

## Wall Mount Fiber Optic Combination Shelf Instructions

### General

The CommScope Wall Mount Fiber Optic Combination shelf, designed for use as a building entrance enclosure, comes in white (tan) and may be ordered with or without adapter panels and splice kits. The unit will hold up to 8 adapter panels and one base and one supplemental splice kit. Adapter panels filled with individual SC, **ST**®, LC or FC adapters are available. Ganged six-pack adapters with SC or **ST**® connector panels or twelve-pack LC connector panels are available in aqua (LaserCore), blue (single-mode), or beige (multi-mode). This product is intended for indoor use but can be used outdoors.

The unit is provided with knockouts so that locks can be installed, if required. Locks can be ordered separately. These instructions also cover terminating and splicing in the shelf. The wall mount building entrance is 17" wide, 10" high and 6" deep and is wall mountable with a plywood backboard.

Ordering information is listed below:

Material ID	Part No.	Description
9700066/00	WBE-FXC-048-WH	Wall mount building entrance for terminations and splices



Wall Mount Fiber Optic Combination Shelf

### 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 **PartnerPRO**™ Network Partner.
  - Within the United States, report any missing/damaged parts or any other issues to **CommScope** Customer Claims at 1-866-539-2795 or email to [claims@commscope.com](mailto:claims@commscope.com). Outside the United States, contact your local account representative or **PartnerPRO** Network Partner.

## Tools Required

- Screwdrivers
- Adjustable wrench

## Parts List

Install the following parts inside the 400A unit, before routing the cable inside the box.

Items to be install are as follows:

- Identification and notice decals
- Cable strain relief grommets (two provided)
- 12A1 or 12A2 cable clamps (must be ordered separately and installed two at a time)
- RFE-PNL type panels (must be ordered separately)
- Couplers or buildouts (must be ordered separately).

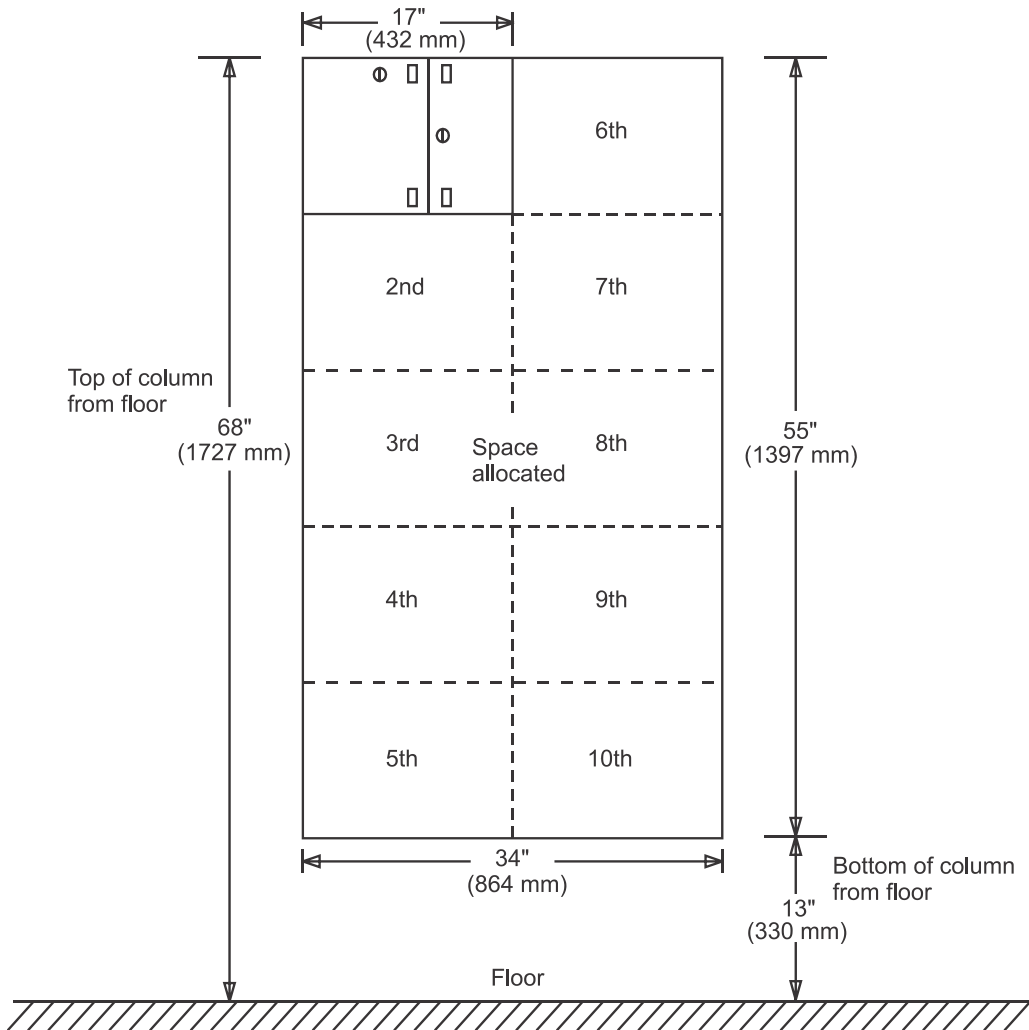


## Cautions

- Safety glasses should be worn at all times while performing splicing procedures.
- Gloves should be worn while preparing the cable sheath.
- Under no circumstances should splicing operations be performed on fiber optic cable without the technician having satisfactorily completed an approved training course.
- Un-terminated optical fibers can emit radiation if the far end is coupled with a working laser or light-emitting diode (LED). Do not view the fiber end of a cable with an optical instrument until absolute verification is established that the fiber is disconnected from any laser or LED source.
- To prevent cable damage, do not bend the optical fiber cable to a radius of less than ten times the outside diameter (OD) of the cable. For example, a 0.5-inch (13mm) diameter outside plant cable should not violate a 5-inch (130mm) minimum bend radius. Bends in individual fibers should not violate a 1-1/2 inch (38mm) minimum bend radius.

## Step 1 – Installation of the WBE-FXC-048 Unit in the Building

It is recommended that up to five units be mounted in one column. The top of the first unit should be no more than 68 inches (1727mm) above the floor. Space allocated for the installation of the units should be 55 inches (1397mm) high by as wide as required.



