CORNING

# Pretium® Wall-Mountable Housing (PWH-02P/-04P/-06P/-12P and FZB-02P-JB)

p/n 003-724, Issue 5

## 1. PRECAUTIONS

**CAUTION:** Cleaved or broken glass fibers are very sharp and can pierce the skin easily. Do not let these pieces of fiber stick to your clothing or drop in the work area where they can cause injury later. Use tweezers to pick up cleaved or broken pieces of glass fibers and place them on a loop of tape kept for that purpose alone. **Good housekeeping is very important.**

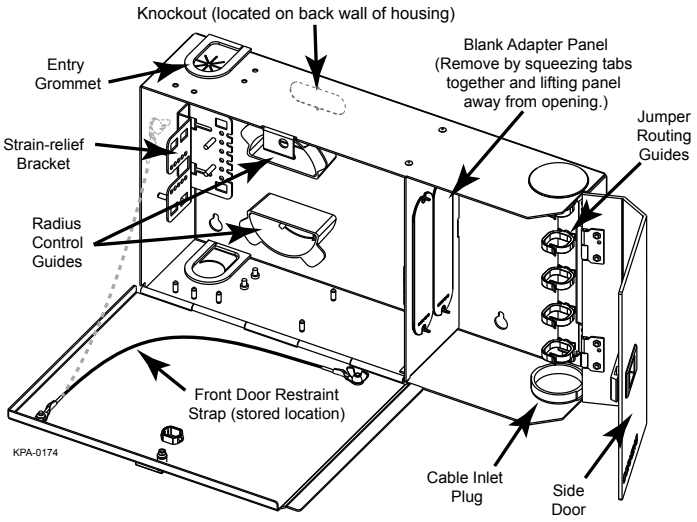
**WARNING:** DO NOT use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

**WARNING:** **Never look directly into the end of a fiber that may be carrying laser light.** Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

## 2. CARTON CONTENTS

- Pretium® Wall-Mountable Housing OR Fiber Zone Box (FZB-02P-JB)

- PWH-02P and FZB-02B-JP have:
  - (15 inches) edge grommet
  - (1) Laser warning label
  - (2) Fiber identification labels
  - (1) 8-32 lock nut
  - (1) M6 washer
  - (3) 1/8 x 4-inch cable ties
  - (1) U-shaped washer
- PWH-04P/-06P/-12P have:
  - (15 inches) edge grommet
  - (1) Laser warning label
  - (6) Fiber identification labels
  - (1) 10-24 wing nut
  - (1) 10-25 x 0.75 in carriage bolt
  - (2) M6 washers
  - (3) 1/8 x 4-inch cable ties
  - (1) U-shaped washer




**NOTE:** The components you receive may vary from those depicted depending upon the configuration ordered for your specific application.

## 3. TOOLS AND MATERIALS REQUIRED

- Phillips-head screwdriver
- Slotted screwdriver
- 5/16-inch (8 mm) socket or wrench
- 11/32-inch (9 mm) socket or wrench
- Needle-nosed pliers
- Pencil, pen or marker

## 4. ADDITIONAL MATERIALS (PURCHASED SEPARATELY)

May or may not be required depending on your application

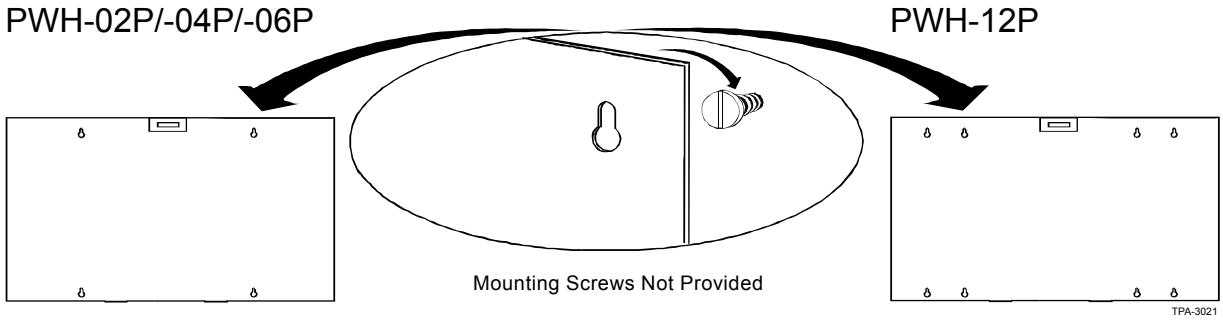
- Connector Panels (CCH-CPXX-YY)
- Mounting hardware appropriate for your installation
- Grounding kit (HDWR-GRND-KIT) for armored cable
- Buffer Tube Fan-Out kits (FAN-XX25-YY)
- Pigtailed Panels (CCH-CPXX-YY-P03ZZ)
- Pigtailed Modules (CCH-RMXX-YY-P03ZZ)
- Splice tray bracket (PWH-SPLC-02P/-04-12P)
- Reduced Length Splice Trays
- External Strain-Relief (PWH-STRNRLF-KIT)
- Plug & Play® trunk strain-relief bracket (PWH-RJSR)
- Hardware locking kit (HDWR-LOCK-KIT)

