2U Fixed LightGuide Interconnect Unit Shelf (2U F-LIU)

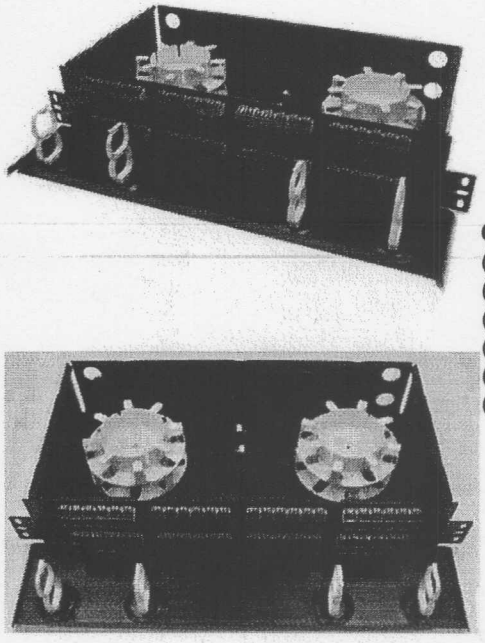
INSTALLATION PROCEDURE
(FOR INDOOR USE ONLY)

This instruction sheet covers the installation of the 2U F-LIU for indoor use only.

Shelf Description

The 2U F-LIU is a frame-mounted, fixed shelf that is designed to terminate up to 96 LC or, 48 ST®, or 48 SC adapters using ganged adapters. The shelf can also be used as a splice unit to store up to 96 single fusion splices, or 36 mass fusion splices. The overall dimensions of the shelf are 3.5 inches (89 mm) high, 17.19 inches (437 mm) wide, and 12 inches (305 mm) deep.

As illustrated in **Figure 1**, the shelf contains a tray with four holes in the rear for fittings that provide strain-relief for incoming nonmetallic Outside Plant (OSP) cable or LightGuide Building (LGBC) cable. Upon entering the tray, the cable is prepared for either direct termination or splicing. Inside the tray, the buffered fibers can be wrapped around 3-inch (76 mm) diameter storage drums relative to the cable entry position (top or bottom drums) before being terminated or spliced. Separate kits of parts are available for holding fusion splices. These kits include a U-shaped bracket and fusion organizer trays. The U-bracket is locked into the shelf by rotating clockwise into hold-down clips on the bottom of the shelf **(Figure 2)**.



Contents:
(1) Main Shelf with Integrated Faceplate
(1) Strain Relief Grommet
(1) Shelf Cover (Not Shown)
(4) #12-24 x 3/8-inch Screws
(4) Labels
(1) Instruction Sheet

Figure 1. 2U F-LIU Shelf

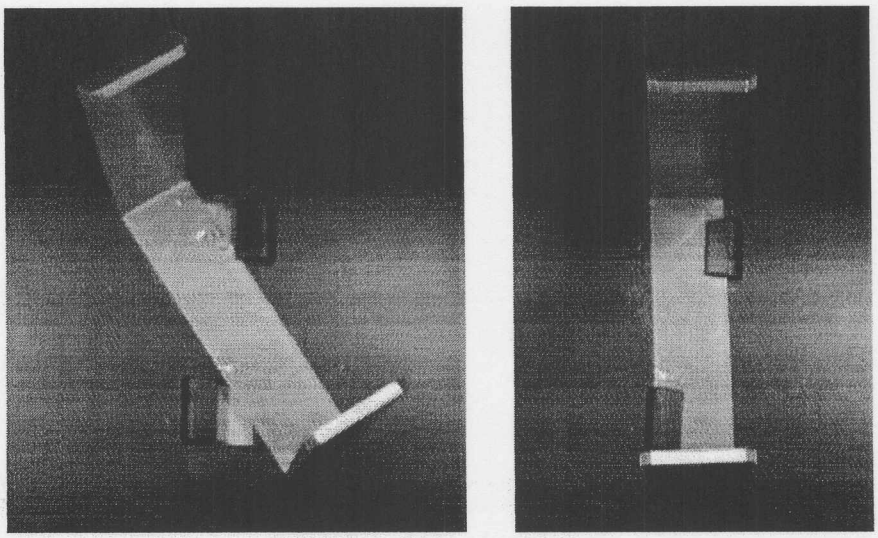


Figure 2: U-Bracket Installation

Install fusion splice organizers by placing at a slight angle, then rotate down into a flat position **(Figure 3)**. Stack up to 6 organizer into a single 2U Clip.