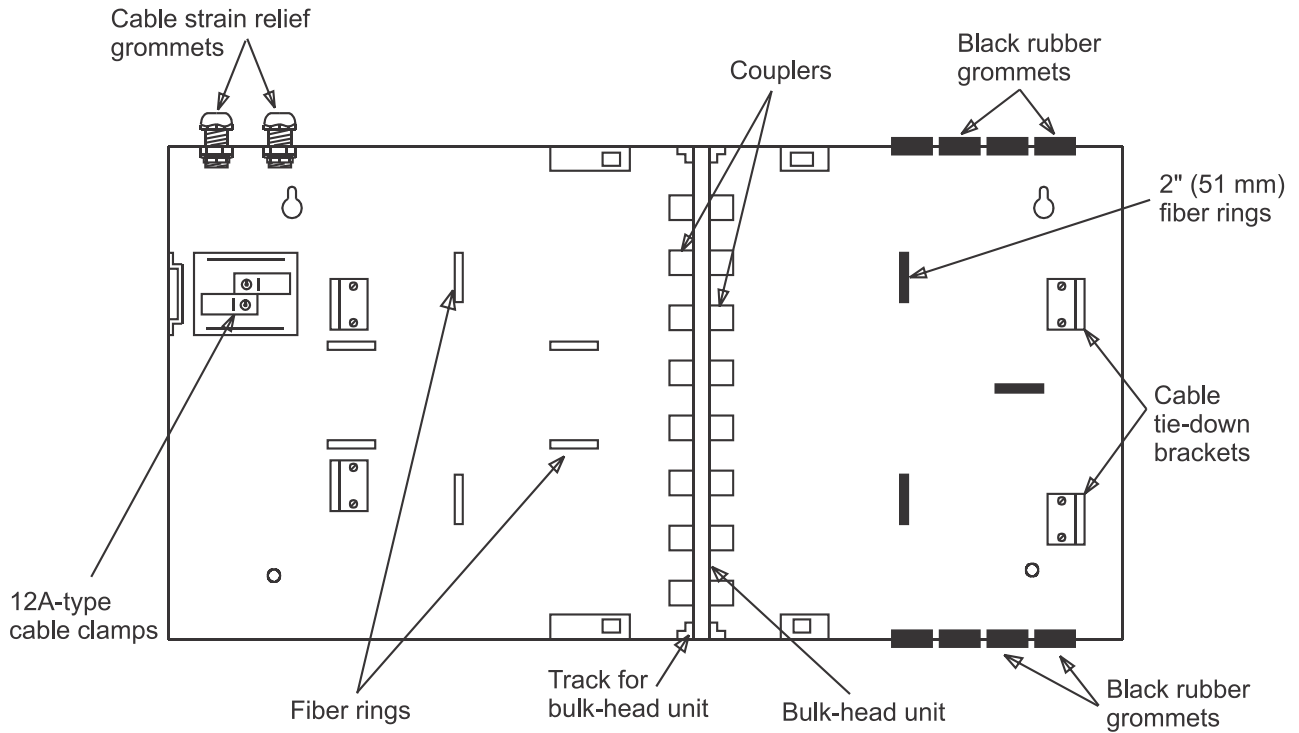
### Recommended Mounting Configuration

## Step 2 – Installation of WBE-FXC-048 Units

The mounting holes in the WBE-FXC-048 unit are designed for easy installation with the top two mounting holes being keyholes. This allows the location of mounting screws to be marked, screws to be installed, and the WBE-FXC-048 unit to be hung on the screws to be tightened down.

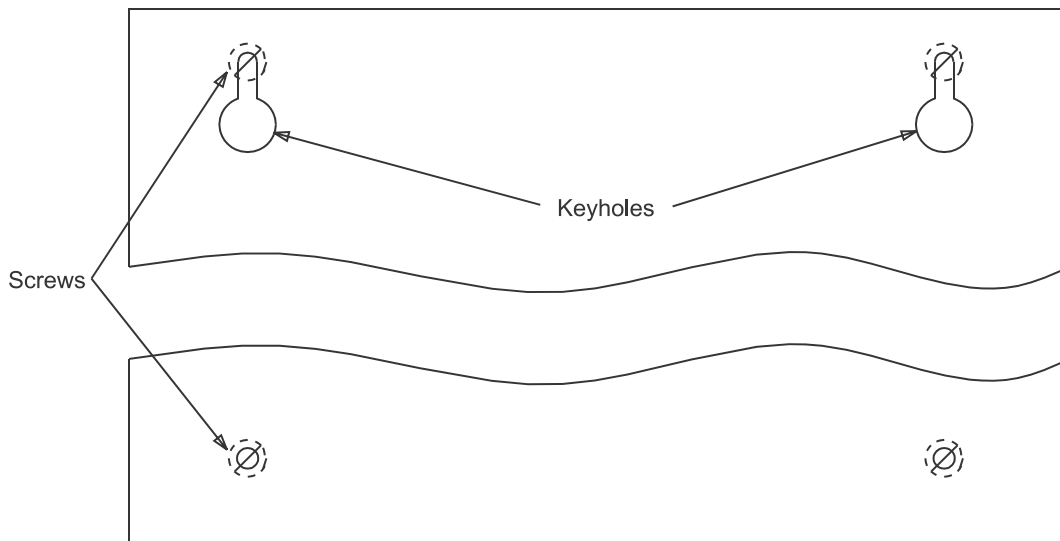
1. Position the WBE-FXC-048 unit in upper left corner space allocated for installation.
2. Mark location of top mounting screws as shown on next page.
3. Remove WBE-FXC-048 unit from wall.
4. Install two No. 8 wood screws or similar hardware for type of wall on which unit is being mounted.  
**Note:** Install the screws halfway only.

5. Hang the unit on the two mounting screws.
6. Install the two bottom mounting screws.
7. Tighten all four screws.
8. Repeat items 1 through 7 for other units to be mounted.



**Parts Locations**

Top mounting holes

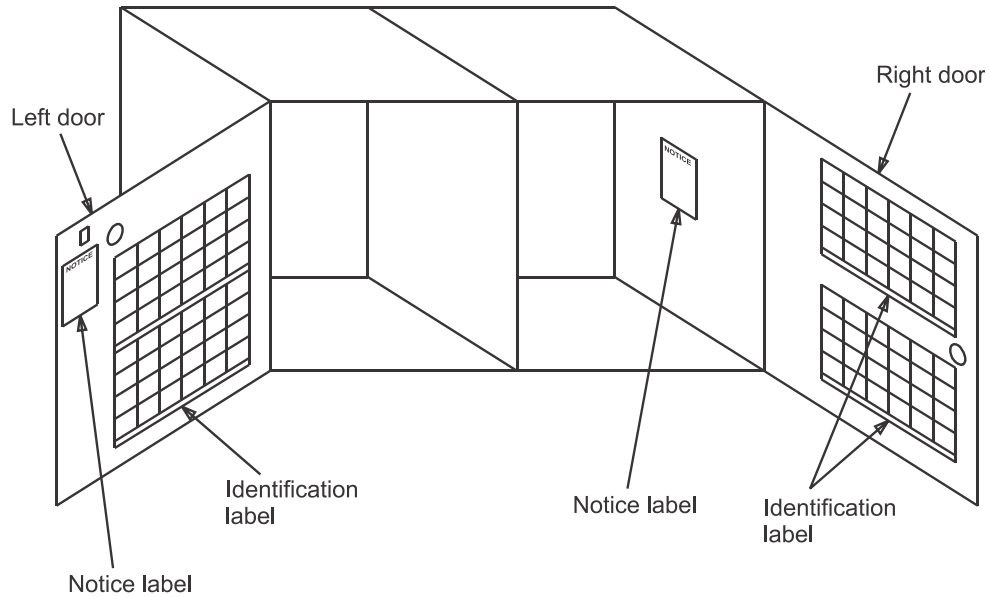


Bottom mounting holes

**Mounting Holes for WBE-FXC-048**

### Step 3 – Install Labels, Grommets, Rings and Clamps

1. Install the provided identification and notice decals.



#### Decal Installation

2. Remove the appropriate number of knockouts for cable entry.

**Note:** For cross-connect applications, cables are routed into the WBE-FXC-048 unit on the left side. For interconnect applications, cables are routed on either side of the unit.

