SUMITOMO RECOMMENDED PROCEDURE

SP F04 052
FutureFLEX Patch Panel Installation

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1.0 General

Please read and understand thoroughly the contents of this procedure before use. This procedure describes the steps to install Sumitomo's FutureFLEX Patch Panels. The 2RU Fixed Patch Panel is compliant with all RoHS regulations and has the capacity 6 adapter panels.

Note: The procedure is the same for the 1RU-4RU versions. The components for the splice tray mount and cable management look slightly different, but install the same way. You may also substitute FOX cassettes for adapter panels in the same positions or use breakout kits instead of pigtails.

For ribbon air blown fiber bundles we suggest ribbon splicing to save time and money. For splicing ribbons to MPOs or ribbon pigtails, you will need a ribbon splicer.

You of course have the option to only use single splices, but it is not recommended for 48 count bundles and higher.

2.0 Safety Precautions

WARNING:
Improper handling and ignoring the precautions below may cause injury or even death.

- Take care not to drop parts and / or tools while working at height.
- Use added caution when opening / shutting doors or covers to avoid pinching hands or fingers.
- Watch out for protruding objects when bending down or standing up near cabinet.

Improper handling and ignoring the precautions below may prevent utilization of the closure or cause the suspension of functions.

- Always maintain minimum cable bend radius. For the optical fibers, do not exceed the minimum bend radius of 30 mm.
- For splicing of optical fiber, it is important to refer to the instruction manual provided with the splicing machine.

3.0 Tools Required

The following is a list of tools and materials required to complete this procedure.

1. Philips head screw driver
2. Flat head screw driver
3. Utility Knife
4. Cable cutter and/or fiber strippers
5. Breakout kits and/or splice trays as needed
6. Gloves
7. Safety Glasses

4.0 Panel and Accessories

4.1 The 2 RU Panel Unboxed. Lift levers on front of panel to reveal parts inside.

Figure 1 shows extra pieces supplied with Precision Flex Panels.

