



# Poli-MOD Patch and Splice Module Installation Instructions

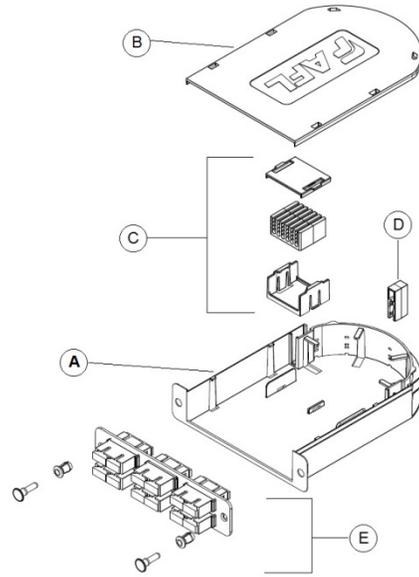
This document provides installation instructions for the Poli-MOD Patch and Splice Module. General fiber preparation instructions are included within this document for inside plant, outside plant, air-blown, and ribbon cable. Please select the appropriate fiber type for the intended application.

- Notes:
- 1) The DAS Poli-MOD application will also utilize the installation procedure outlined in this document.
  - 2) The Splice-Only Poli-MOD contains a blank faceplate assembly allowing the module to be used as a stand-alone splice tray.

## Materials

### Package Content

Ref	Item Description	Quantity
A	Splice & Termination Module, Base	1
B	Clear Plastic Module Cover	1
C	Splice Holder Kit	1
D	Cable Mounting Clip Kit	1
E	Faceplate Assembly	1
	Splice Sleeve Kit	1
	Pigtail Kit	1
	Furcation Tube	2
	Installation Instruction	1

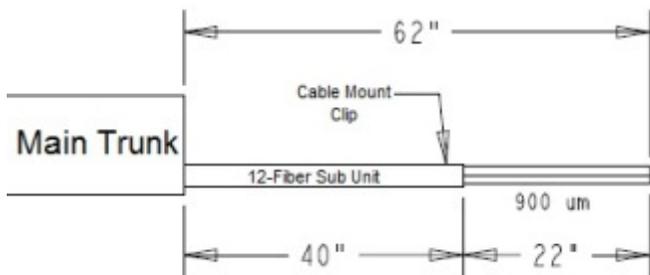


**Required Tool:** Fusion Splicer, Ring Cutter, Sheers, Tape Measure

## Incoming Fiber Preparation

The following images are to be used as templates representing the recommended lengths for the fiber preparation and installation process.

### Inside Plant (ISP)

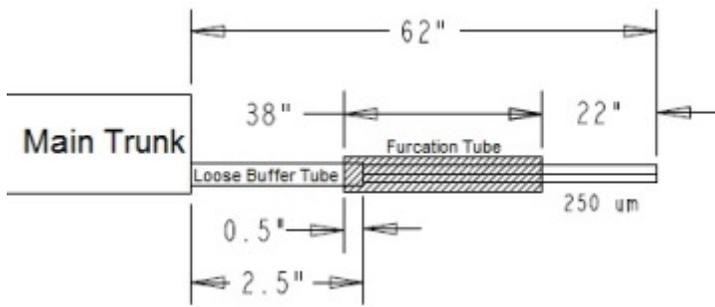


1. Measure and ring cut 62" from the end of the main cable trunk.
2. Remove 4-6" of cable sheath to expose the rip cord and sub-units.
3. Split the cable sheath by pulling the rip cord towards the end of the cable. Remove the split cable sheath.
4. With sub-units exposed, measure and ring cut 22" from the end of each sub-unit.
5. Remove any loose aramid yarn and rip cords.

Note: ISP Cable will constitute the majority of applications; therefore it will be the primary focus of this instruction set. However, the other cable types will follow a very similar process.

## Incoming Fiber Preparation (continued)

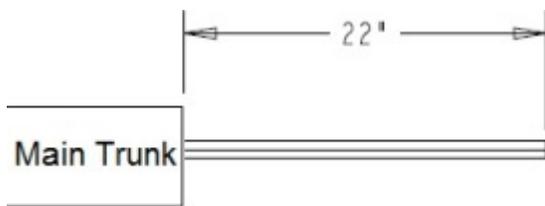
### Outside Plant Cable



1. Cut furcation tubing to 38" before starting the cable preparation process.
2. Measure and ring cut 62" from the end of the main cable trunk. Remove cable jacket.
3. Measure and mark the buffer tubes 2.5" in front of the ring cut.
4. At the 2.5" mark, score and remove the buffer tube segment. Thoroughly clean the 250µm fiber.
5. Slide each group of 250µm fibers through a furcation tube. The furcation and buffer tube should overlap 0.5".
6. Label each sub-unit as necessary.
7. For the cable mounting clip, wrap a single layer of foam tape around the end of the furcation tube.

