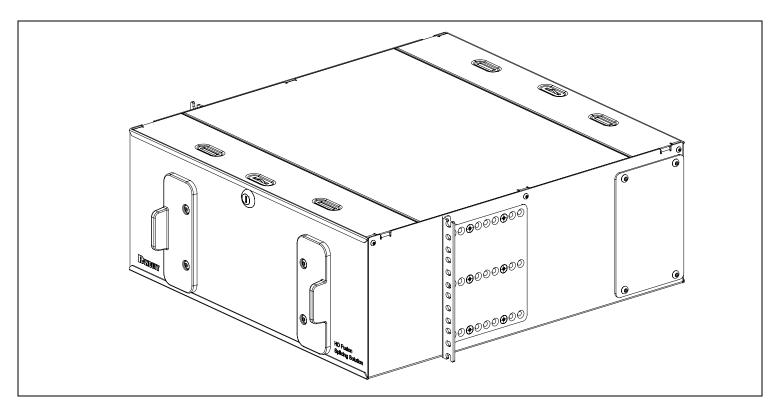


HD Fusion Splicing Enclosure

Part Number(s): FRMHSS-4RU

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1.0 CONTENTS

- 1 Enclosure
- 1 Inner Cable Entry Bracket
- 1 Outer Cable Entry Bracket
- 1 Cable Guide
- 1 Splicing Tray Holder
- 1 Cable Entry Cover
- 1 Tak-Ty (Hook and Loop) Strap
- 8 #12-24 x 1/2" screws
- 8 M6 x 1.0 x 15mm screws
- 8 #10-32 x 5/16" screws
- 2 #6-32 x 1/4" screws
- 4 #6-32 thumb screws
- 30 Cable Management Clips

2.0 SAFETY PRECAUTIONS

1. SAFETY GLASSES

WARNING: IT IS STRONGLY RECOMMENDED THAT SAFETY GLASSES BE WORN WHEN HANDLING BARE OPTICAL FIBER. THE BARE FIBER IS VERY SHARP AND CAN EASILY DAMAGE THE EYE.

2. ISOPROPYL ALCOHOL

WARNING: ISOPROPYL ALCOHOL IS FLAMMABLE. CONTACT WITH THE ALCOHOL CAN CAUSE IRRITATION TO THE EYES. IN CASE OF CONTACT WITH THE EYES, FLUSH WITH WATER FOR AT LEAST 15 MINUTES. ALWAYS USE ISOPROPYL ALCOHOL WITH PROPER LEVELS OF VENTILATION. IN CASE OF INGESTION, CONSULT A PHYSICIAN IMMEDIATELY.

3. DISPOSAL OF BARE FIBERS

WARNING: PICK UP AND DISCARD ALL PIECES OF BARE FIBER WITH STICKY TABS. DO NOT LET CUT PIECES OF FIBER STICK TO CLOTHING OR DROP IN THE WORK AREA WHERE THEY ARE HARD TO SEE AND CAN CAUSE INJURY.

4. LASER LIGHT PROTECTION

USE OF CONTROLS OR PERFORMANCE OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. THE POWER OF EMISSION OF THE LASER BEAM EXCEEDS 1MW IN CLASS II AND IS LESS THAN 5MW IN CLASS IIIA/3R, SO THE FOLLOWING WARNINGS MUST BE FOLLOWED TO AVOID INJURY:

- NEVER POINT THE LASER INTO THE EYES OF OTHERS.
- DO NOT STARE DIRECTLY AT THE LASER BEAM.
- DO NOT SET UP TOOL TO WORK AT EYE LEVEL OR OPERATE THE TOOL ON A REFLECTIVE SURFACE AS THE LASER COULD BE PROJECTED INTO YOUR EYES OR THE EYES OF OTHERS.

ALWAYS TURN THE LASER OFF WHEN IT IS NOT IN USE OR IS LEFT UNATTENDED FOR A PERIOD OF TIME. REMOVE THE BATTERIES WHEN STORING FOR AN EXTENDED PERIOD OF TIME TO AVOID DAMAGE TO THE TOOL SHOULD THE BATTERIES DETERIORATE. NEVER LOOK INTO THE PATH OF THE VISUAL FAULT LOCATOR OR ANY OTHER LASER BEAM.

NEVER LOOK INTO THE END OF A FIBER WHICH MAY HAVE ANY VISUAL FAULT LOCATOR, OR ANY OTHER LASER, COUPLED TO IT.