3. Install the cable strain relief grommets in the openings made by removing the knockouts.

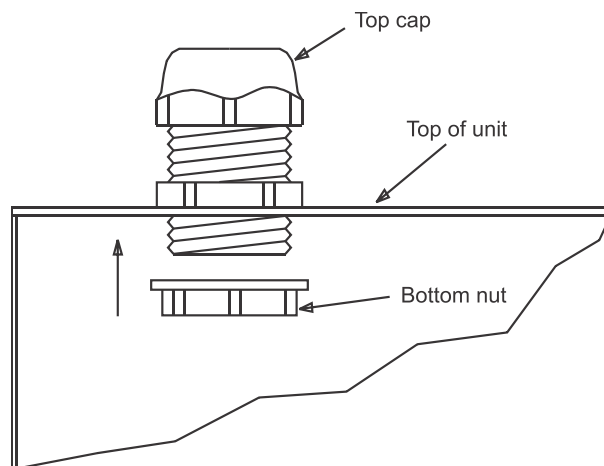
**Note:** Grommets fit smaller knockouts only.

4. Remove the appropriate cable clamp bracket from the WBE-FXC-048 unit.

5. Install two KIT-CBL-CLP or KIT-CBL-CLP -ARM cable clamps.

**Note:** The cable clamps should be ordered and installed in pairs. See instruction sheet for applicable cable clamp.

6. Reinstall the cable clamp bracket with two cable clamps.

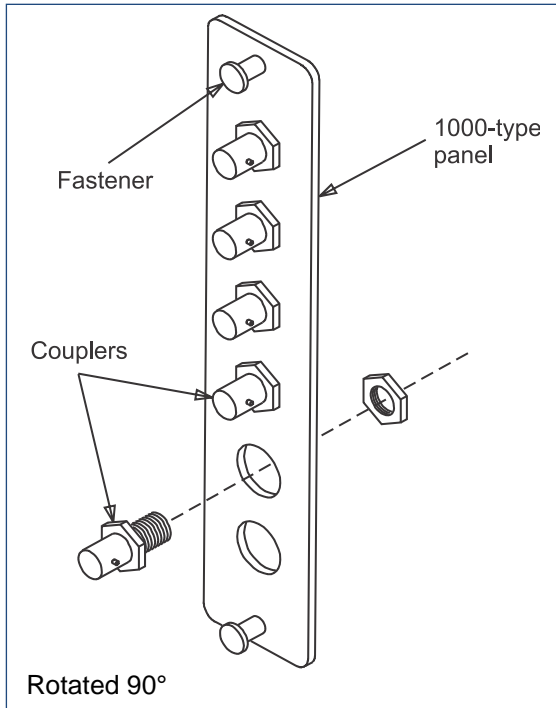


#### Cable Strain Relief Grommet

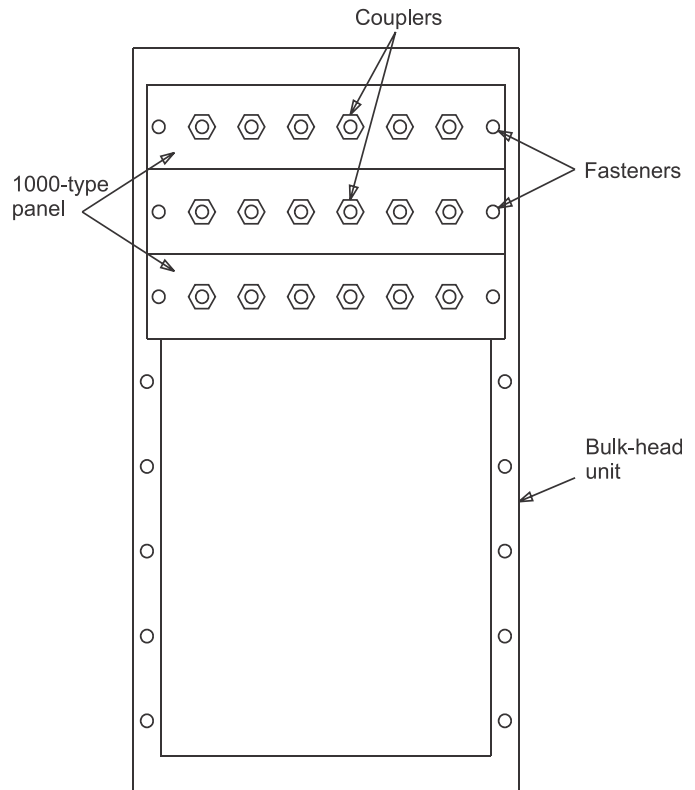
### Step 4 – Installing Adapters and Panels

1. If the panels were ordered without adapters, install the adapters in the panels now.
2. Mount individual identification decals on the panels and write the identification number of each coupler on the decals.
3. When the couplers have been installed, position and secure the panels onto the WBE-FXC-048 bulk-head unit.

**Note:** The bulk-head unit partially slides in and out of the WBE-FXC-048 unit allowing easy access to the couplers. The bulk-head will not slide out of the track completely.



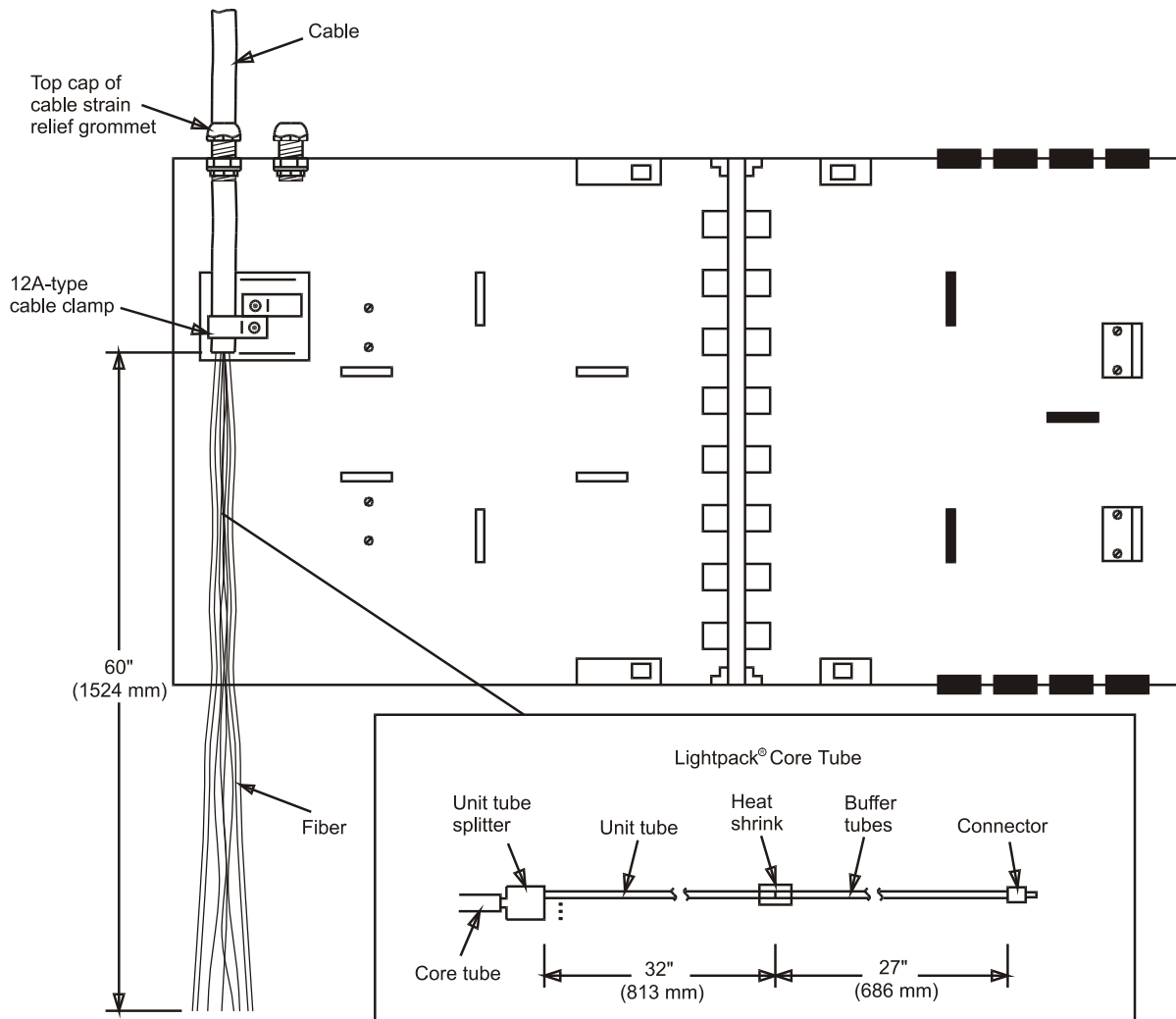
**Coupler Installation (ST-Type Shown)**