## 5. MOUNTING

The PWH may be mounted directly to a wall. An optional wall standoff kit, (purchased separately), may be used for mounting to allow cable routing between the cabinet and the wall. The wall standoff kit may be installed following instructions provided with the kit.

**Step 1:** When mounting the PWH directly to a wall, select a vertical surface. The surface should be flat so that the PWH won't warp when it is secured to the wall.

**Step 2:** Hold the unit in position on the wall and mark the hole locations with a pencil, pen, or marker.




- Mounting holes for the -02P units are:

L : 12 in (30.48 cm) H: 7 1/4 in (18.42 cm)

- Mounting holes for both the -04P and -06P units are:

L : 16 in (40 cm) H: 11 1/8 in (28.26 cm)

- Mounting holes for the -12P units are:

L : 16 or 24 in (40.6 or 61 cm) H: 11 1/8 in (28.26 cm)

Drive anchors or wood screws in at these locations leaving a 1/8-inch gap between the mounting surface and screw or bolt head. Hardware used for mounting depends on the mounting surface.

**Step 3:** Place the unit on the mounting hardware and tighten the hardware.

## 5.1. On a Slack Storage Housing

**Step 1:** Remove the knockouts from the front of the SSH and from the rear of the PWH to allow cable to be routed from the SSH to the PWH.

**Step 2:** Install screws in the locations leaving a 1/8-inch gap between the screw head and the SSH.

**Step 3:** Hang the PWH on the screws and tighten the screws.

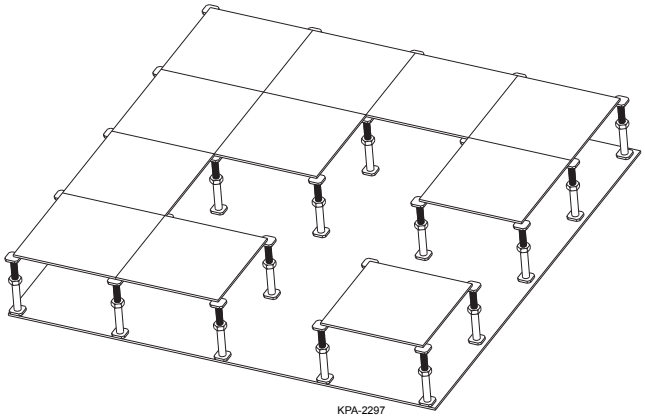
## 5.2. Below a Raised Floor (ONLY Applicable to FZB-02P-JB)

Only FZB-02P-JB meets Underwriter Laboratories approval for installation below a floor.

**Step 1:** Select an installation location and remove five adjacent floor tiles in a "+" pattern. The unit will be installed in the center of the "+."

**Step 2:** Remove stringers (not shown) from the tile location where the unit will be installed. These will be replaced after the unit is installed below the level of the stringers.

**Step 3:** The bottom of the unit will rest on the substructure; be sure there is enough depth for the top of the unit to be below the stringers.




## 6. PWH CENTER DOOR

**Step 1:** The unit's center door can be opened and secured at a 90 degree angle by attaching the cable from it to the housing. Avoid putting excessive weight on the door when using it as a shelf; doing so may cause the door to bend or break.

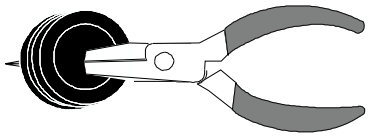
**Step 2:** It is possible to close the door without disconnecting the cable. When closing, make sure the cable doesn't get caught between the door and the housing or interfere with the fibers or connectors.

