



INSTALLATION INSTRUCTIONS

AFL RTD™ Splice Terminal



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PACKAGE CONTENTS

AFL RTD™ Splice Terminal Closure
Cable Attachment Units, as ordered
Factory-Installed Pigtails, as ordered
Splice Trays
Terminal Mounting Brackets

Installation Instructions Packet
3/8" Velcro
Drive Screws and Hose Clamps
Grounding Straps

REQUIRED TOOLS

3/8" Can wrench
Tape measure
Cable entry tools
Splicing equipment and tools
UV-resistant black tie wraps

Optional Consumables

AFL Foam Retention Kit (pack of 25 - AFL no. HW000406)
Mesh transition tube, if desired (AFL no. AX-KIT-TUBE-014-XX*)
Silicone spiral wrap (AFL no. FC001657)

*Replace "XX" with any of the following for colors per the TIA-598 color code:
BL, OR, GN, BR, GY, WH, RD, BK, YL, VI, NP or PP

ADDITIONAL KITS AND ACCESSORIES

ORDERING INFORMATION

DESCRIPTION	AFL NO.
Velcro, 75 Foot Length Roll – For securing SWR bundles in the slack basket	FC001759
Apex Cable Bonding Kit (Bonds armored cable sheath to ground) – Pack of 10	AX-KIT-GROUND-10
WTC-SWR Bundle Splice Tray Retention Kit – Includes 25 foam grommets for retaining SWR bundles to splice trays	HW000406
Apex AFRS Kit 2 – Used for Loose Tube Cable. Kit includes: V-Clip (24 ea.) and Retention Pads (6 sheets of 8 pads)	AX-KIT-AFRSLT
Apex AFRS Kit 3 – V-Clip bulk kit. Includes: V-Clips (120 ea.) and Mesh Inserts (120 ea.)	AX-KIT-AFRSVC-120
Apex AFRS Kit 4 – Mesh bulk kit. Includes: Clean Cut Gray Mesh (100 ft.)	AX-KIT-AFRSMESH-100FT
Aerial strand mount hanger kit	FC150793
Hardware Kit for Mounting to AFL CB-30-3AL or CB-AX2SH Coil Brackets	HW150510
PLC Splitter, 1x12, 900 µm, 1260-1650, 1 Meter Leads, SC/APC Connectors	PLC-1X12-9-1M-ASC
PLC Splitter, 1x8, 900 µm, 1260-1650, 1 Meter Leads, SC/APC Connectors	PLC-1X8-9-1M-ASC
PLC Splitter, 1x4, 900 µm, 1260-1650, 1 Meter Leads, SC/APC Connectors	PLC-1X4-9-1M-ASC
PLC Splitter, 1x2, 900 µm, 1260-1650, 1 Meter Leads, SC/APC Connectors	PLC-1X2-9-1M-ASC

SPECIFICATIONS

Parameter	Value
Terminal Outer Dimensions – (L x W x H)	Standard 12-Drop Lid – 17.5 x 11.3 x 5.6 in (45 x 29 x 14 cm) Prodigy® Hardened Drop Lid – 17.5 x 11.3 x 6.8 in (45 x 29 x 17 cm)
Feeder Cable Port OD Range	0.25" - 0.83" in. (6.4 - 21 mm)
Drop Cable Port OD Range	0.12" - 0.2" in (3.0 - 5.0 mm) or flat drop cable

QUALIFICATIONS

Governing Body	Standard Code
IEC	IEC 60529 (IP68) 6 FT Waterhead
Telcordia	GR-771 Temp/Humidity; Drop Test