### Step 5 – Route and Prepare Cable Inside of Unit

Whether a cable is routed from the top or bottom of the WBE-FXC-048 unit, a strain relief grommet should be installed in the first unit that the cable enters. The cable can then be clamped inside the individual unit. If a cable is to be routed from the first unit to a consecutive unit, the proper knockouts between the units must be removed.

1. Route cable through the cable strain relief grommet into the WBE-FXC-048 unit.
2. Measure 60 inches (1524mm) from the end of the cable back to the cable clamp.
3. Mark and remove the sheath from the cable.
4. Attach the cable to a cable clamp.
5. Tighten the top cap of the cable strain relief grommet.
6. Complete fiber termination by routing the fibers through protective tubing and installing the appropriate connectors on the individual fibers.
7. Repeat items 1 through 6 for all cables routed into the WBE-FXC-048 unit.

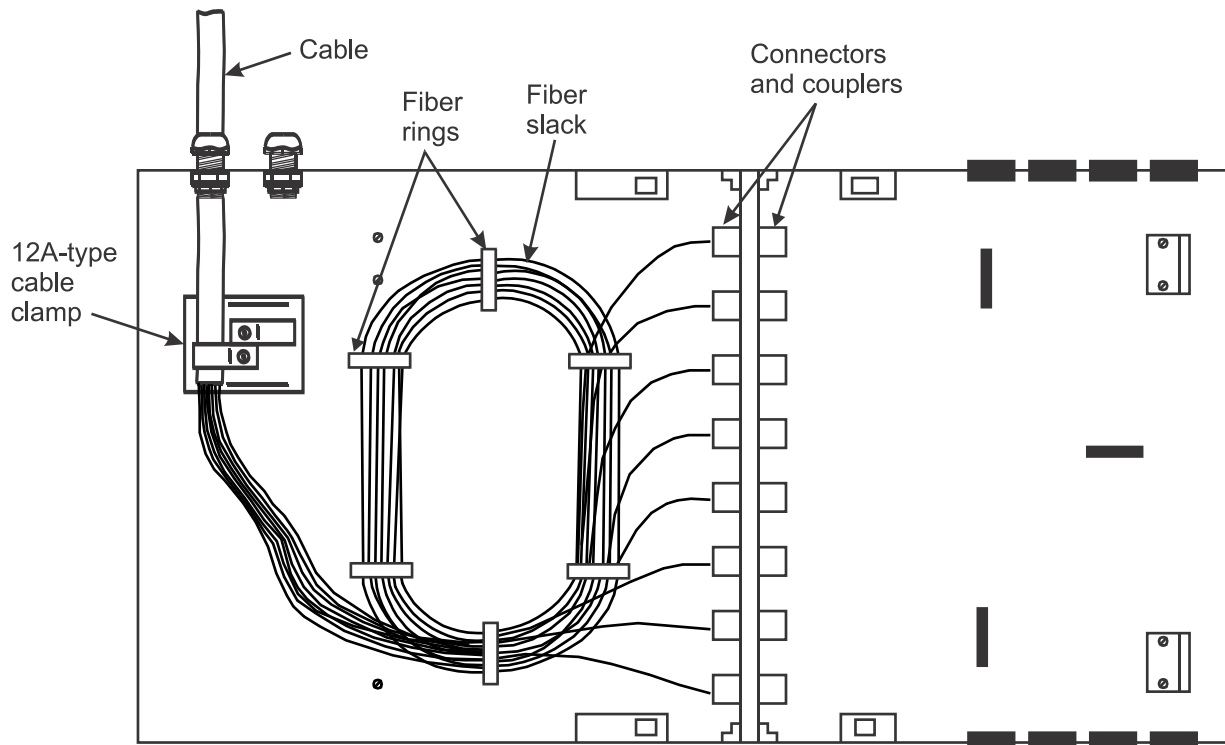


**Cable Preparation**

## Step 6 – Terminate Fibers and Store Fiber Slack

After cable has been routed inside the WBE-FXC-048 unit and connectors installed, the fibers may be terminated to the bulk-head unit.

1. Pull bulk-head unit out until it stops.
2. Terminate connectors to couplers on bulk-head unit.
3. Starting from the connector end of the fiber, store fiber slack inside the fiber rings.
4. When all fiber has been stored, slide bulk-head unit to the back of the WBE-FXC-048 unit.
5. Close the WBE-FXC-048 unit doors by first closing the left door and then closing the right door.
6. Turn plastic tabs to secure doors.