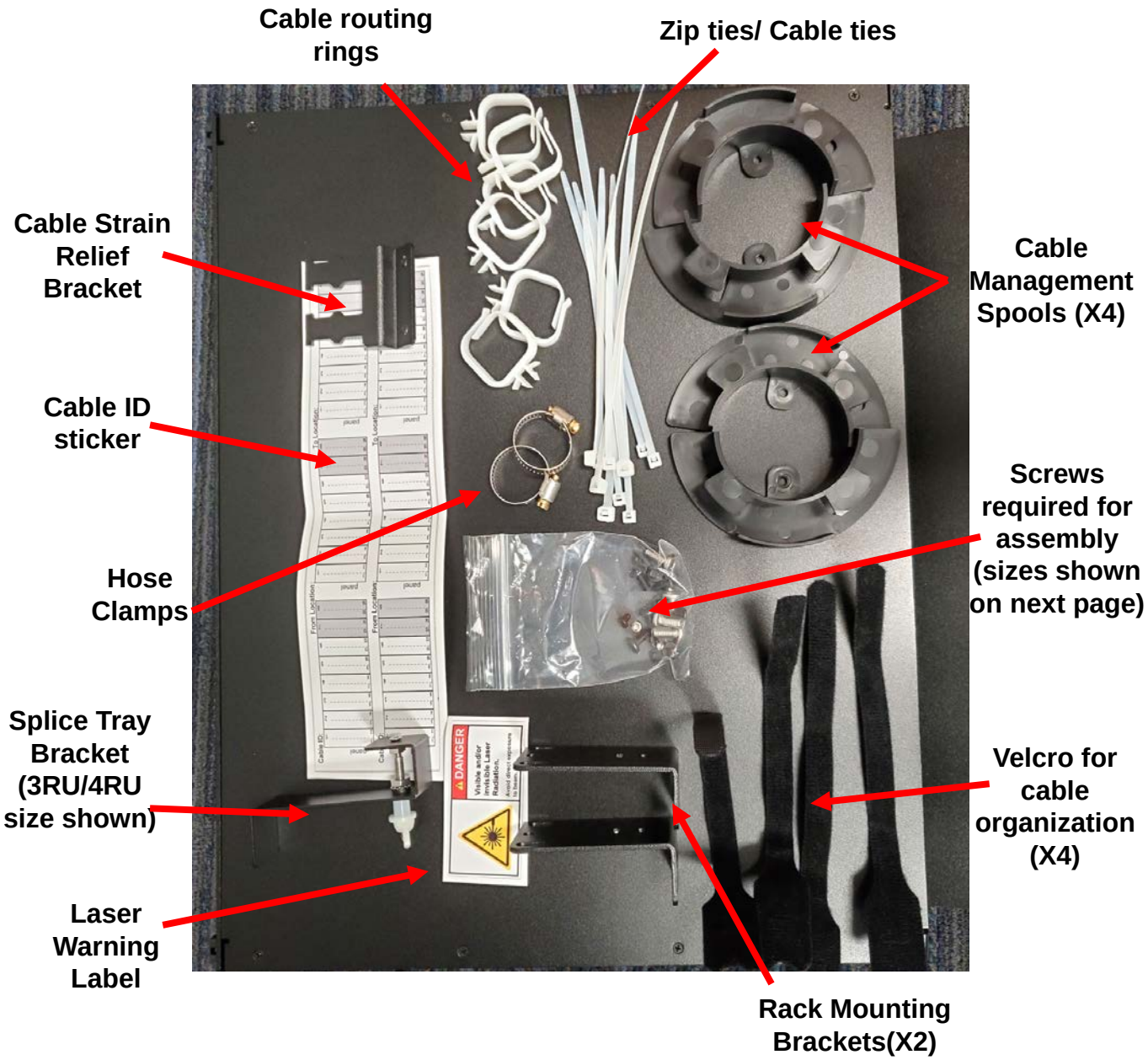
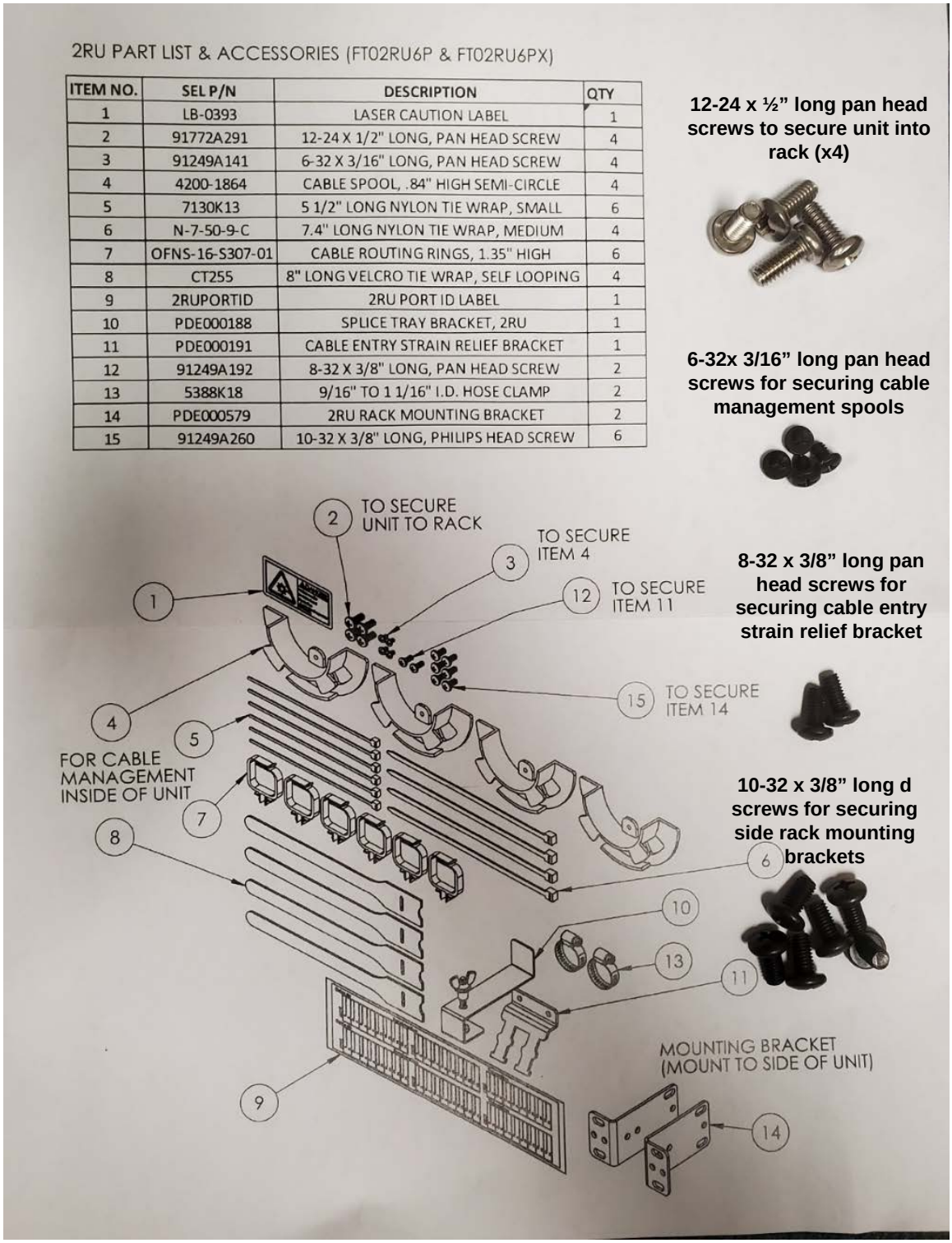