TEMPERATURE SPECIFICATIONS

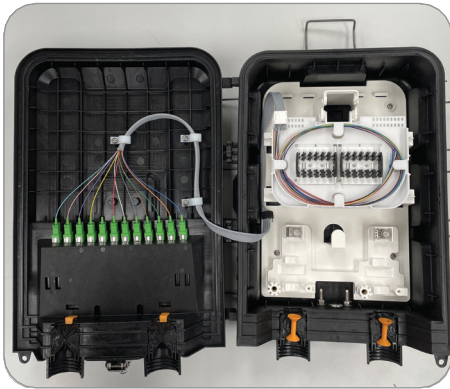
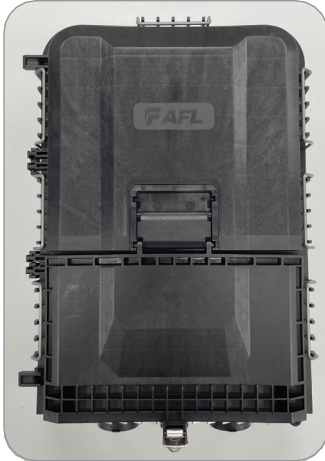
Temperature Range
Operation -40°C to +65°C (-40°F to +149°F)
Installation -18°C to +40°C (0°F to +104°F)

AFL RTD™ Splice Terminal Description Guide

Referenced below are the different RTD Splice Terminal versions that can be ordered, based on the type of drop lid and factory-installed pigtails.

Based on how the terminal is ordered, it will be a combination of groups A and B. The standard drop lid can also be ordered without pigtails and adapters.

GROUP A - DROP LID VERSION

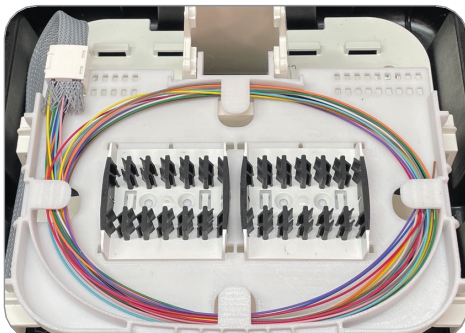


Standard Drop Lid

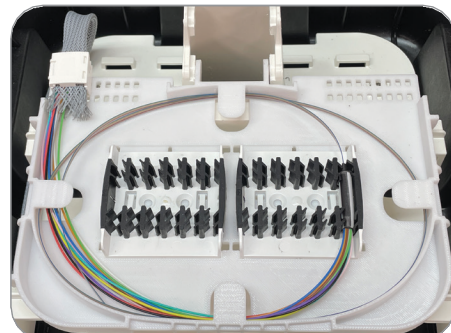


Prodigy® Hardened Drop Lid

GROUP B - FANOUT PIGTAIL VERSION



Tight-Buffer Pigtail



Flat Matrix Ribbon Pigtail

OPENING TERMINAL

1. Release the pressure valve to ensure no pressure or vacuum is present. **(Figure 1)**
2. Lift all the wire latches on the sides and back of the terminal. **(Figures 2 and 3)**
3. Open the main door of the terminal. The door is hinged on the left side. **(Figure 4)**
4. Remove splice trays one at a time by disengaging from the hinge using a flathead screwdriver or similar tool. **(Figure 5)**
5. Rotate the splice tray to remove it, and set aside. If factory-installed pigtails are in the splice tray, do not hang or leave the fibers under tension when setting aside. **(Figure 6)**