NEVER LAUNCH ANY VISUAL FAULT LOCATOR INTO ACTIVE EQUIPMENT OR MICROSCOPE.

MAKE SURE THAT THE END OPPOSITE THE VISUAL FAULT LOCATOR IS NOT CONNECTED

TO ANY ELECTRONICS OR ACTIVE EQUIPMENT DURING TERMINATION.

5. CABLE HANDLING

WARNING: FIBER OPTIC CABLE CAN BE DAMAGED BY EXCESSIVE PULLING, TWISTING, CRUSHING OR BENDING STRESSES. CONSULT THE APPROPRIATE SPECIFICATION SHEETS AS PROVIDED BY YOUR CABLE VENDOR. ANY DAMAGE MAY DECREASE OPTICAL PERFORMANCE.

6. SHEATH REMOVAL

CONSULT CABLE MANUFACTURER'S INSTRUCTIONS FOR PROPER SHEATH REMOVAL METHOD FOR THE CABLE IN USE. CONSULT SPLICE MANUFACTURER'S INSTRUCTIONS FOR RECOMMENDED PRECAUTIONS,



LASER LIGHT

AVOID DIRECT EYE EXPOSURE

<5mW @ 635nm

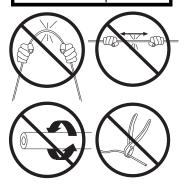
CLASS IIIa/3R LASER PRODUCT

Complies with:

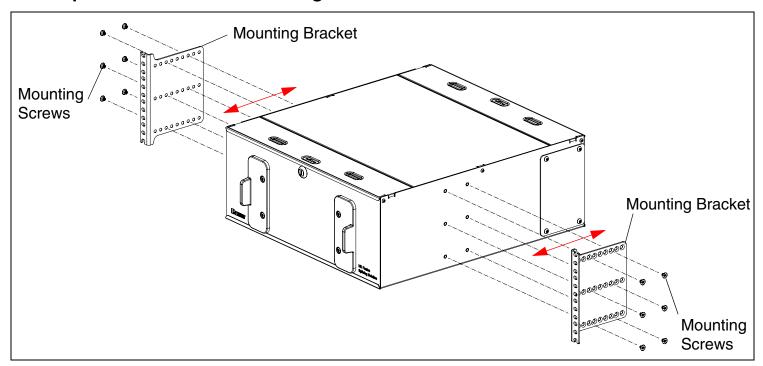
IEC/EN 60825-1:2001;

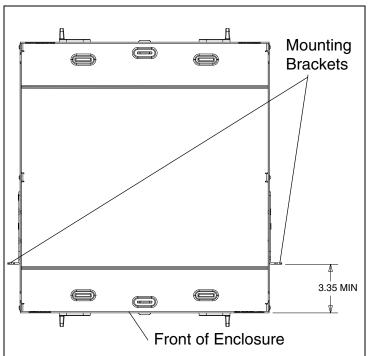
and also with 21 CFR 1040.10 and
1040.11 with Laser Notice No. 50.

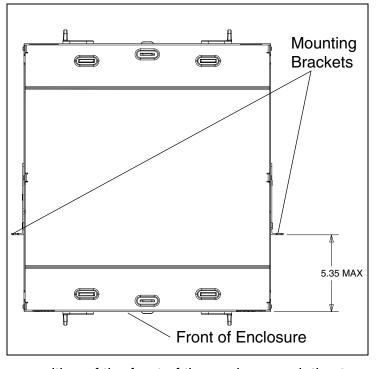
AVOID EXPOSURE - Laser Light is emitted from the aperture below or the end of the patch cord.



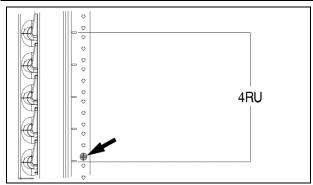
3.0 Preparation and Rack Mounting





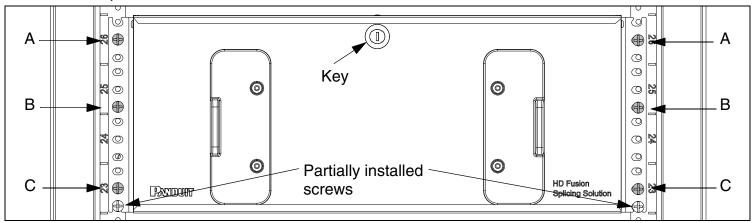


If desired, mounting brackets can be adjusted to change position of the front of the enclosure relative to the equipment rails. Brackets are adjustable in 0.50" increments,



If RU space is open above the splicing enclosure location, partially install two screws, one on each side of the rack, in the bottom hole location of the rack position desired. These partially installed screws will assist in mounting the splicing enclosure to the rack.

