INSTALLATION INSTRUCTIONS

AFL Apex® Deep Splice Tray Kit

For complete installation instructions and video, visit www.AFLglobal.com/APEX or use the QR code.

SPLICE TRAY OPTIONS AND ROUTING

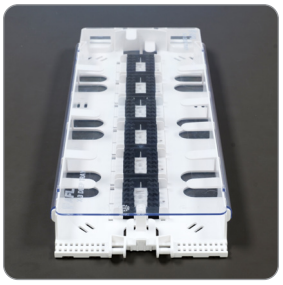
Apex deep splice trays are designed for flat matrix ribbon applications. The 12-fiber or 24-fiber ribbons can be routed and stored in the Apex Closure. Deep Trays are available for the complete Apex family.

Ordering Information

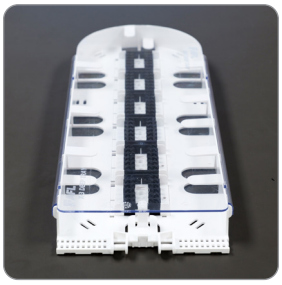
DESCRIPTION	AFL NO.
APEX X-2 DEEP SPLICE TRAY, WITH 4 SPLICE MODULES, NO ADAPTERS	AX-TRAY-2-D-4-E
APEX X-2 DEEP SPLICE TRAY, NO SPLICE MODULES, WITH ASC ADAPTERS	AX-TRAY-2-D-E-ASC
APEX X-2 DEEP SPLICE TRAY, NO SPLICE MODULES, NO ADAPTERS	AX-TRAY-2-D-E-E
APEX X-2S DEEP SPLICE TRAY, WITH 2 SPLICE MODULES, NO ADAPTERS	AX-TRAY-2S-D-2-E
APEX X-2S DEEP SPLICE TRAY, NO SPLICE MODULES, WITH ASC ADAPTERS	AX-TRAY-2S-D-E-ASC
APEX X-2S DEEP SPLICE TRAY, NO SPLICE MODULES, NO ADAPTERS	AX-TRAY-2S-D-E-E
APEX X-3, DEEP TRAY KIT, ROUND END, 6 SPLICE MODULES, DOUBLE STACK	AX-TRAY-3-R-D-6-E
APEX X-3, DEEP TRAY KIT, ROUND END, EMPTY	AX-TRAY-3-R-D-E-E
APEX X-3, DEEP TRAY KIT, SQUARE END, 6 SPLICE MODULES, DOUBLE STACK	AX-TRAY-3-S-D-6-E
APEX X-3, DEEP TRAY KIT, SQUARE END, EMPTY	AX-TRAY-3-S-D-E-E
APEX X-3 DEEP SPLICE TRAY, SQUARE END, NO SPLICE MODULES, WITH ASC ADAPTERS	AX-TRAY-3-S-D-E-ASC
APEX X-3 DEEP SPLICE TRAY, SQUARE END, NO SPLICE MODULES, WITH ASC ADAPTERS	AX-TRAY-3-S-D-E-USC

X-2S Tray

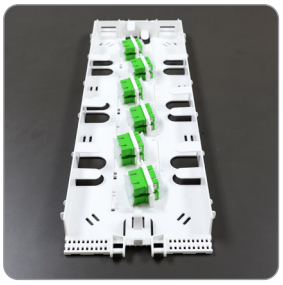
X-2 Tray



X-3 Square Tray



X-3 Round Tray

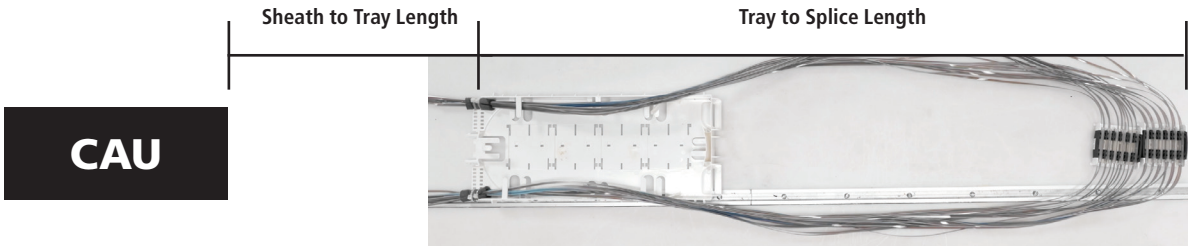


X-3 Tray
with Bulkhead Installed

PACKAGE CONTENTS

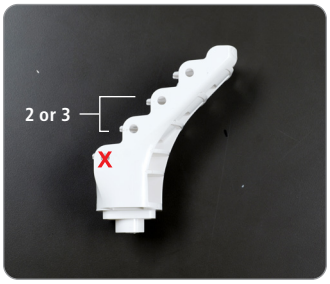
A. Splice Tray
B. Cover
C. Double Stack Adapter
D. Splice Module Cover
E. Foam Retention
F. Tie Wraps
G. Adhesive Foam