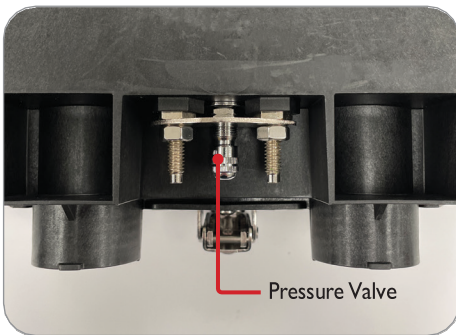


Figure 1



Figure 2

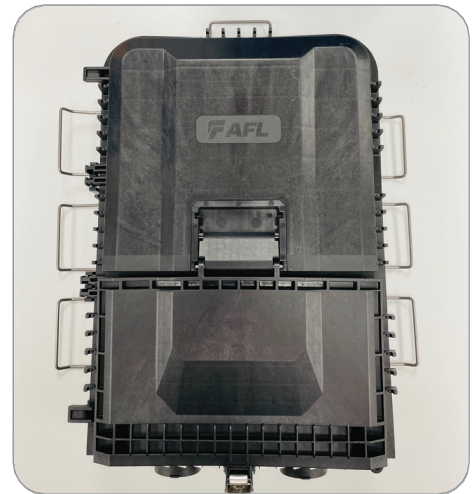


Figure 3

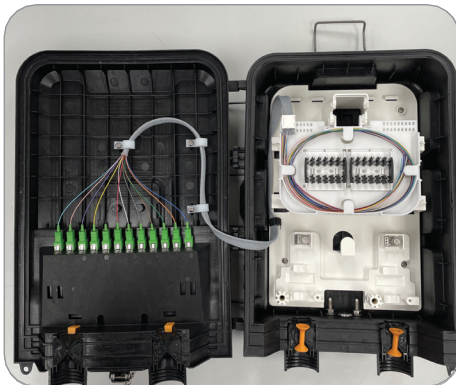


Figure 4

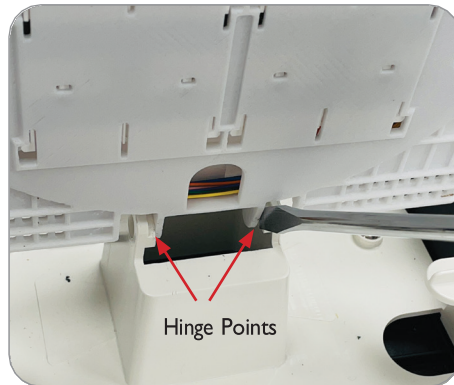


Figure 5

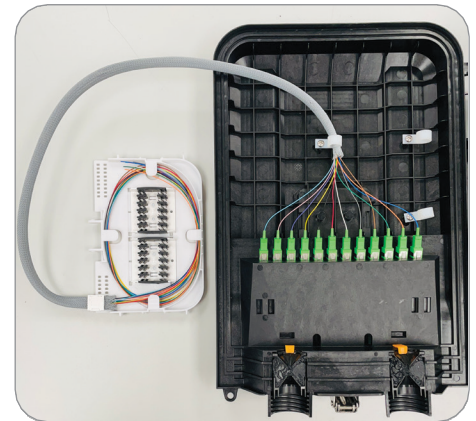


Figure 6

REMOVING FACTORY-INSTALLED PIGTAILS FROM SPLICE TRAY

****For installing cables with the terminal already mounted****

If cables are being installed after the terminal has been mounted, the factory-installed pigtails can be temporarily removed from the splice tray by opening the white V-Clip cover at the splice tray entrance.

1. Remove the clear splice tray cover.
2. Gently push the mesh toward the splice tray to slide the Mesh Insert out of the clip. (Figure 7)
3. Open the clip cover, which hinges to one side. The cover snaps on to the hinge on the clip. (Figure 8)
4. Remove the stored pigtails with the Mesh Insert from the splice tray and V-Clip, and set aside where they will not be damaged.
5. Replace the splice tray cover, leaving the V-clip attached to the splice tray.

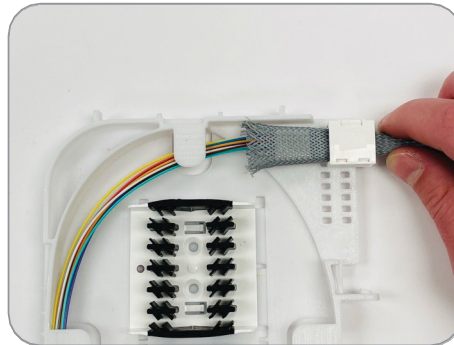


Figure 7



Figure 8

RE-INSTALLING FACTORY-INSTALLED PIGTAILS FROM SPLICE TRAY

****For installing cables with the terminal already mounted****

1. Remove the clear splice tray cover.
2. Slide the Mesh Insert over the pigtails with the tapered end toward the mesh and slide the mesh tube an inch or two over the Mesh Insert. (Figure 9)
3. Open the V-Clip cover and lay the mesh into the open clip about an inch or two behind the end of the mesh. (Figure 10)
4. Close the V-Clip cover and fully engage the insert by pulling the mesh gently so the insert fully sits inside the V-Clip. The mesh should extend at least ½" beyond the clip. (Figure 11)