## 7. INSTALLING CABLE

**NOTE:** Fiber optic cable is sensitive to excessive pulling, bending, and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

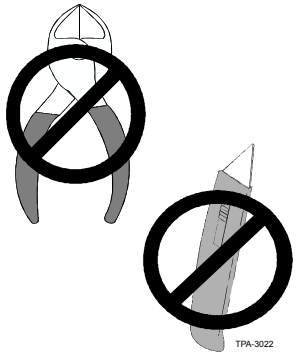
Pierce the grommet in the top or bottom of the housing and thread the cable through the hole.

Grommet Preparation



Use a pair of needle-nose pliers or sharp pencil to pierce the grommet. Do not use a knife or cutters.

Grommets must fit tightly to prevent the intrusion of insects, water, dirt, or foreign particles. A knife may cut all the way through the grommet, and cutters may cut a hole that is too large for a tight fit.



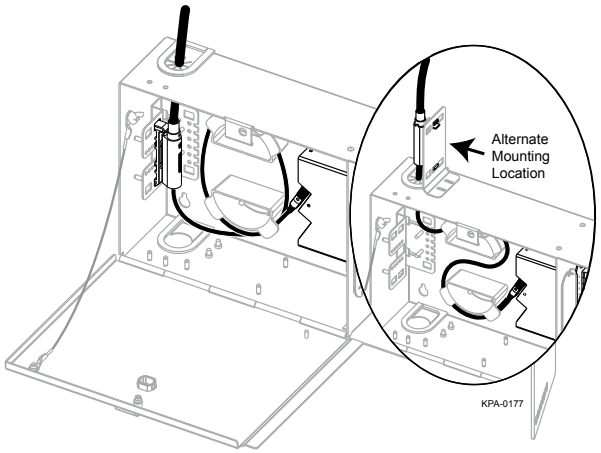
## 7.1. Installing Cable Using Plug & Play® System Connector Modules

Internal strain-relief is dependent upon the outside diameter of the cable furcation plug; when the plug is too large (greater than size 2) to fit through the cable entry grommet, a separate strain-relief bracket (p/n PWH-RJSR, purchased separately) is required. The internal bracket will hold up to two size 0 furcation plugs or one size 1 plug. Choose the strain-relief location and routing configuration that best fits your application.

**Step 1:** Feed the fiber leg with the MTP® connector and the cable furcation plug through the appropriate grommet. Insert the feet of the mounting clip into the square mounting holes on the strain-relief bracket.

**Step 2:** Slide the Plug & Play® System connector module into the telco compartment from the premises side of the unit. Secure the module with the nylon fasteners.

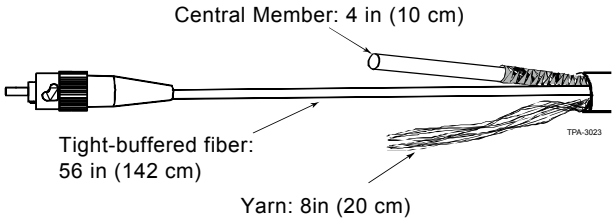
**Step 3:** Loosely route the MTP connector fiber leg around the radius control guides and plug the connector into the back of the connector module. The fiber routing configuration is dependent upon the mounting location of the furcation plug on the cable.



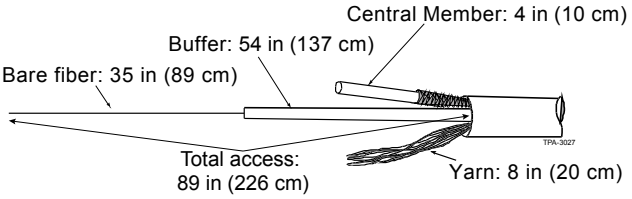

## 7.2. Installing cable to be spliced or connectorized

### 7.2.1 Cable access

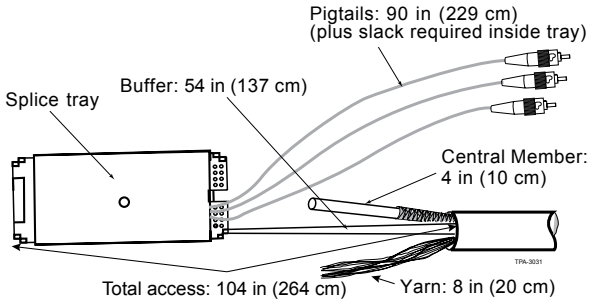
Perform cable sheath removal steps as specified in instructions for the cable you are installing. Suggested lengths are illustrated.