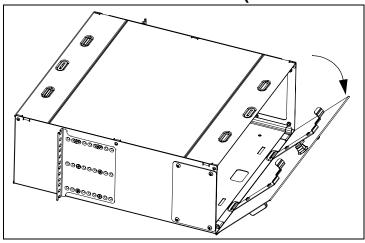
If RU space is <u>not</u> open above the splice enclosure location, do not pre-install screws. Place the splicing enclosure into position and secure with a minimum of 6 screws.

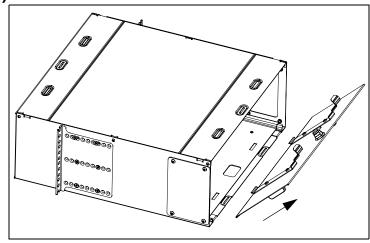


For pre-installed screws mounting method, place the splicing enclosure into rack and allow the splicing enclosure mounting brackets to rest on the partially installed screws.

Install the remaining screws and tighten all to the enclosure. Use a minimum of six screws, with one screw in the second from the top screw slot (A), one in the second from the bottom screw slot (C), and one about the middle screw slot (B), on each side.

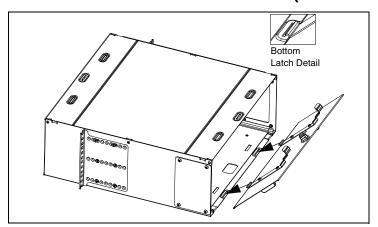
4.0 Access Panel Removal (Front and Rear)

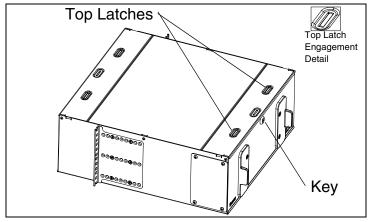




Turn key clockwise to unlock. Grip both handles, then rotate access panel downward, away from the enclosure top cover, until the top latches disengage. Once the top latches are disengaged, lift the access panel up to pull the bottom latches out of the mating holes.

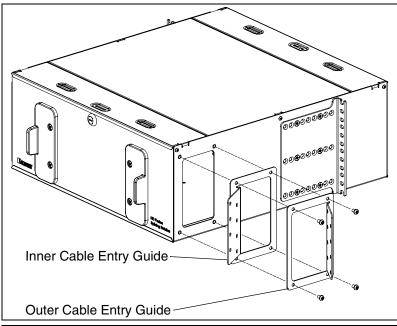
5.0 Access Panel Reinstallation (Front and Rear)



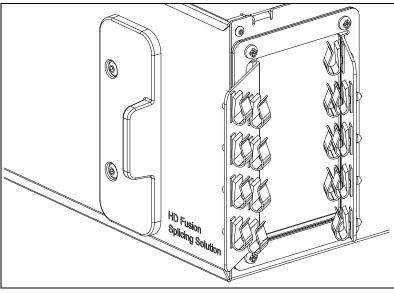


Insert the bottom latches into the mating holes. Rotate the access panel toward the enclosure until the top latches engage in the mating holes. Turn key counterclockwise to lock.

6.0 Cable Entry Bracket Installation

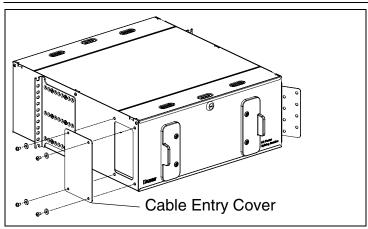


The cable entry brackets, which secure the incoming and outgoing cables, can be attached to either side of the enclosure. However, both the incoming and outgoing cables must enter the enclosure from the same side. Attach the inner and outer cable entry guides using four 10-32 x 5/16 screws as shown.