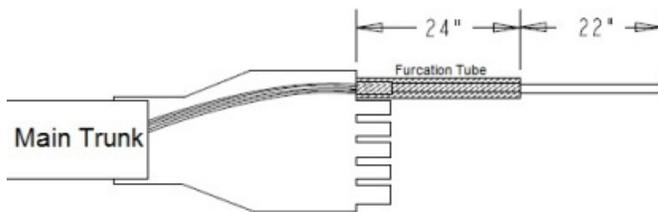
### Air-Blown Fiber

#### 12-Fiber Main Trunk



1. Measure and mark the eABF 22" from the end of the main cable trunk.
2. Using wire stripping pliers score and remove the 22" eABF outer jacket segment.
3. Cut the aramid yarn back to the cable sheath cut.

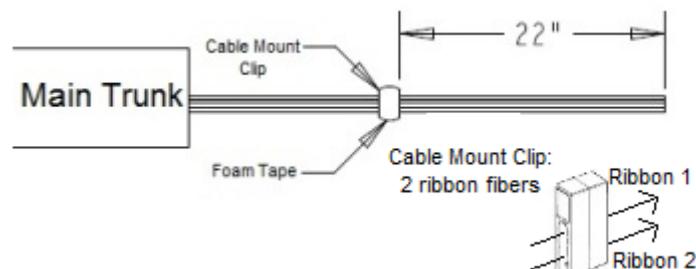
#### 24 or greater Fiber Main Trunk



1. Cut furcation tubing to 24" before starting the cable preparation process. This is the recommended length for installation with the XFM 4RU panel.
2. Measure and mark the eABF 48" from the end of the main cable trunk.
3. Using wire stripping pliers score and remove the 48" eABF outer jacket in 24" segments.
4. Cut the aramid yarn back to the cable sheath cut.
5. Separate out each distinct 12-fiber bundle.
6. If necessary, up-jacket the main fiber trunk with ½" of double stick foam tape.
7. Secure the eABF to the Fan Out Router by installing the tie wrap, routed from the backside, around the up-jacketed cable.
8. Snap the strain relief cap into place.
9. Slide each 12-fiber bundle through a furcation tube.
10. Slip the furcation tube onto appropriate finger of the Router. Repeat for each bundle.
11. Install the router cover by aligning the two posts of the cover to the base.

Note: AFL's eABF Poli-MOD Installation Instructions may be referenced for additional resource material

### Ribbon Cable

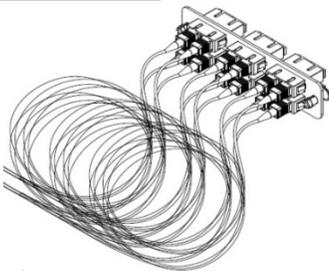


The incoming fiber preparation will vary based on fiber type and intended application preferences.

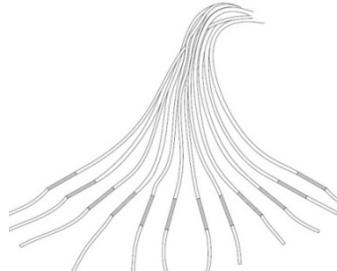
It is recommended that a piece of foam tape be folded over each 12-fiber ribbon prior to inserting the ribbon into the cable clip.

When working with 24 fibers it is AFL's recommendation that the fiber be stacked one on top of the other to assist with the fiber routing process.

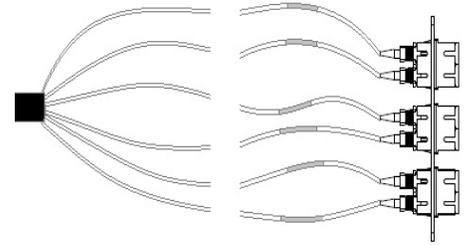
## Fiber Splicing



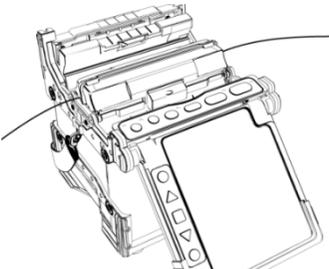
1: Organize the prepared incoming fiber and pigtails on a suitable work surface.



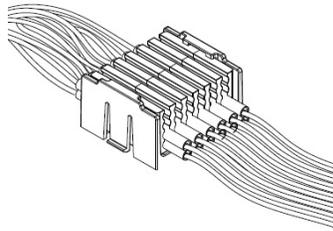
2: Slide splice sleeves on the pigtails.