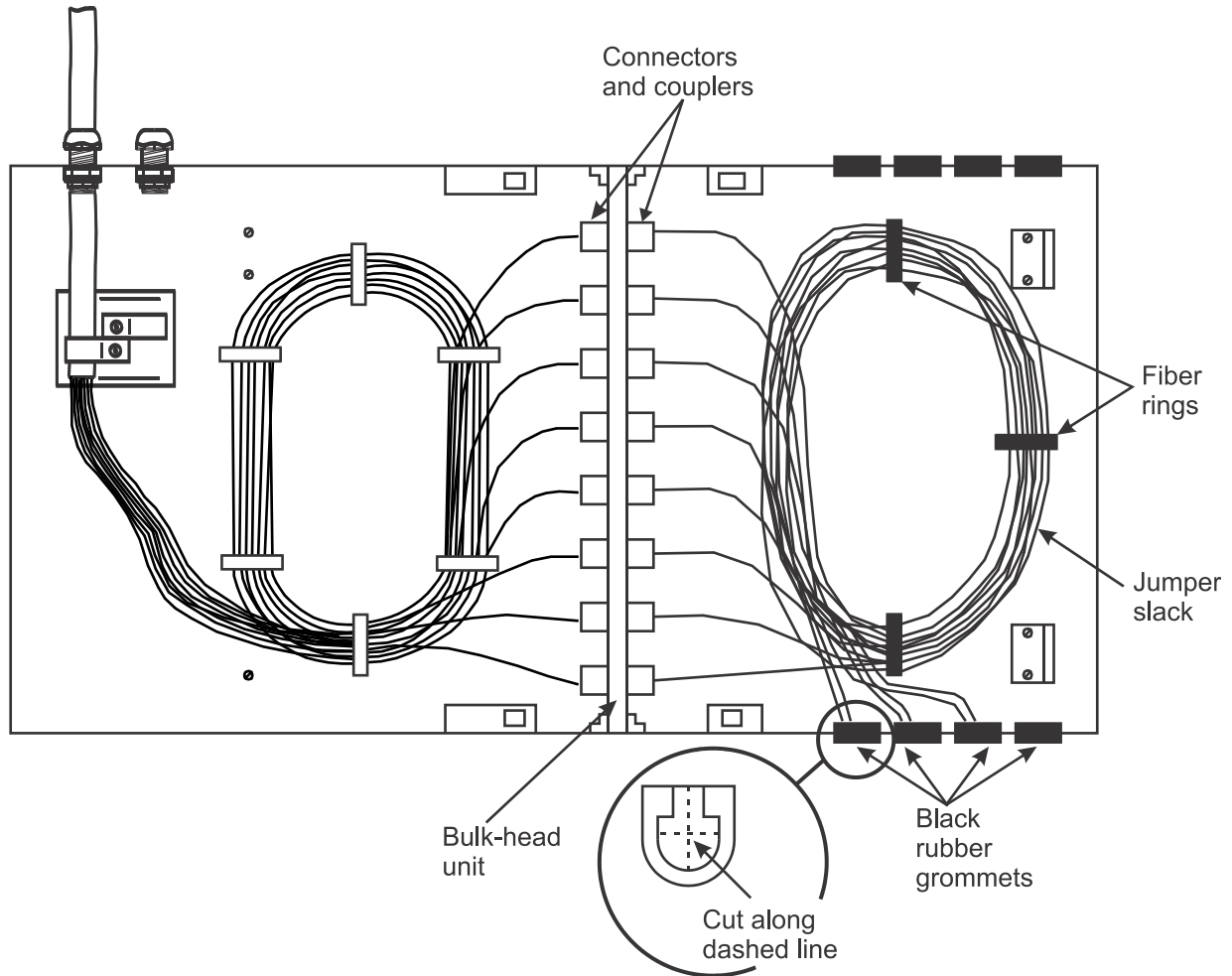
Cable Slack Storage

## Step 7 – Terminate and Route Jumpers

The jumpers are located on the right side of the WBE-FXC-048 unit and can be routed to the next unit through the black grommets, shown on the following page.

1. Pull bulk-head unit out until it stops.
2. Terminate jumpers to couplers on bulk-head unit.
3. Slide bulk-head unit to the back of the WBE-FXC-048 unit.
4. Prepare black grommets by using a utility knife to cut grommets along dotted lines.
5. Route jumpers through black grommets and terminate in the desired unit.
6. Store the jumper slack in the fiber rings.
7. Close the WBE-FXC-048 unit doors by first closing the left door and then closing the right door.
8. Turn plastic tabs to secure doors.



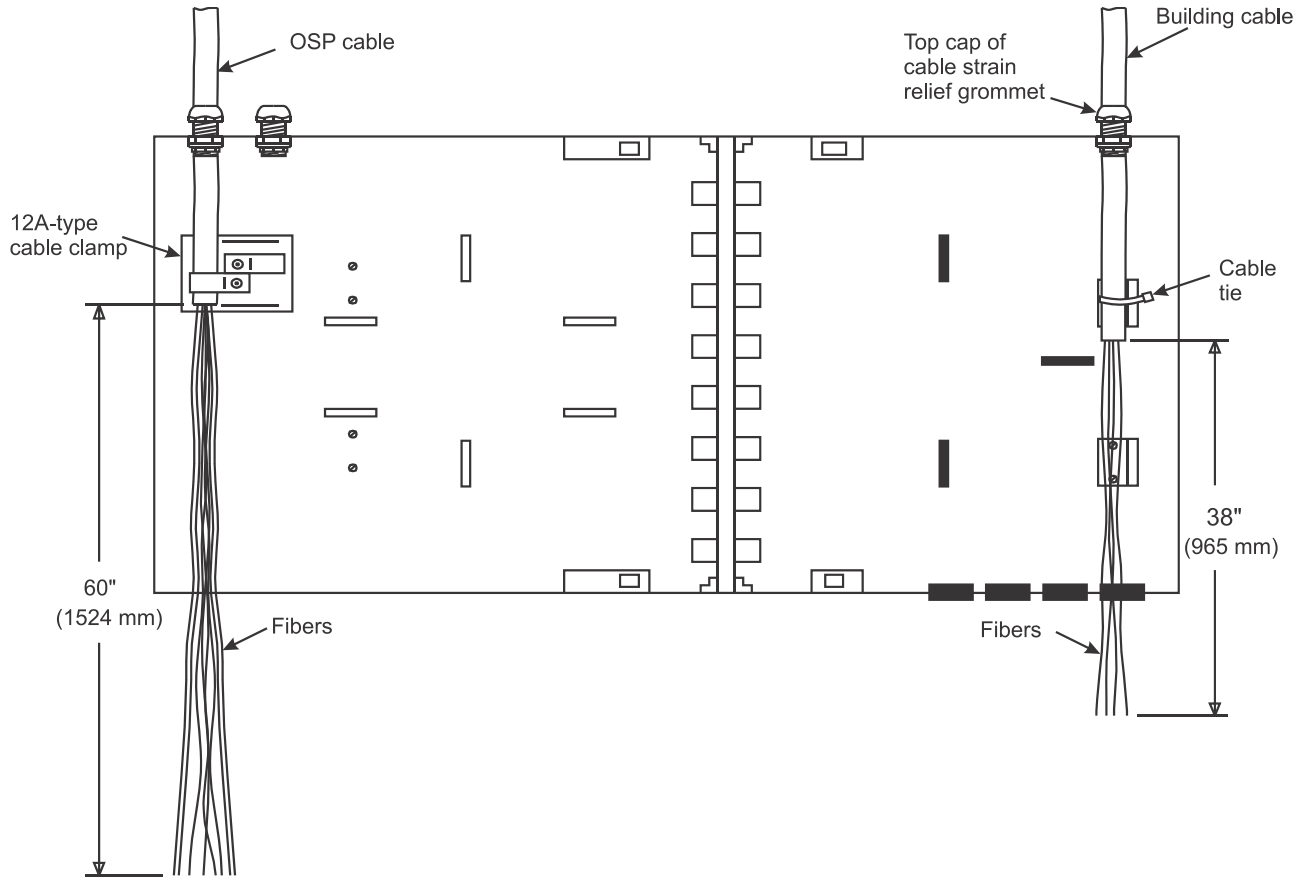


### Jumper Slack Storage

#### Step 8 – Interconnection Application

The WBE-FXC-048 unit will accommodate interconnection of OSP cables to building cables.

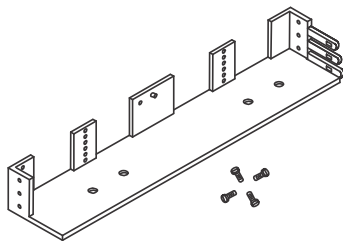
1. Remove knockout for cable entry from the right side of the WBE-FXC-048 unit.
2. Install cable strain relief grommet in the knockout opening.
3. Route the building cable through the grommet.
4. Tie wrap the cable to the top tie down bracket and tighten top cap of cable strain relief grommet.
5. Measure 40 inches (1016mm) from the end of the cable back to the tie down bracket.
6. Remove 38 inches (965mm) of jacket from the cable.
7. Install a connector on each fiber and terminate the connectors to the couplers on the bulk-head unit.
8. Starting from the connector end of the fiber, store fiber slack inside the fiber rings.
9. When all fiber has been stored, close the WBE-FXC-048 unit doors by first closing the left door and then closing the right door.
10. Turn plastic tabs to secure doors.