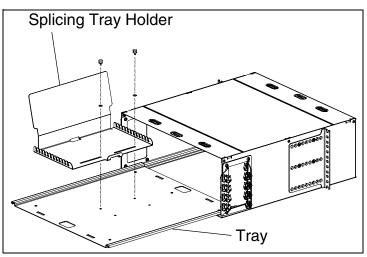
Install cable management clips to the mounting holes of the inner and outer cable entry guides. *PANDUIT* type PMCC38H25-C cable clips are provided with the kit, but any other *PANDUIT* cable management accessory, with a push mount for a 1/4" panel hole, can also be used. Note that, depending on the application, not all 16 mounting positions may be needed. To see *PANDUIT'S* line of cable management accessories go to: https://www.panduit.com/en/products/wire-routing-management-protection/cable-conduit-supports/cable-conduit-clamps-clips.html

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

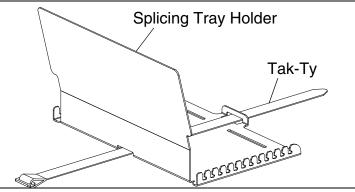


Attach the cable entry cover to the unused opening with $#10-32 \times 5/16$ " screws and #10 washers as shown.

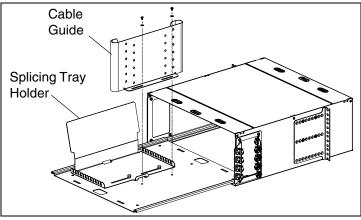
7.0 Installing the Splicing Tray Holder and the Cable Guide



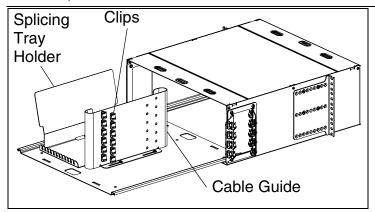
Pull out the tray, either through the front or back of the enclosure. Install the Splicing Tray Holder, using two thumbscrews and two #6 washers, on the opposite side of the enclosure from the cable entry.



Thread the Tak-Ty strap, plain side up as shown, through the slots of the splicing tray holder. The Tak-Ty will be used to secure the splicing trays.



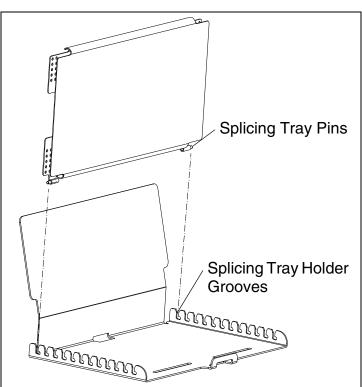
Install the cable guide as shown, using two #6-32 \times 1/4" screws and two #6-32 washers.



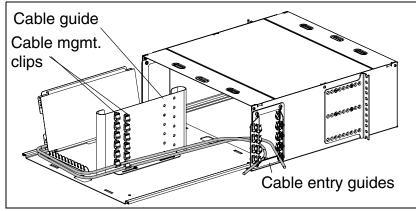
Install cable management clips to the rear mounting holes of the cable guide. *PANDUIT* type PMCC38H25-C cable clips are provided with the kit, but any other *PANDUIT* cable management accessory, with a push mount for a 1/4" panel hole, can also be used. Note that, depending on application, not all 12 cable mounting positions may be needed.

8.0 Installing Splicing Trays

Use only FST144R or FST48 splicing trays. Follow the splicing tray instructions to install and secure fiber and fiber splice protectors to the splicing tray. The cables should enter and exit the splicing tray along the bottom edge (edge near the pins). It is recommended that the fiber should enter the same side of the tray as it does the enclosure. For example, if the fiber enters the enclosure on the right side (when viewed from the front), it should also enter the splice tray from the right side (when viewed from the pin side down).

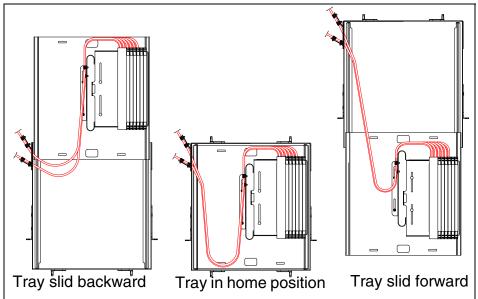


Install the splicing trays into the tray holder, as shown, by inserting the pins of the splicing tray into the grooves of the splicing tray holder. Once the pins are fully seated, allow the splicing tray to rest against the rear plate of the splicing tray holder. Install subsequent splicing trays in the same manner. Note: Refer to the splicing tray instructions for fiber routing options.