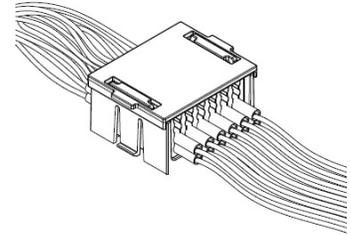
3: Prepare matched incoming and pigtail fibers for splicing: Strip, Clean, and Cleave. Then secure the prepared fibers in the splicer.



4: Splice Fibers. Position splice sleeve over exposed fiber and use heater to shrink the sleeve. Repeat for all matched incoming and pigtail fibers.

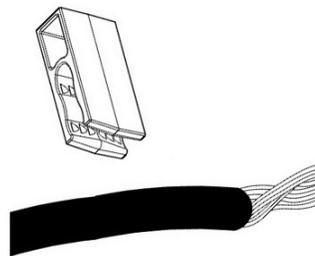
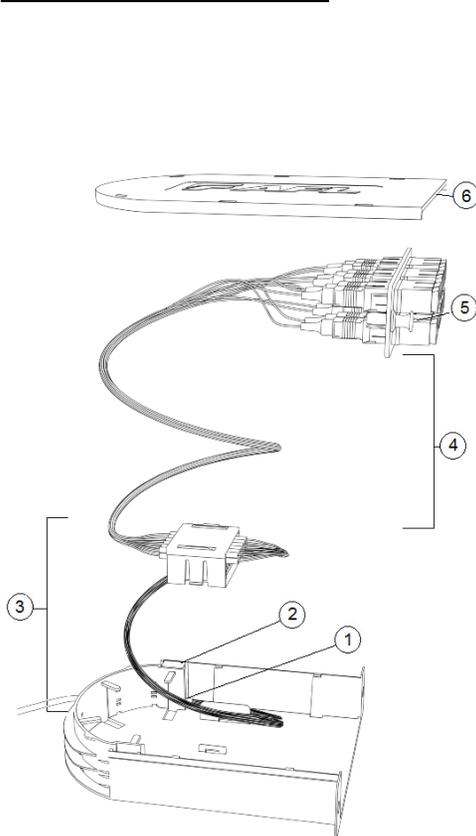


5: Place each splice sleeve into the splice holder assembly.  
\* Up to 2 separate ribbons splice sleeves can be inserted into the splice holder assembly.

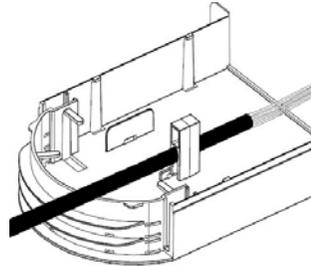


6: Attach the splice holder assembly cover once all the splice sleeves have been inserted.

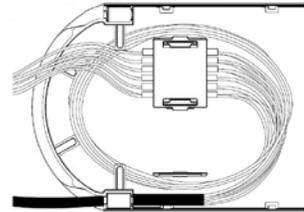
## Poli-MOD Assembly



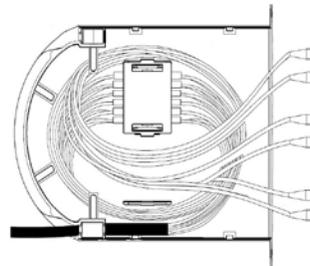
1: Place the cable mounting clip onto the incoming fiber 1" from the end of the cable jacket. For smaller diameter cable a single layer of foam tape can be used to up jacket the sub unit.



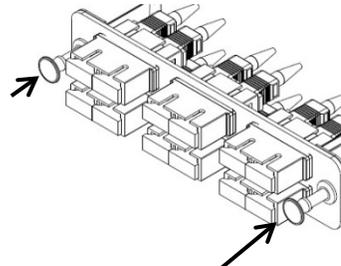
2: Mount the incoming fiber into the module using the mounting clip. The fiber may enter from either side of the module, so the most convenient mounting position may be selected.



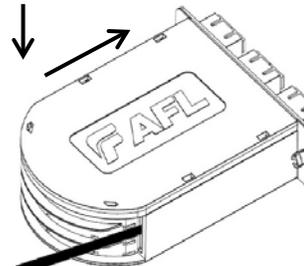
3: Starting at the mounting clip, route the incoming fiber into the module. Create 1.5 loops around the bottom of the housing. Mount the splice sleeve holder on the module base.



4: Route the pigtails into the module, on top of the incoming fiber, by wrapping the pigtails 1.5 times around the base.



5: Attach the adapter plate to the module base by pressing in the nylatch plungers.