PREP LENGTH FOR DEEP TRAY SPLICING

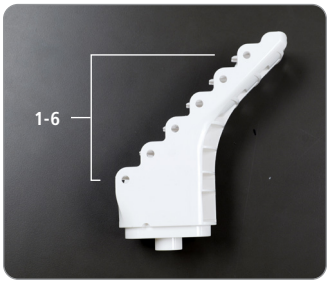


CLOSURE	TOTAL END OPENING (IN)	SHEATH TO TRAY (IN)	TRAY TO SPLICE (IN)	MIDSHEATH (IN)	# OF RIBBON SPLICE SLEEVES PER TRAY	MAX DEEP TRAYS PER CLOSURE
X-1 (uses X-2S tray)	53	29	24	106	12	1
X-2S	56	32	24	112	12	3
X-2	78	41	37	156	48	3
X-3	106	58	48	212	72	3
X-3H	89	41	48	188	72	4 (R VERSION)

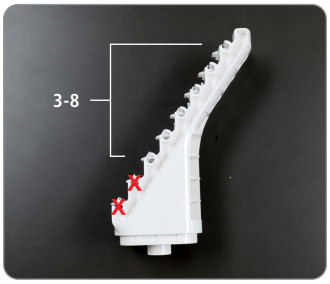
Positions available in each closure for single and double deep splice trays. Single width trays can be intermixed but cannot cause the top tray to exceed the max tray from the table (2 single trays = 1 deep tray).



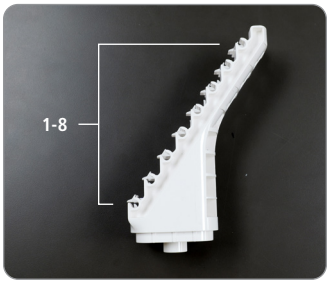
X-2S Tray



X-2 Tray



X-3 Square Tray



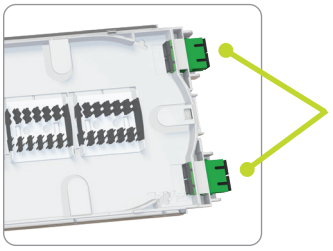
X-3 Round Tray

X-1: One deep tray can be installed in position 2 or 3.

X-2S/X-2: Deep tray can be installed in positions 1-5.

X-3: Deep tray can be installed in positions 3-7.

X-3H: Deep round tray can be installed in position 1-7.



All Apex deep trays allow 2 duplex SC bulkhead adapters to be field installed at the far end of the tray. These adapters can be used for WDM test locations.

SECURING THE SPLICE MODULE TO THE SPLICE TRAY

Splice trays can be shipped empty or fully loaded, and splice modules are field movable (Figure 1).

1. To add a splice module to Apex splice tray, simply align the latch tabs **(Figure 2)**.
2. Slide to engage **(Figure 3)**.
3. To remove a splice module simply disengage the locking tabs on the back with a pair of shears and slide module to release latch **(Figure 4)**.

✻ ***The openings between modules are designed to act as a fiber pathway if desired.***

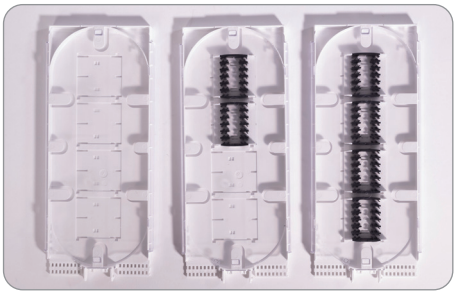


Figure 1

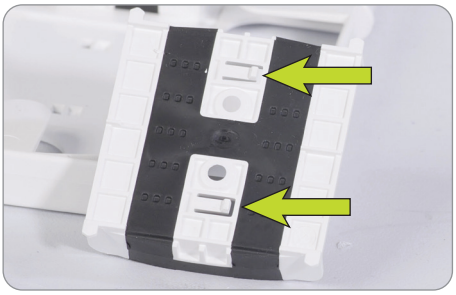


Figure 2

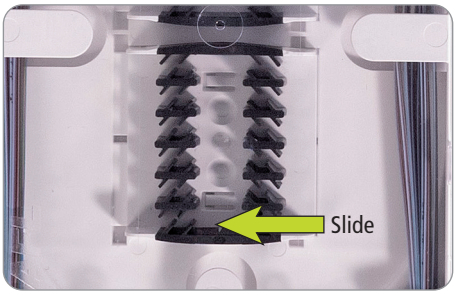


Figure 3

Figure 4

SECURING FIBER TO SPLICE TRAY

1. Loosely secure fiber or tubes at tray entrance. Refer to the diagram and table on page 2 for specified length. ***Ensure proper lengths from sheath to tray and tray to splice.***
2. **Loose tube:** Use a few wraps of supplied adhesive foam on loose tube products. Two tie wraps per bundle – supplied **(Figure 5)**.
3. **Flat matrix ribbon or SWR or other ribbon:** Attach loosely until spliced modules are installed and all fibers are routed. Secure with AFL foam retention—included with kit **(Figure 6)**.