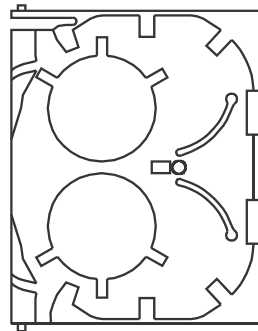
**Interconnection Cabling**

**Step 9 – Installing Splice Trays**

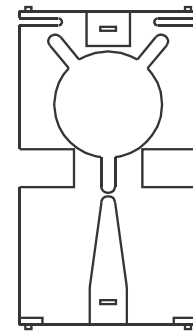
1. Verify applicable kit materials as shown.



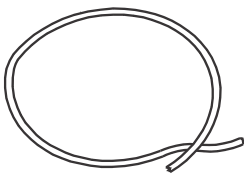
Holder with four mounting screws



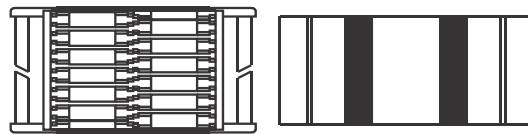
Splice tray



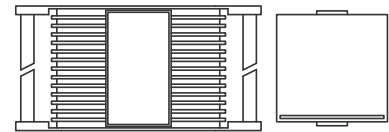
Adapter tray



White PVC tubing



Mechanical organizer and cover (D-181706 kit)

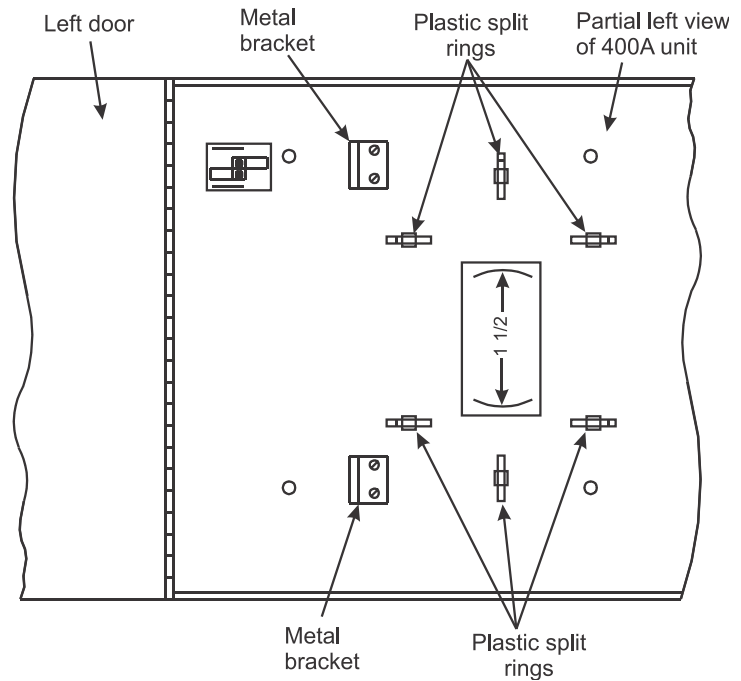


Fusion organizer and cover (D-181707 kit)

**2. Remove metal brackets and plastic rings.**

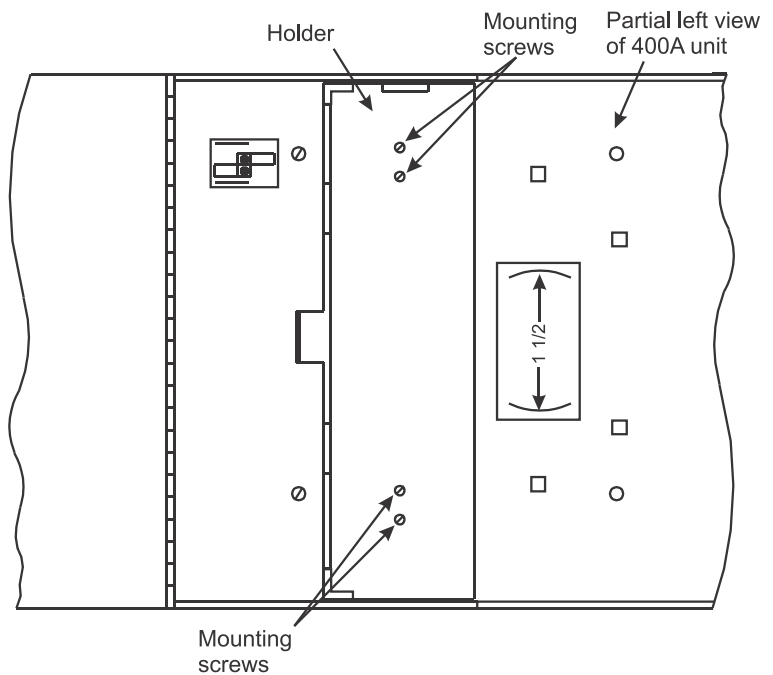
**Note:** If the WBE-FXC-048 unit does not contain the six plastic split rings or metal bracket, go to item 3.

- Remove and discard the six plastic split rings.
- Remove and discard the two metal brackets.



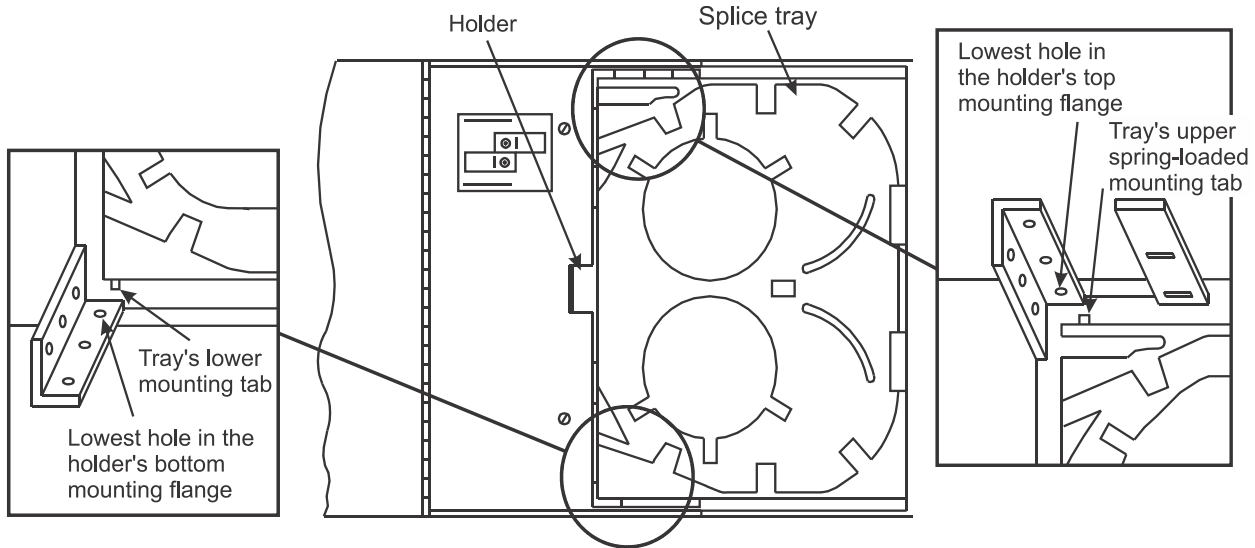
**3. Install holder.**

- Locate the holder and four mounting screws.
- Position the holder in the WBE-FXC-048 unit and secure with the four mounting screws.