Figure 1: Accessories included with the FutrueFLEX Patch Panels



2RU PART LIST & ACCESSORIES (FT02RU6P & FT02RU6PX)

ITEM NO.	SEL P/N	DESCRIPTION	QTY
1	LB-0393	LASER CAUTION LABEL	1
2	91772A291	12-24 X 1/2" LONG, PAN HEAD SCREW	4
3	91249A141	6-32 X 3/16" LONG, PAN HEAD SCREW	4
4	4200-1864	CABLE SPOOL, .84" HIGH SEMI-CIRCLE	4
5	7130K13	5 1/2" LONG NYLON TIE WRAP, SMALL	6
6	N-7-50-9-C	7.4" LONG NYLON TIE WRAP, MEDIUM	4
7	OFNS-16-S307-01	CABLE ROUTING RINGS, 1.35" HIGH	6
8	CT255	8" LONG VELCRO TIE WRAP, SELF LOOPING	4
9	2RUPORTID	2RU PORT ID LABEL	1
10	PDE000188	SPLICE TRAY BRACKET, 2RU	1
11	PDE000191	CABLE ENTRY STRAIN RELIEF BRACKET	1
12	91249A192	8-32 X 3/8" LONG, PAN HEAD SCREW	2
13	5388K18	9/16" TO 1 1/16" I.D. HOSE CLAMP	2
14	PDE000579	2RU RACK MOUNTING BRACKET	2
15	91249A260	10-32 X 3/8" LONG, PHILIPS HEAD SCREW	6

Figure 2: Sheet that comes with rack unit and description of screws provided.

5.0 Installation of 2 RU in Rack

5.1 First, take off the front cover. See **Figure 3**.

Figure 3: Slide front cover sideways to remove from panel unit pins.

5.2 Pull out tray by pulling up on pin as you slide it out shown in **Figure 4**. Separate the three parts of the panel shown in **Figure 5**.