   - Optional transition tube **(Figure 7)**

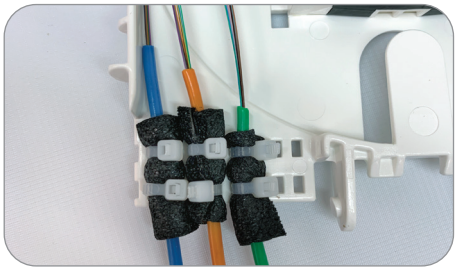


Figure 5

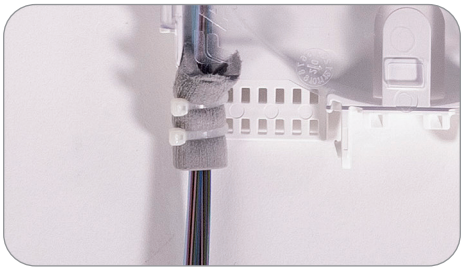


Figure 6

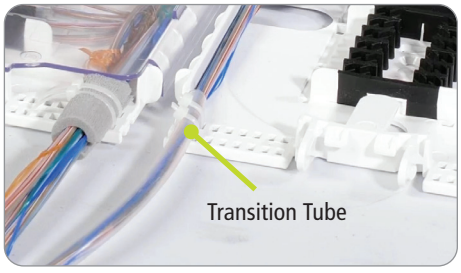


Figure 7

4. Optional Apex advanced fiber retention system for loose tube or ribbon.
   - No zip ties needed **(Figures 8a and 8b)**

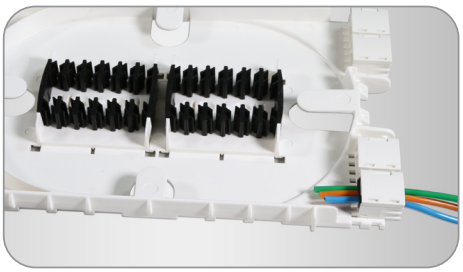


Figure 8a

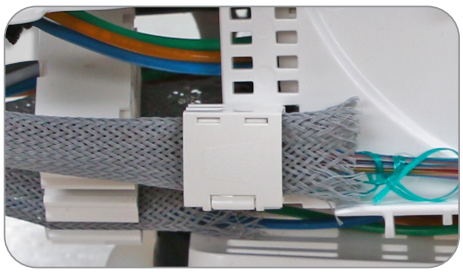


Figure 8b

FIBER SPLICING

All fibers should be spliced outside the splice tray. Ensure the splice modules are in the proper orientation to install in the splice tray **(Figure 9)**. The proper orientation is the same way they will be installed in tray. Install splice sleeves into splice modules using two fingers over the retention fingers to depress sleeve into module **(Figure 10)**.

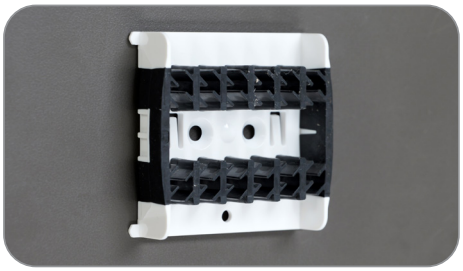


Figure 9

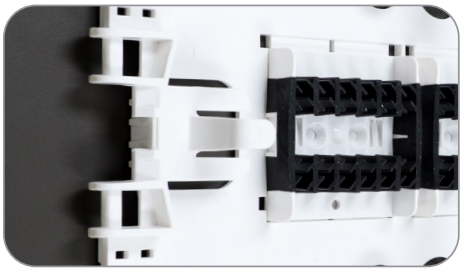


Figure 10

Scan to watch video.

ROUTING FIBER IN DEEP TRAY

Scan to watch video.

1. With the splice modules extended to the proper distance for the try to be utilized, perform all splices watching fiber rotation. Confirm fiber lengths to splice tray and to slice module from the table on page 2.
2. Splice all fibers using the distance from the table as the furthest splice. This will accomplish the splicing for layer one.
3. Splice all fibers straight from the tray entrance to the chip with no twists.
4. Once all splices are in the module, lift and rotate 360° horizontally keeping the fiber exiting the sleeves on the bottom of the fiber coil.
   - ***CAREFULLY*** ensure fiber is not damaged and route the lower fibers under the retaining tab. Then snap modules back in place.
5. Keep as much of the slack coil on the upper level where possible.
6. Route the fibers exiting the sleeves on the lower/bottom routing of the tray and the storage in the upper/top of the tray.
7. Fold slack into place without damaging fiber.
8. If only splicing on layer one, attach double stack adapter plate to the top of the layer one module **(Figure 11)**.
9. Repeat process for layer two.
10. Use the same measurements for layer two splicing mindful again with the orientation of the chip.
11. Prior to installing the modules on top of layer one, install the double stack adapter to the bottom of the layer two splice modules **(Figure 12)**.