#### 4. Install splice tray.

- Locate the splice tray and note the mounting tabs on upper and lower left edge of the tray.  
**Note:** The upper mounting tab is spring-loaded.
- Insert the lower tab of the tray into the lowest hole of the holder's bottom mounting flange.
- Press down on the tray's upper spring-loaded tab and insert it into the lowest hole on the holder's top mounting flange.



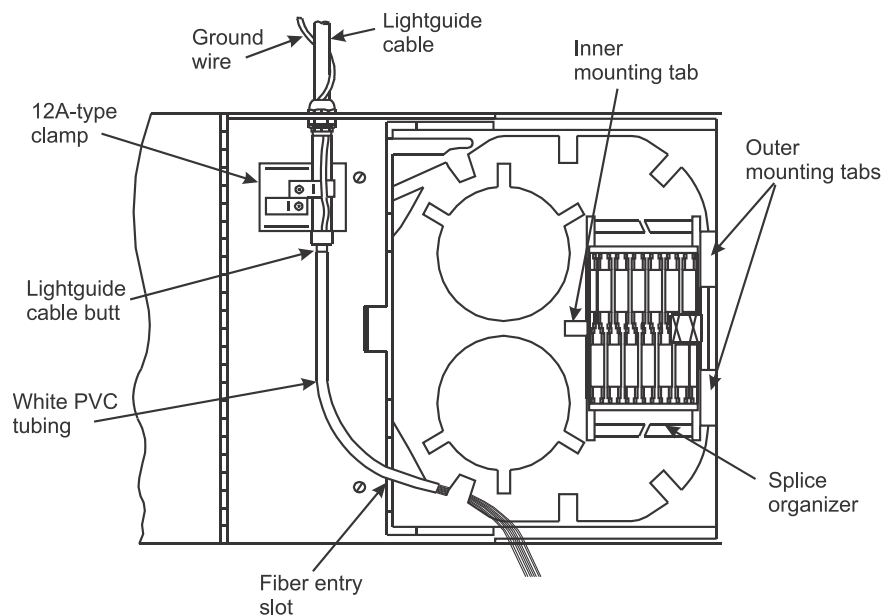
#### 5. Prepare and install cable.

- Prepare the end of the cable.

**Note:** Allow for 60 inches (1524mm) of cable fiber slack and leave ½ inch (13mm) of inner tubing from the cable sheath.

- Install the cable in the clamp and ground the cable, if required.
- Cut a length of the white PVC tubing long enough to reach from the cable end to 1 inch (25mm) inside the splice tray's entry slot.
- Insert a maximum of 12 fibers into the cut length of PVC tubing and slide the tubing up over the fibers to the butt of the cable.
- Place the PVC tubing into the splice tray's entry slot.

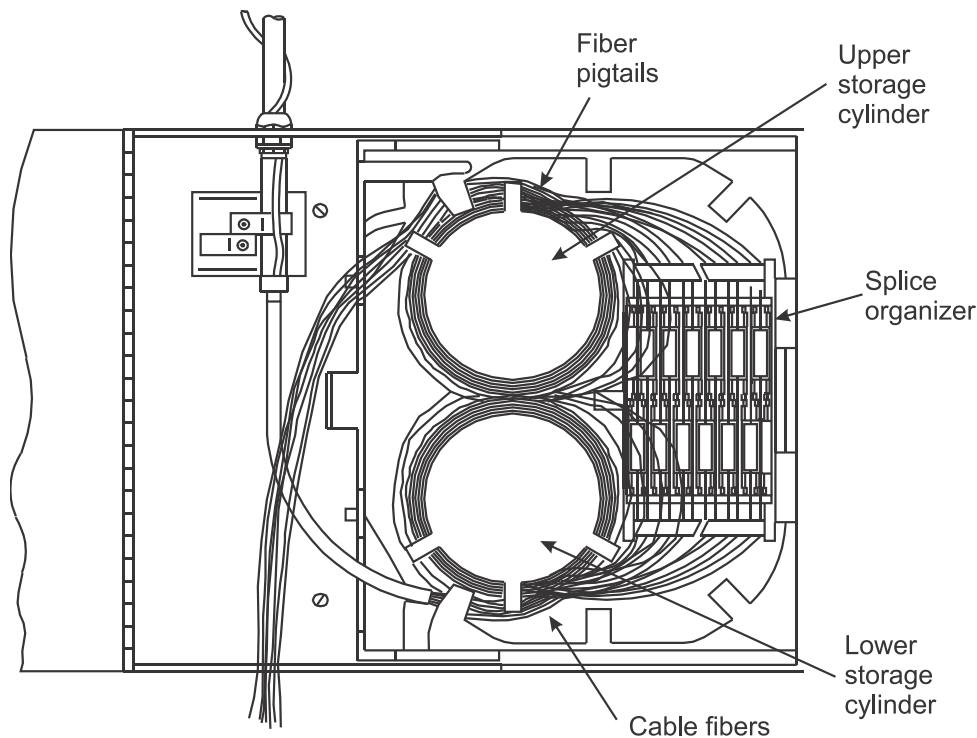
**Note:** The tubing must extend 1 inch (25mm) into the entry slot.



- Install splice organizer onto the splice tray by inserting the organizer under the tray's two outer mounting tabs, then gently pressing the opposite side of the organizer under the tray's inner mounting tab.

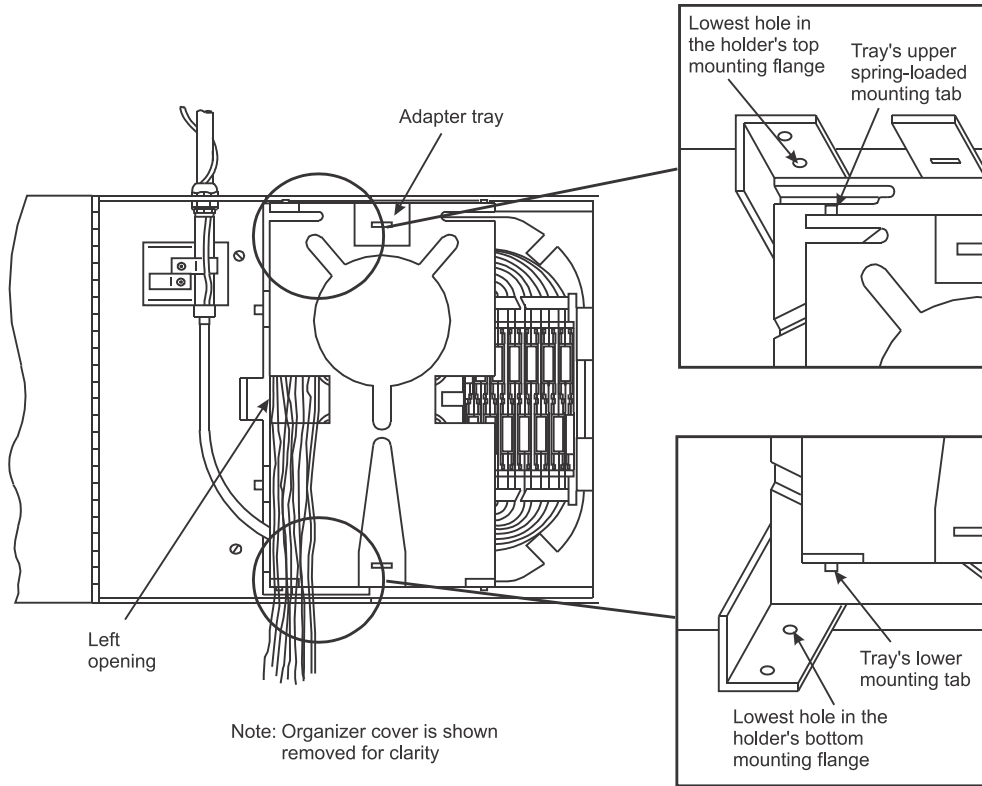
## 6. Store fiber slack.