Buffer tube fan-out applications




Pigtail splicing applications



### 7.2.2 Strain-relief

**IMPORTANT:** If you are installing outside plant cable or temperature fluctuates widely along any part of the cable, the strength members of the cable must be strain-relieved. Failure to do so may result in damage to the cable as temperature varies. Other situations only require the cable to be strain-relieved by sheath retention only.

#### Cable sheath strain-relief

**Step 1:** Trim strength member and aramid yarn flush with the outer jacket.

**Step 2:** Secure the cable to the strain-relief bracket with two cable ties.

**NOTE:** If external cable sheath strain-relief is required, purchase PWH-STRNRLF-KIT and follow the instructions provided.

#### Strength member strain-relief

##### PWH-02P

**Step 1:** Secure the cable to the strain-relief bracket with two cable ties.

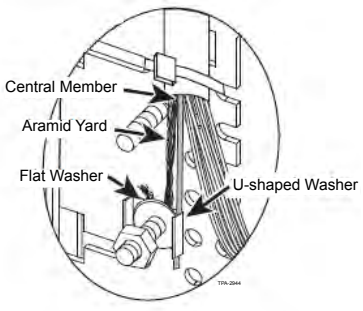
**Step 2:** Wrap the aramid yarn around the top stud for bottom entry or bottom stud for top entry in a clockwise direction.

**Step 3:** Install the U-shaped washer onto the stud.

**Step 4:** Insert strength member on top of the U-shaped washer.

**Step 5:** Place the flat washer over the strength member and secure with the locknut.

**Step 6:** Trim excess aramid yarn and strength member.




##### PWH-04P/-06P/-12P

**Step 1:** Secure the cable to the strain-relief bracket with two cable ties.

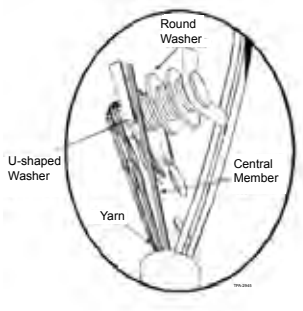
**Step 2:** Insert the carriage bolt through the strain-relief bracket and wrap the aramid yarn around it in a clockwise direction.

**Step 3:** Install the U-shaped washer, two flat washers and the wing nut as shown.

**Step 4:** Insert the strength member between the U-shaped washer and the first flat washer.

**Step 5:** Tighten wing nut.

**Step 6:** Trim excess aramid yarn and strength member.



## 7.3. Installing Cable Using Buffer Tube Fan-out (BTF) Kits

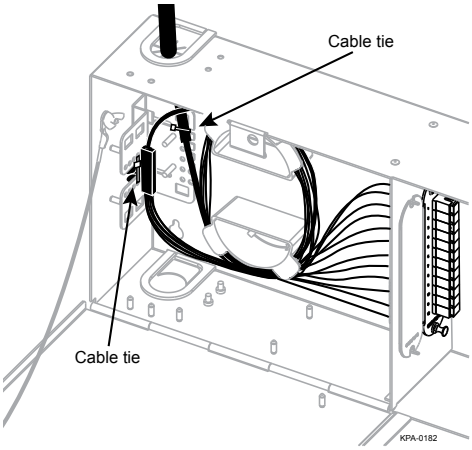
**Step 1:** Access the cable as specified for the cable you are installing.

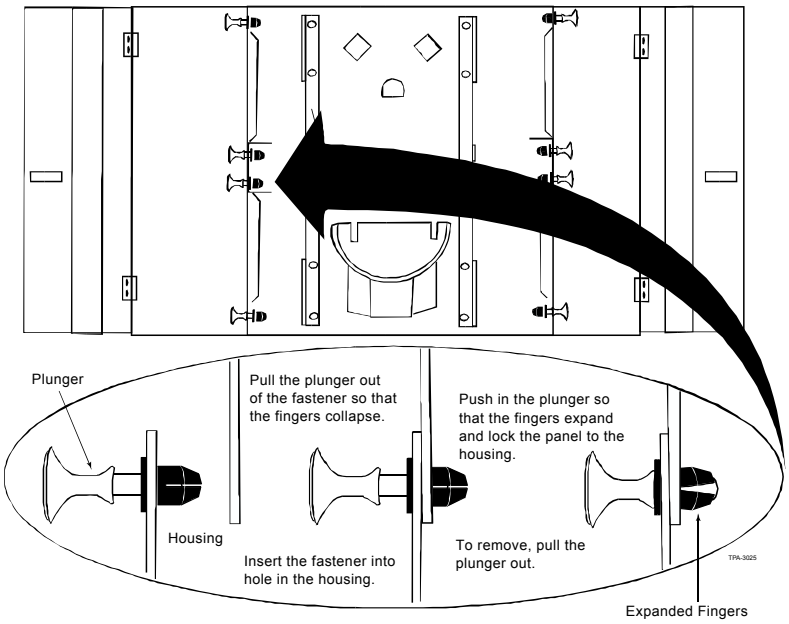
**Step 2:** Install the BTF assemblies (p/n FAN-XX25-YY, purchased separately) on the buffer tubes as described in the instructions supplied with the BTF kits buffer tube.