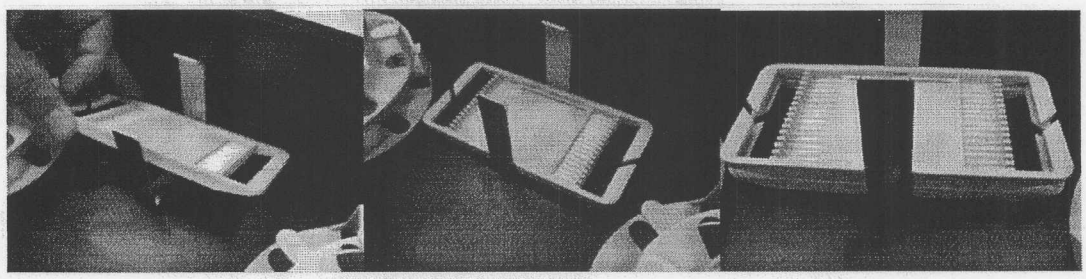


Figure 3: Fusion Organizer Installation

NOTE:

The mounting brackets included are for a 19-inch frame. A kit of parts is available for mounting in a 23-inch frame (109172197).

Adapters are factory installed dependant upon the ordering code selected. Reference your order for detail of adapters included.

CABLE INSTALLATION (FOR DIRECT TERMINATION)

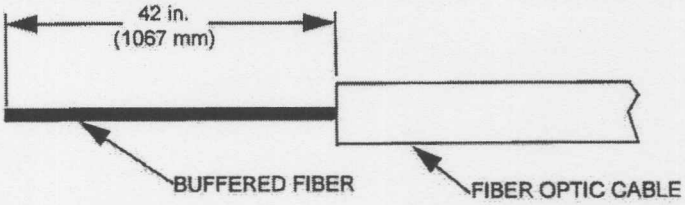


Figure 4: Preparing Fiber Optic Cables

1. Prepare the fiber optic cable(s) as shown in 2.
2. Install appropriate connectors on buffered fibers for type of adapters ordered
3. Secure the incoming fiber optic cable(s) to the tray using the strain-relief cable fitting provided **(Figure 5 and Figure 6)**.
4. Adjust the cable diameter by wrapping the cable strain area with suitable tape as needed to best fit within the fitting.
5. Secure the cable egressing from the rear of the shelf to the frame with cable ties. Ensure proper cable slack remains to allow for sliding action of the shelf.