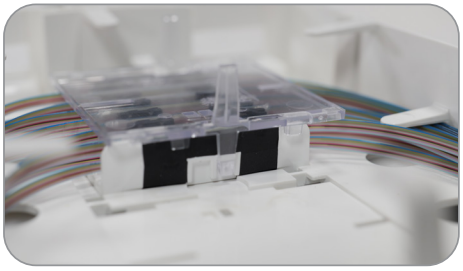


Figure 11

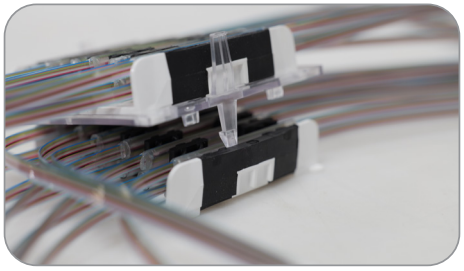


Figure 12

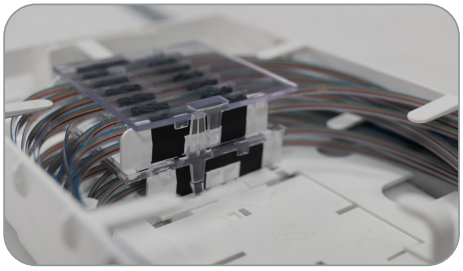


Figure 13

12. Take fully spliced layer to splice modules and rotate in place above layer one. These modules will snap down onto layer one **(Figure 11)**.
13. Install splice module cover plates on top of all layer two splice modules **(Figure 13)**.
14. Any exposed layer one splice modules must have a double stack adapter attached on top **(Figure 12)**.
15. Dress fiber carefully fold each slack loop into place.
16. Carefully dress all fibers so that no fibers are pinched. Secure splice tray cover.

INSTALLING SPLICE TRAY FOR X-1, X-2S, AND X-2

All types of splicing, loose tube or ribbon, can be done in the same splice tray and can coexist in the same tray if desired.

1. Splice trays should be installed from the bottom up without a gap.
2. Tubes should be attached to tray one layer at a time, bottom up to prevent trapping.
3. Install splice tray by engaging hinge pin onto yoke and rotating tray into place. Start at the second position up on the spline **(Figure 14)**.
4. Raise the tray to its upper locked position.
5. Release tray by depressing locking tab at the bottom center of the tray and lower into place **(Figure 15)**.
6. Once all splices are complete, address the slack behind the yoke in both open and closed positions. Adjust slack and secure both the tray and basket retention on the fibers.

Figure 14

Figure 15

INSTALLING SPLICE TRAY FOR X-3 AND X-3H

All types of splicing, loose tube or ribbon, can be done in the same splice tray and can coexist in the same tray if desired.

1. Splice trays should be installed from the bottom up without a gap.
2. Tubes should be attached to tray one layer at a time, bottom up to prevent trapping.
3. To install splice tray, bring X-3 splice tray to 45 degrees and walk hinge pin from hinge **(Figure 16)**.
4. Raise the tray to its upper locked position.
5. Secure the tray in the upper locked position with the X-3 Tray Brake. Simply rock in place from side to side until tray is fully supported **(Figure 17)**.
6. To lower tray simply depress the tab on the tray lock and roll it out from the hinge. Secure Tray Brake back on X-3 spline as shown. Then depress the hinge lock tab to lower splice tray.
7. Begin routing to splice.
   - Each bundle of fibers will make a full loop in the tray to splice to the furthest location.
8. Once all splices are complete, address the slack behind the spline in both open and closed positions. Adjust slack and secure both the tray and basket retention on the fibers.
9. At the ends of the splice tray, do not route fiber toward closest end of the tray. The three-end splice sleeve locations at each end should always route away from the tray end.

Figure 16

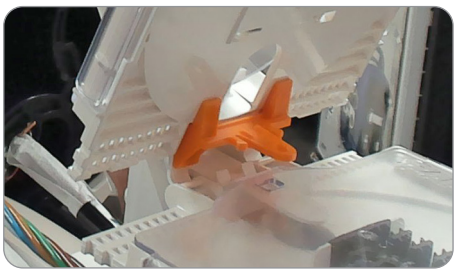


Figure 17