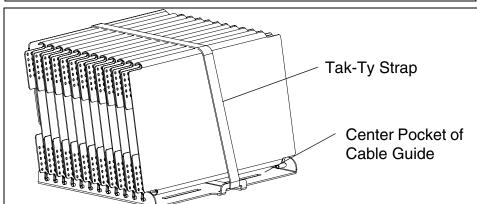


Route the incoming and outgoing cables as shown in the image. Secure the cables to the cable management clips in the cable guide and cable management clips in the cable entry guides. Note that it is easier, but not necessary, to secure the incoming cables to one cable entry bracket and the outgoing cables to the other cable entry guide.

For Technical Support: www.panduit.com/resources/install maintain.asp

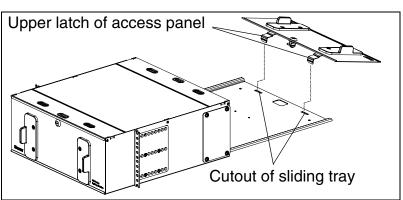


Arrange the cable with just enough slack, to allow the sliding tray to slide out both forward and backward. If the cable tray has too much slack, it will interfere with the installation of the removable panels. Note that, for ease of access, the splicing tray holder can be repositioned, by loosening the two thumb screws.

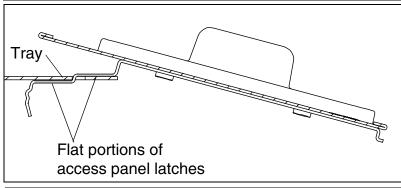


Once all the splice trays are installed, secure them by cinching down the Tak-Ty strap. The slicing tray label sheets, provided with the splicing trays, can be stored in the center pocket of the cable guide.

9.0 Using the Access Panel as a Splicing Tray Work Surface

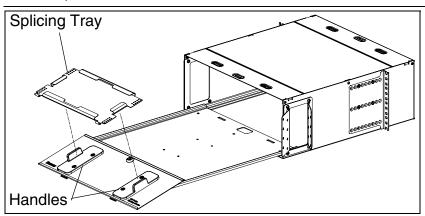


The front and rear removable access panels can be mounted onto the sliding tray by inserting the upper latches of the access panels into the cutouts of the sliding tray.

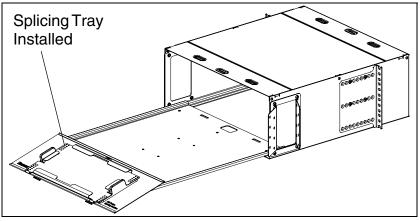


The flat portion of the access panel latches must rest of the sliding tray, as shown in the image.

For Technical Support: www.panduit.com/resources/install maintain.asp

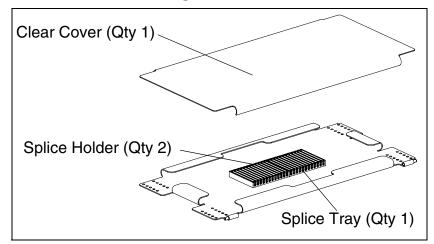


The handles of the removable panel serve as a nest for the splicing tray as shown in the image.

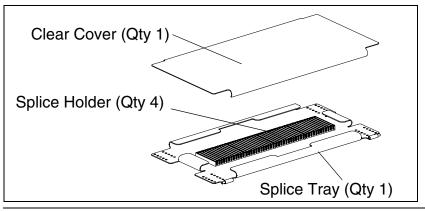


Splicing Tray Installed on Removable Access Panel

FST144R



FST48



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

10.0 SPLICE TRAY CONTENTS

1 pc - Splice Tray (FST144R or FST48)

1 pc - Label Card

10 pcs - Cable Tie

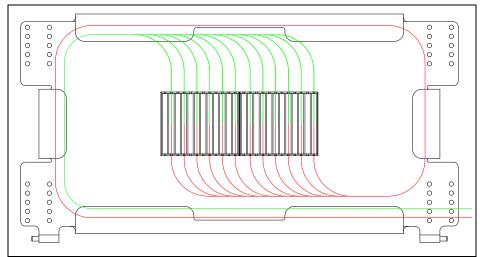
2 pcs - Grommet

6 in - Heat Shrink Tubing

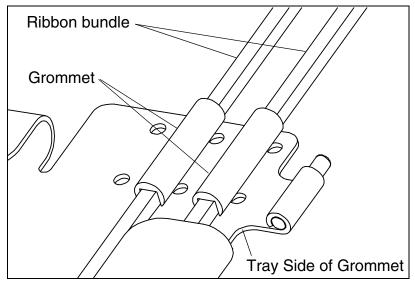
11.0 INSTALLING SPLICE TRAY AND FIBER

The fiber can enter the splice tray from any of the four corners.