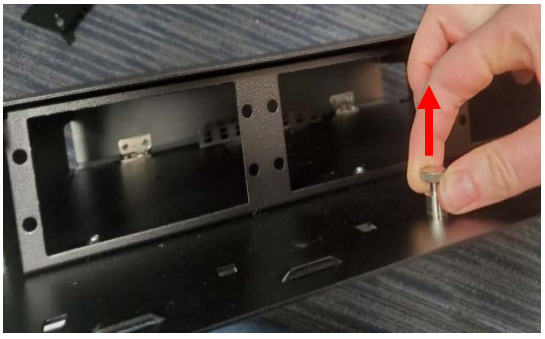


Figure 4: Pull out inside tray.

Figure 5:Panel (Left), Insert (Lower Right), and Cover(Upper Right) disassembled.

5.4 Install rack mounting brackets on side of panel as shown in **Figure 6**.

Figure 6: 3 Screws fastened into rack mounting bracket.

5.5 Mount into rack using brackets. See **Figure 7.** Keep insert outside so you can place cable management tools.

Figure 7: Use the 4 largest screws for tightening panel into rack.

6.0 Cable Management Spools and Splice Tray Holder Installation

6.1 Install cable management spools in the insert portion as shown in **Figure 8.** Cable management spools installed in any position based on user preference**. Figure 8** shows a configuration that will fit a splice tray in the middle of them.

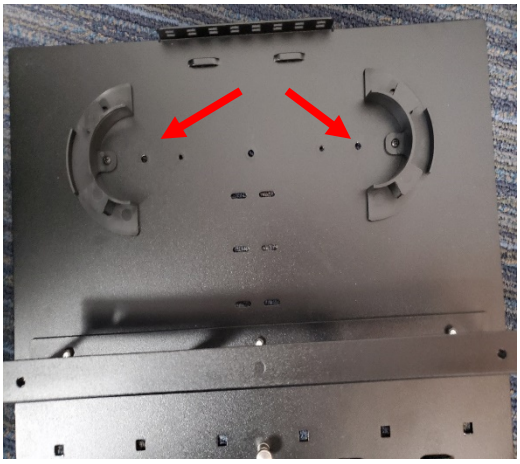


Figure 8: Multiple positions allowed for screwing in cable management spools around splice tray

6.2 Install splice tray bracket for splice tray. The winged nut on top screws off and must be reinstalled/screw down after all splicing to hold splice tray and splice tray cover in place. See **Figure 9 and 10.**
NOTE: You can stack two splice trays in a 2RU unit. We recommend using the Velcro provided to hold them together for extra support.

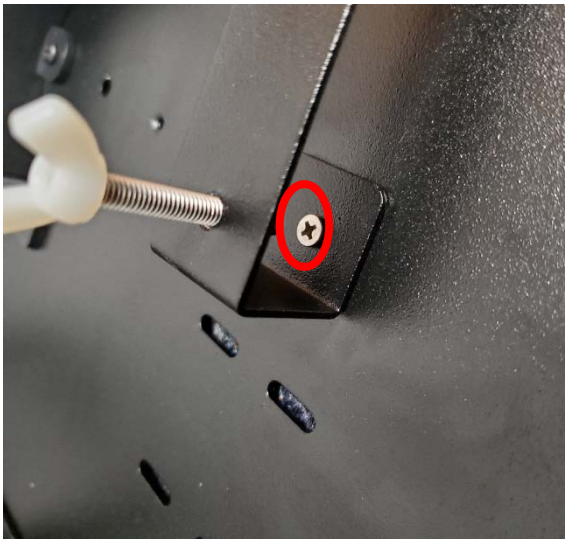


Figure 9 Splice Tray Bracket mounted by lower screw which is threaded through panel.