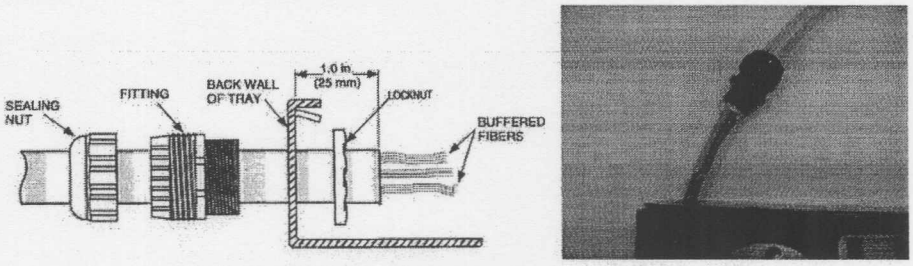


Figure 5: Preparing Fiber Optic Cables

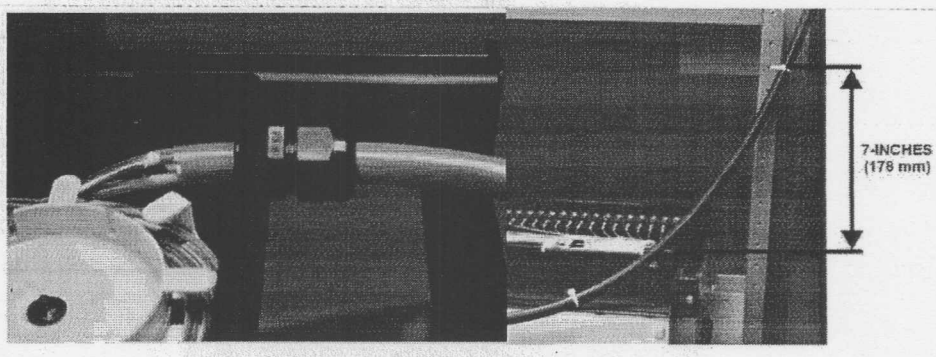


Figure 6. Cable Installation

1. Route the buffered fibers with connectors around the storage drum(s) to the couplings **(Figure 7)**.

2. Install the plastic cover plate over the installed fiber to protect and retain the fibers within the shelf.

CABLE INSTALLATION (FOR SPLICING)

1. Install splice organizers to the tray approximately as shown in **Figure 3**, if splicing is required. Splice organizers are sold as separate kits in either single or mass fusion configurations.
2. Prepare the fiber optic cable(s) as shown in (**Figures 4 & 5**).
3. Secure the incoming fiber optic cable(s) to the tray using the cable strain-relieve fitting(s) provided **(Figure 5 & 6)**.
4. Organize the fibers to the splice organizers and then perform splicing**(Figure 7)**. Place splices into the splice organizers in recommended sequential order as shown. Blue, Orange, Green, Brown, Slate, White, Red, Black, Yellow, Purple, Rose, Aqua and repeat.
5. Route fibers from the top row of adapters into the top level of fiber spools and bottom row to bottom fiber spools **(Figure 8)**.
6. Dress slack and spare fibers around the storage drum(s) as shown in **(Figure 8)**.

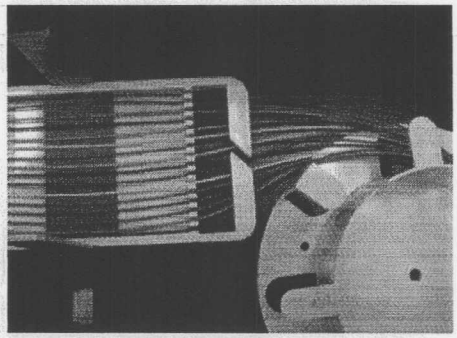


Figure 7: General Fiber Color Layout

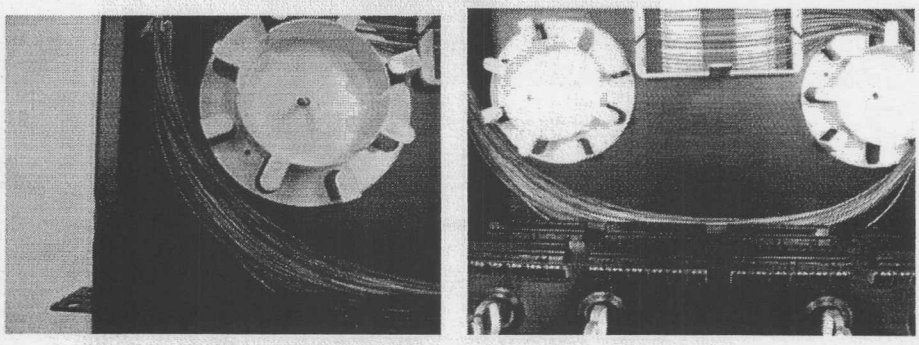


Figure 8: Fiber Entry and General Routing