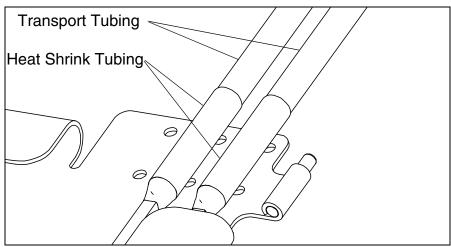
FST144R - Ribbonized Fiber



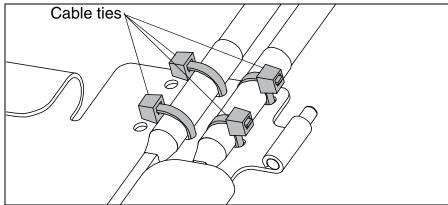
Route the fiber as shown in the image. For 12 fiber ribbon, install splice protector in every other mounting groove of the splice holder. Splice protectors as well as heat shrink tubing and transport tubing, as described later, should be placed over the fiber prior to splicing.



Place the grommets over the ribbons as shown. Note that each grommet will accommodate up to 12 ribbons.



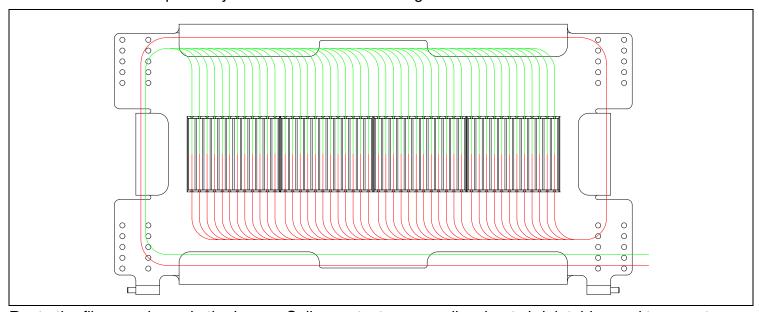
Cut 2" sections of heat shrink tubing. Heat shrink the heat shrink tubing over the grommet, part of the exposed ribbon (on the tray side of the grommet) and transport tubing to secure the fiber to the transport tubing. The *Panduit* SE25PSC-TR0 braided sleeving is the recommended transport tubing.



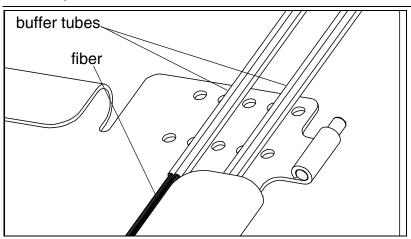
Using cable ties, secure the fiber to the splice tray as shown.

FST48 - Loose Tube Fiber

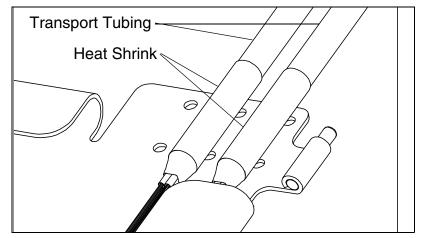
Note that the FST48 splice tray is not recommended for tight buffered fiber.



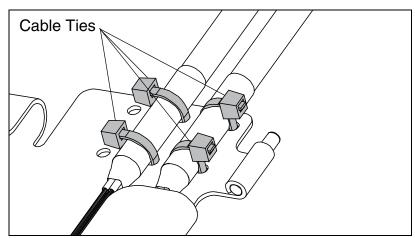
Route the fiber as shown in the image. Splice protectors as well as heat shrink tubing and transport tubing, as describer earlier, should be placed over fiber prior to splicing.



The incoming and outgoing fiber should be grouped together as shown. The buffer tubes will be secured directly to the tray and should be positioned over the cable tie holes as shown. The grommets are not required in this arrangement.



It is recommended that transport tubing is used to keep the buffer tubes bundled. Cut 2" sections of heat shrink tubing. Heat shrink the heat shrink tubing over the exposed buffer tubes and transport tubing to secure the fiber to the transport tubing. The *Panduit* SE25PSC-TR0 braided sleeving is the recommended transport tubing.



Using cable ties, secure the fiber to the splice tray as shown.

For Instructions in Local Languages and Technical Support:

www.panduit.com/resources/install_maintain.asp



E-mail: techsupport@panduit.com Phone: 866-405-6654