Figure 10: ST-01 splice tray(sold separately) installed. Note the winged nut must be screwed on after the splice tray cover. But can be used as shown without cover for holding in place while splicing**.**

6.3 Install adapter panels or FOX cassettes into front of insert as shown in **Figure 11.**

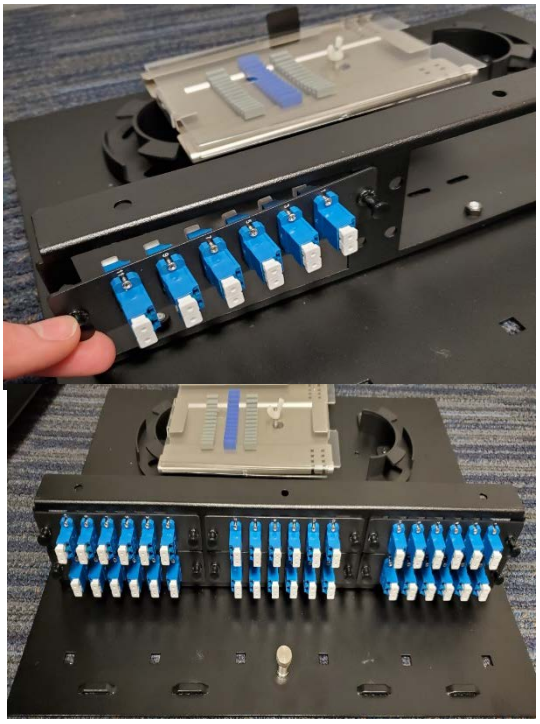


Figure 11:Adapter panels (sold separately) secured front of insert by pins.

6.4 Install insert back in panel, reinstall cover, and place laser and ID sticker on cover or wherever needed. See **Figure 12.**

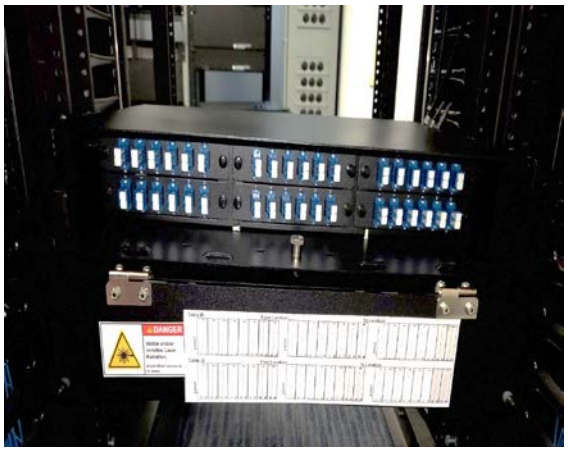


Figure 12: Tray replaced and stickers adhered

Figure 13: Cover Replaced on front of panel

7.0 Strain Relief Cable Entry

7.1 Remove back cover for easier access(**see Figure 14**). This must be done AFTER panel is secured in rack

Figure 14: Back panel removed

7.2. The bracket can be placed on either side of the patch panel as well as adjusted vertically in two different positions depending on where the cable is coming from into the patch panel. **See Figure 15** for cable entry from above.

Figure 15: Install cable entry strain relief brackets

7.3 Route cable into strain relief bracket or using hose clamps attached to brackets (**Figure 16 and 17**). <u>Velcro is also acceptable and preferred to avoid damaging tubes.</u>.

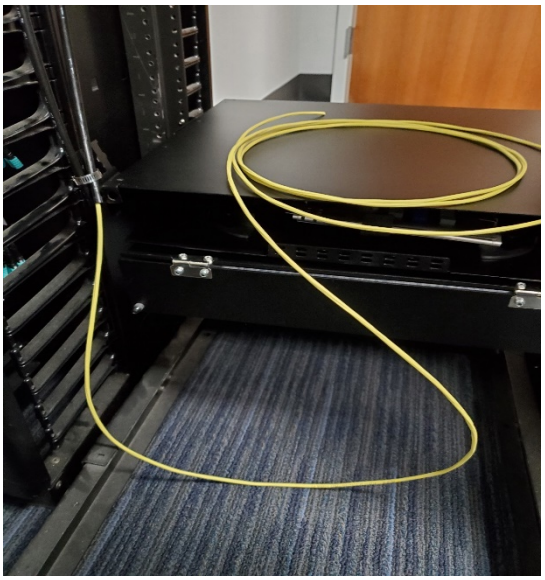


Figure 16: Cable and fiber entry into back of panel.

Figure 17: Back panel closed.