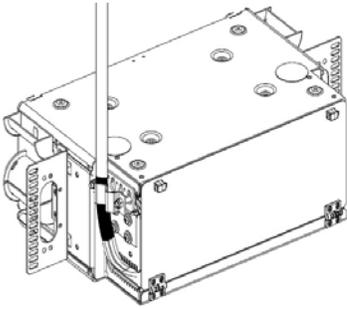


6: Place the plastic cover onto the module and slide it forward to lock it into place.

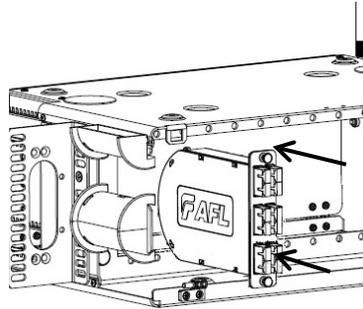
## Module Installation

Smaller panel configuration may utilize similar cable routing methods as detailed below.

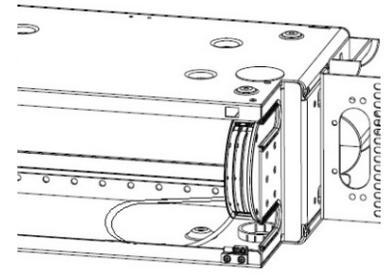
### Standard 4RU Patch Panel



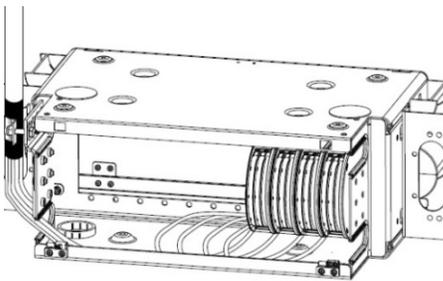
1: Route the prepared cable through the back of the patch panel. Secure the incoming cable with the cable clamp.



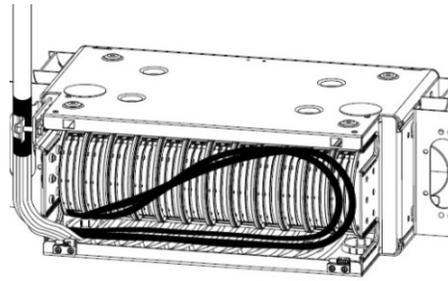
2: Install the first module into the panel by pressing in the nylatch plungers.



3: Route the cable slack in a 6 3/4" diameter circle beneath the module.

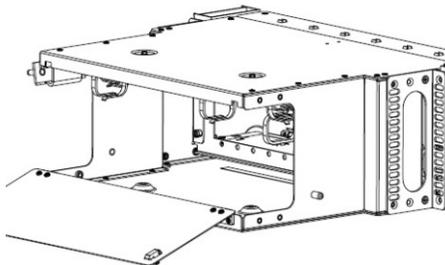


4: Repeat steps 2 and 3 for the installation of modules 2 - 8.

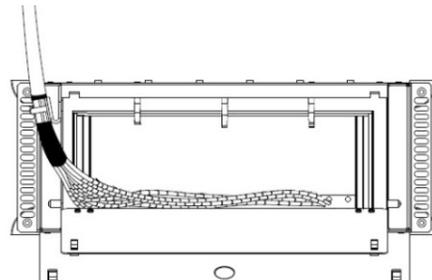


5: Modules 9 - 12 must be installed from the front side of the patch panel.  
\* Route the cable slack for modules 9 and 10 in the same 6 3/4" diameter circle.  
\*\* Route the cable slack for modules 11 and 12 along the bottom of the panel and back across the modules.

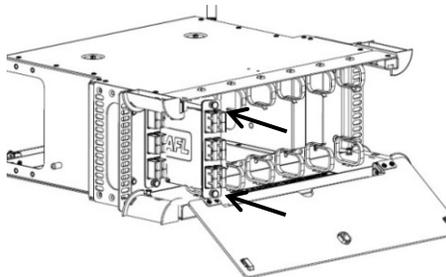
### Xpress Fiber Management (XFM) 4RU Patch Panel



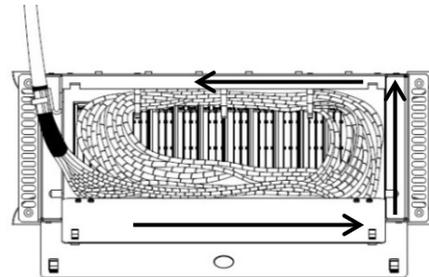
1: From the rear of the XFM panel, remove the tray cable guide from the base plate and reattach it to the top of the panel. The tray's two plungers may be used to remove and secure the tray.



2: Route the prepared cable through the back of the patch panel. Secure the incoming cable with the cable clamp.



3: Install all modules from the front of the panel by pressing in the nylatch plungers.



4: Route the cable slack through the cable routing guides in the back of the panel.