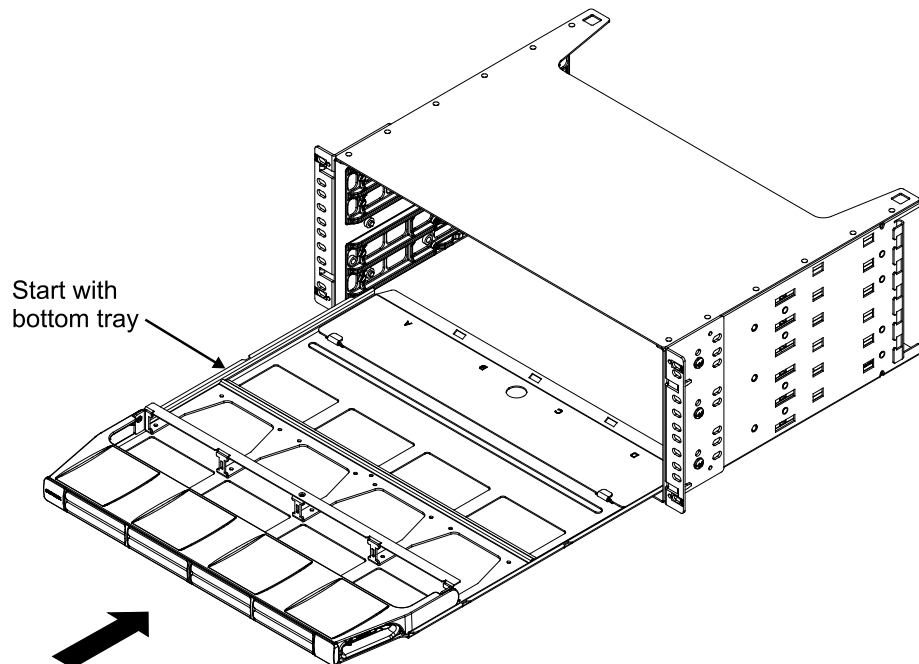
2.   Start with the bottom slot and insert the trays along the tray guide channels as shown.

Front ID

Rear ID

3. Once all trays are inserted, break-off the tray identification numbers.

Tray 1

Front Tray ID
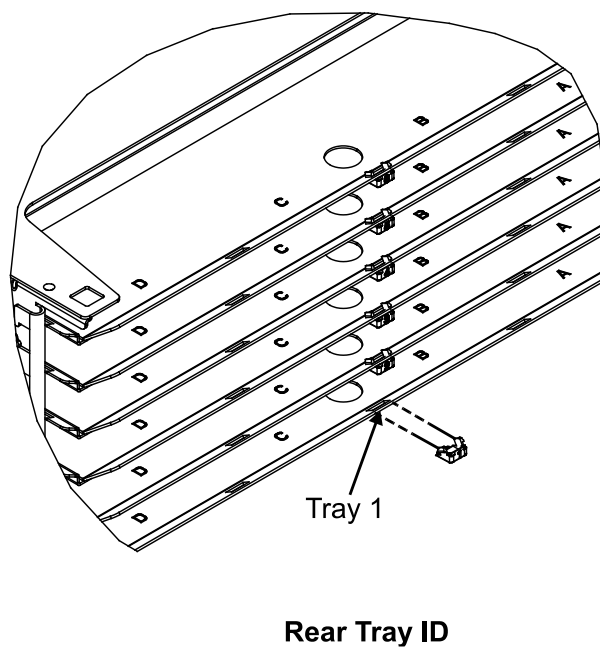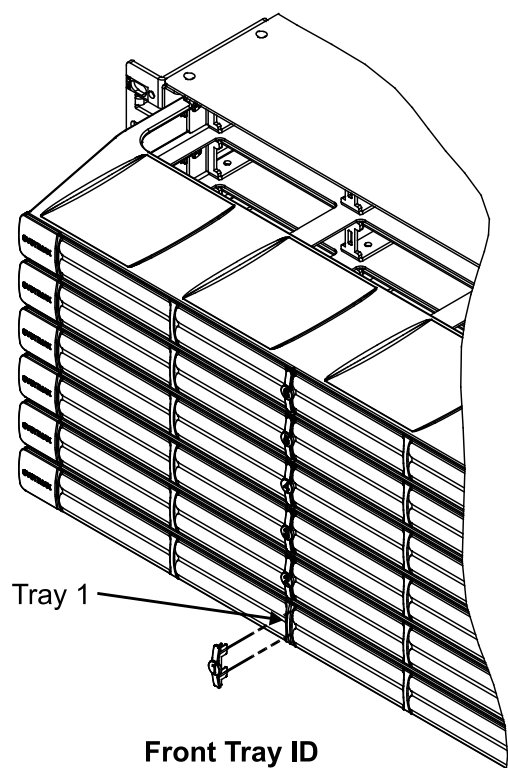
Tray 1

Rear Tray ID

4. Insert front tray ID between lenses, starting with tray 1 at the bottom.
5. Insert rear tray ID at center slot of each tray starting with tray 1 at the bottom.
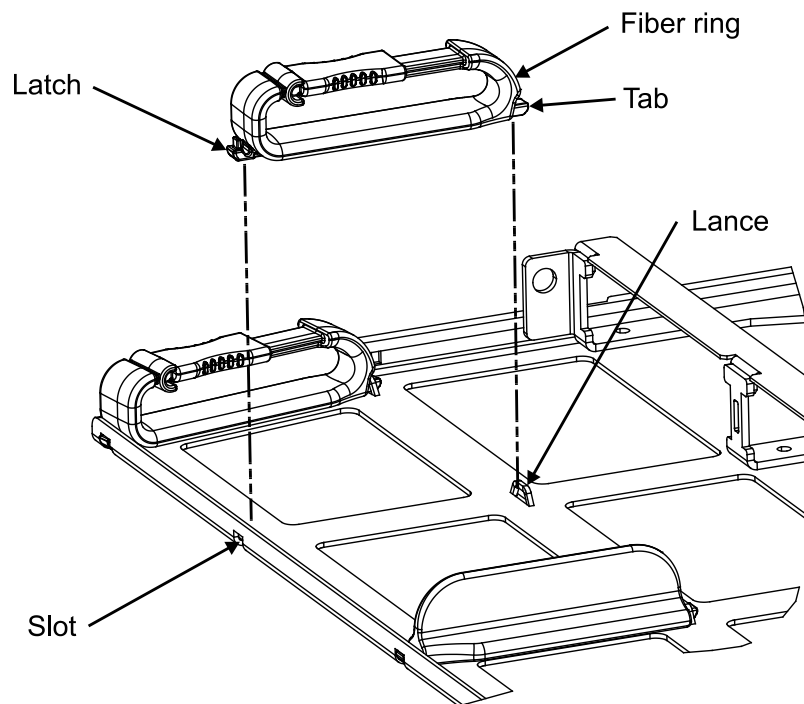
6. Install fiber ring by inserting tab under lance and engaging the front of the fiber ring to the front stiffener slot.

    Note: To remove the fiber ring, use a flat blade screwdriver and delatch the fiber ring at the front.