8.0 Cable Routing Inside Panel

8.1. Remove front cover and take out tray to route the fiber bundle and secure around cable management spools into splice tray. **See Figure 18**.

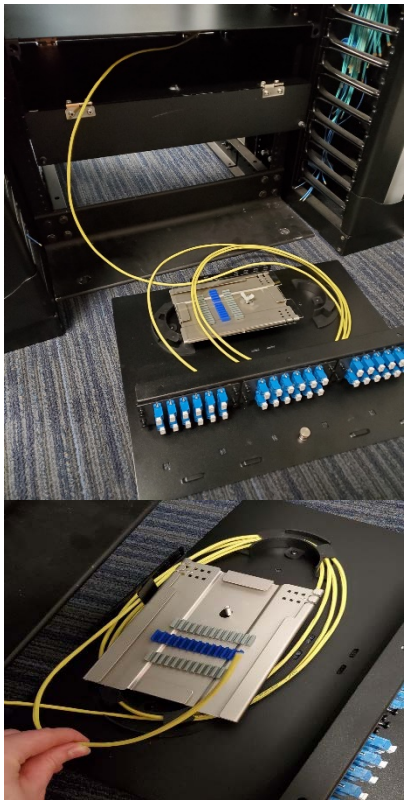


Figure 18: Fiber routed to tray for splicing

8.2 Using either a breakout kit or pigtails, splice and terminate fiber bundle and place splice into splice tray holder. **See Figure 19.**

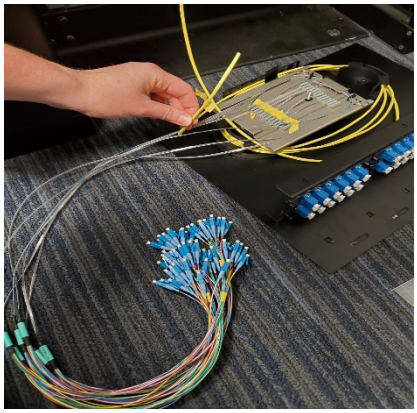


Figure 19: 6 x 12 fiber ribbon LC pigtails for termination into adapter panels spliced to a 72 fiber bundle.

8.3 Remove adapter panel and LC connector port covers and place in position. See **Figure 20.**

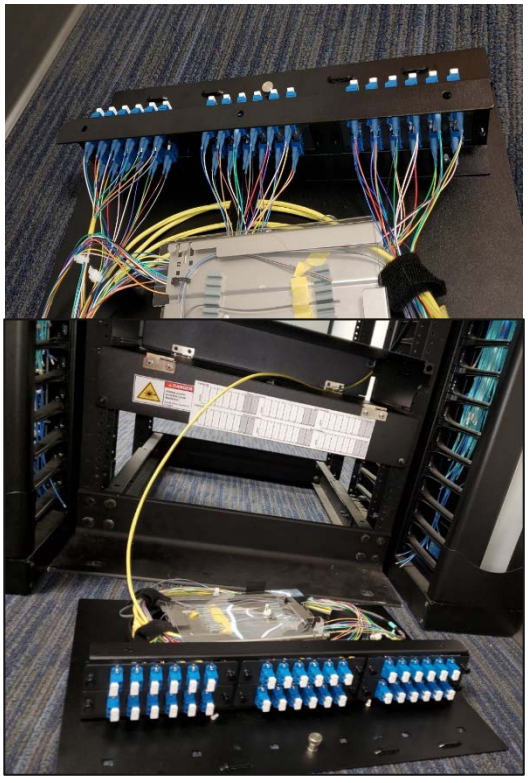


Figure 20: Fiber bundle spliced and terminated.

8.4 Replace insert back into panel, but do not replace cover.

8.5 Pull tray slightly out to place cable routing rings. **See Figure 21**.

Figure 21: Cable routing rings inserted into specified holes in panel insert.

8.6 Use routing rings for patch connections and replace cover. **See Figure 22.**

Figure 22: Cable routing rings managing patch connections and cover replaced.

8.7 Push tray back into position and close lid**.**