**Step 3:** Loop the buffer tube once around the radius control guides and slide the BTF body into the strain-relief bracket. Install a cable tie to secure the body.

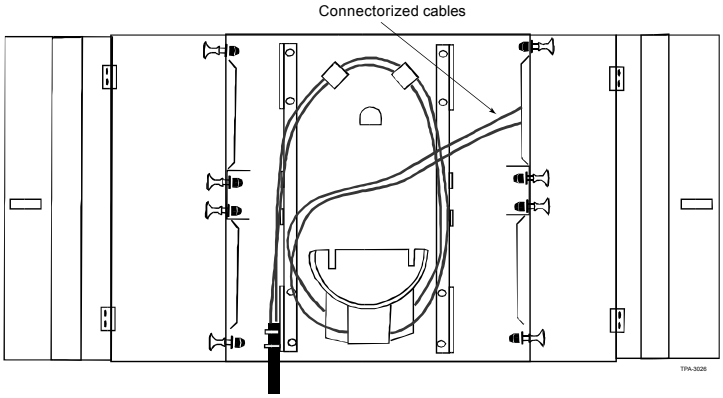
**Step 4:** Route the connectorized fibers behind the plastic tabs on the radius control guides.

**Step 5:** Remove blank panels and install connector panels.




**Step 6:** Once the connectors have been terminated, route the fiber using the routing pattern illustrated.




**Step 7:** Remove dust caps from the connectors and adapters into which they will be mated. Clean the connector end faces and the adapter per standard company practices. Mate the connectors in the adapters.

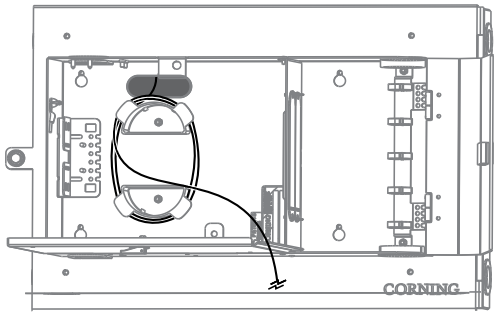
## 7.4. Installing Cable from a Slack Storage Housing (SSH)

**Step 1:** Use a can nut driver to open the door of the SSH unit and access the fibers in it.

**Step 2:** Bring the fibers from the SSH unit into the wall-mount housing through the knockout openings and carefully secure the door of the SSH unit in the closed position.

**Step 3:** Connectorize the fibers and route them behind the plastic tabs on the radius guides.

**Step 4:** Refer to Section 7.3, Steps 5 - 7.



KPA-0825

## 7.5. Installing Cable Using Reduced Length Splice Trays

A splice tray bracket kit (p/n PWH-SPLC-02P/-04-12P, purchased separately) is required to install splice trays. Follow instructions provided with the splice tray bracket kit.

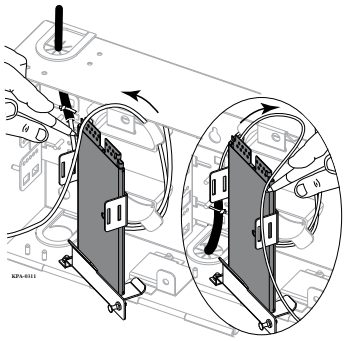
### 7.5.1 Install Splice Tray

Temporarily position the splice tray in the holder to determine adequate fiber slack.