- Splice the fiber pigtailed and cable fibers.
- Store the completed splices in the splice organizer and install the organizer cover.
- Starting at the PVC end of the cable fiber, wrap the fiber around the lower storage cylinder of the splice tray in a counterclockwise direction.
- Starting at the splice end of the pigtailed, store two slack loops around the upper storage cylinder of the splice tray in a counterclockwise direction.
- If a second splice tray is to be added to the WBE-FXC-048 unit, repeat items 4 through 6.



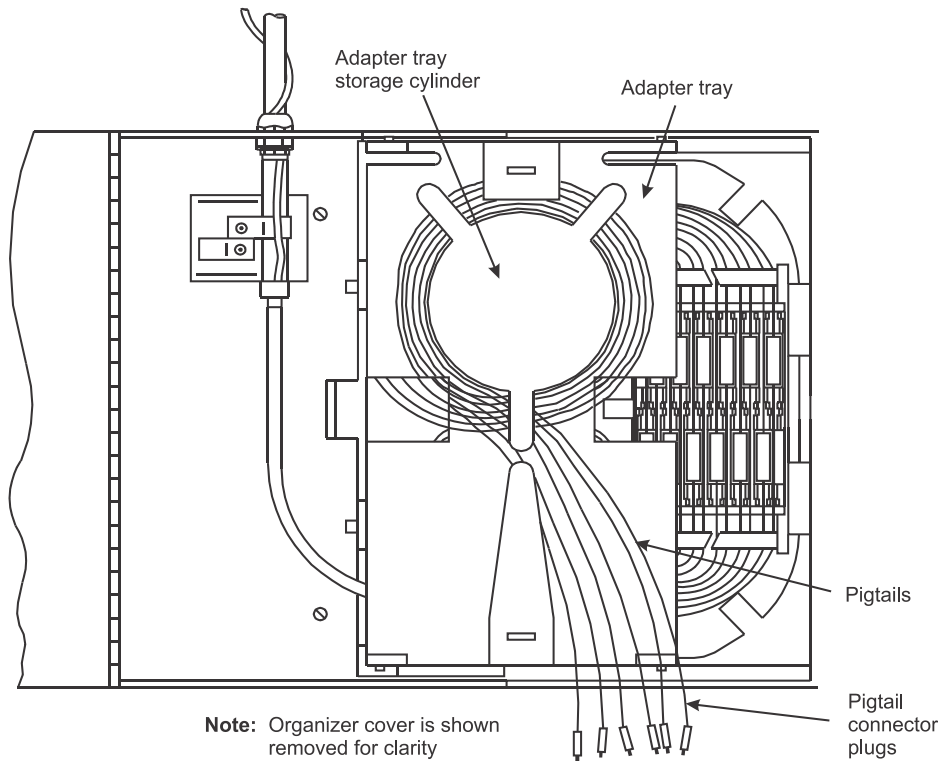
## 7. Install the adapter tray.

- Locate the adapter tray and note the mounting tabs on upper and lower left edge of the tray, shown on next page.  
**Note:** The upper mounting tab is spring-loaded.
- Route all pigtail fibers through the adapter tray's left opening.
- Insert the lower tab of the adapter tray into the lowest hole of the holder's bottom mounting flange.
- Press down on the tray's upper spring-loaded tab and insert it into the lowest hole on the holder's top mounting flange.



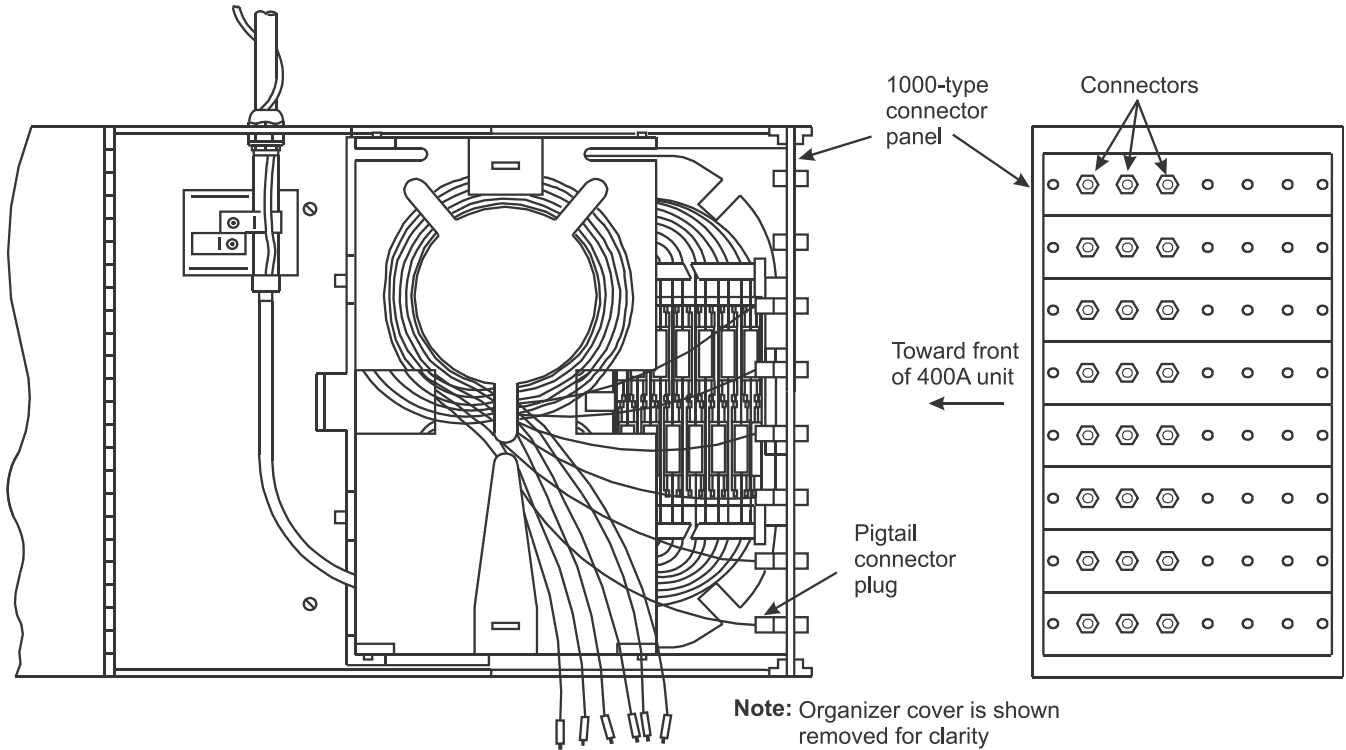
### 8. Store pigtail fiber slack.

- Store the pigtail fiber slack around the adapter tray's storage cylinder in a counterclockwise direction.



**9. Install connector panels and connect pigtail connector plugs.**

- Install connectors on the connector panel in only the first three positions.
- Install WBE-PNL connector panels into WBE-FXC-048 unit.
- Connect the pigtail connector plugs to the connector panels.



**Note:** Make sure the connectors are toward the front of the WBE-FXC-048 unit.