#### Route Buffer Tubes

**Step 1:** Route the buffer tube in a counterclockwise direction around the radius control guides to the splice tray.

**Step 2:** Mark the cable where it will enter the splice tray.


KPA-0111

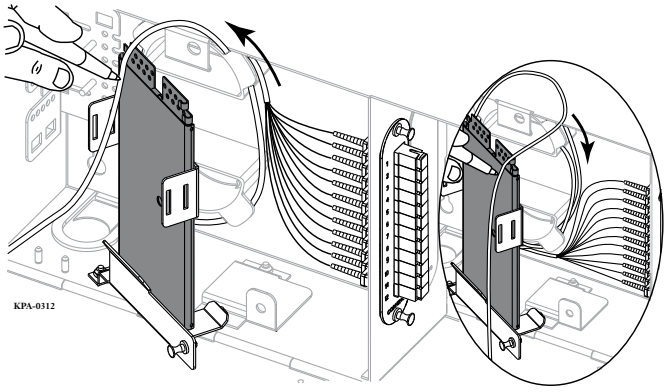
**IMPORTANT:** If the cable enters the PWH from the bottom, route the buffer tube in a clockwise direction around the radius control guides.

#### Route Pigtail Fibers

**Step 1:** Remove the blank panels from the PWH by squeezing the tabs together and lifting the panel away from the opening. Install factory-pigtailed panels or modules.

**Step 2:** Route pigtails in a counterclockwise direction around the radius control guides to the splice tray.

**Step 3:** Mark the pigtail where it will enter the splice tray.


KPA-0312

**IMPORTANT:** If the cable enters the housing from the bottom, route the pigtail around the guides in a clockwise direction.

### 7.5.2 Splice

This procedure is to be used in conjunction with the instructions provided with the splice tray.

**Step 1:** Follow instructions provided with the splice tray to remove cable buffer and jacket and secure them to the splice tray.

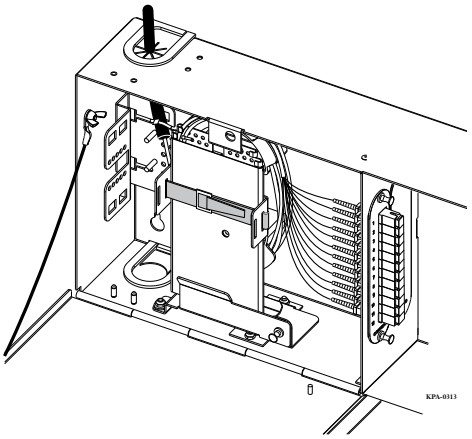
**Step 2:** Move the splice tray and fibers to the splicing equipment. Splice fibers as described in the instruction provided with your splicing equipment.

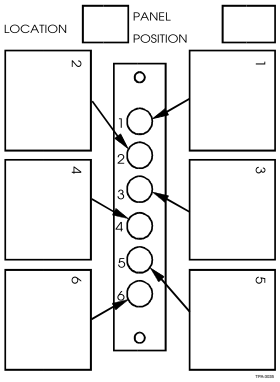
**Step 3:** Route fiber slack around the radius control guides.

**Step 4:** Install the splice tray into the holder.

**Step 5:** Swing the splice tray holder against the bracket and secure it to the bracket using the nylon fastener.

**Step 6:** Once all splicing is complete, secure the splice trays into the holder using the hook-and-loop strap.




## 8. DOCUMENTATION

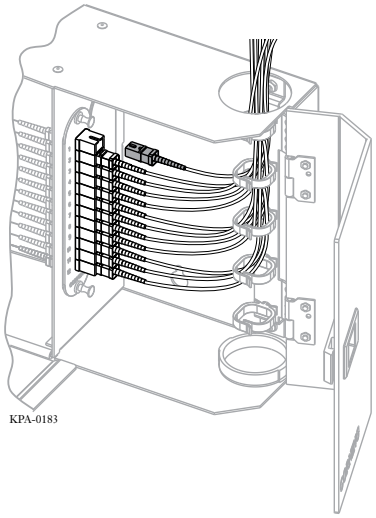
Attach the labels provided in the hardware kit to the inside of the telco door. Record fiber identification information appropriately. Accurate recordkeeping is imperative to an organized installation.

## 9. INSTALL JUMPERS

**Step 1:** Remove dust caps from the connectors and adapters into which they will be mated. Clean connector end faces and adapters per standard company practices and insert connectors into adapters.

**Step 2:** Remove the cable inlet plugs. If desired, attach the provided edge grommet to the opening.

**Step 3:** Secure the jumpers in the routing clips in the premise compartment. Maintain appropriate bend radius.




## 10. SECURE THE UNIT

Close the center door and secure with the swell latch. Then close the side doors and ensure the slide latches engage to secure the doors.

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