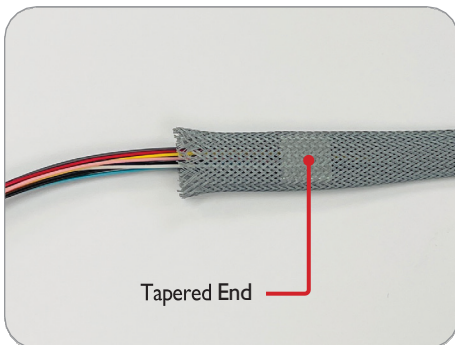


Figure 9

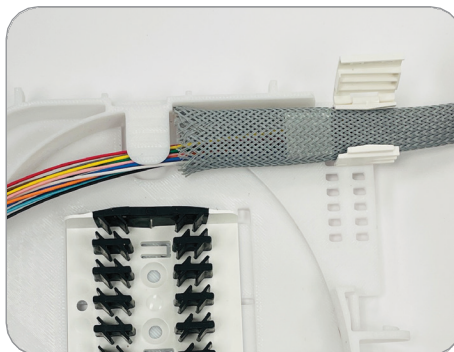


Figure 10

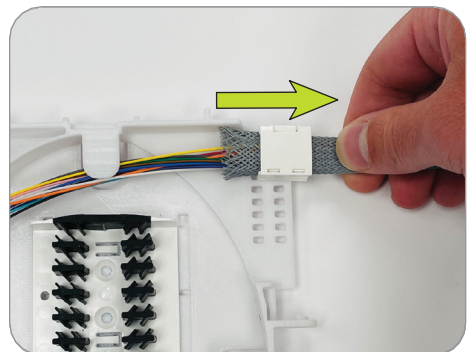


Figure 11

FEEDER CABLE LENGTH TABLE

The AFL RTD Splice Terminal has two feeder cable ports that support one cable per port, with an outer diameter ranging from 0.25 to 0.83 in. (6.4 to 21 mm).

This table should be used as a reference guide for determining the right cable preparation length. Applications may vary.

Cable Type	Type of Opening	Prep Length (in.)
All Cables	Mid sheath	68-102**
	End cut	34-52**
	Sheath to tray distance	18
Definition		
* Flat Matrix Ribbon	Minimum length is sheath to tray, to far splice location. Maximum adds storage loop in backplate.	
**Loose Tube and Wrapping Tube Cable (WTC)	Minimum length is sheath to tray, to far splice location. Maximum adds service loop in splice tray.	
Sheath to tray	No slack loop in backplate.	

Storage		
Each additional storage loop in backplate	24-26; 16-18 for Ribbon	
Each additional Splice tray service loop	17-18	

* Flat Matrix Ribbon routing path is intended to prevent flat matrix ribbon crossover in the splice tray		
** Loose storage for max number of tubes – 12 (144F with 12F per tube). Additional tubes will decrease cable lengths.		

CABLE ATTACHMENT UNIT (CAU)

Parts of the CAU (Figures 12 and 13)

- Sheath end
- Hose clamp gear nest in CAU
- Alignment slot on back
- Spur bracket

****Cable strength members are secured via a separate retention bolt in the terminal base.****

****Cable must be clean and free of all tape, dirt, or contamination for proper sheath retention and sealing.****

For AFL Wrapping Tube Cable (WTC)

1. No need to secure strength members.
2. Armored WTC outer sheath will end at the CAU sheath end location. (Figure 14)

****For AFL WTC or other preferential bend cables, the strength rods should be positioned so the natural bend of the cable aligns with how the cable tails are to be coiled. For parallel coiling, strength members should be positioned at 12 and 6 O'clock (top and bottom).****

****For mid-sheath on all WTC/SWR® binders and tubed flat matrix ribbon, ensure there is no twisting in the mid sheath opening that occurs to trap groups.****

Spur Bracket Orientation under Hose Clamp

1. The spur bracket MUST be installed completely under the hose clamp ring at the top of the cable. (Figure 15)

For all Thin-Walled Jettable Micro Cable

1. Install hose clamp without the spur bracket on any thin-walled micro cable. (Figure 16)

For Traditional Cable Types

1. Secure hose clamp and install spur bracket making sure it is properly oriented (spur bracket on top of cable).
2. If the cable is armored, a tab should be left for the ground clamp. The tab should be past the hose clamp. (Figure 14)
3. Tighten hose clamp to 30 in-lb, which is about the maximum one can hand-tighten on a can wrench.

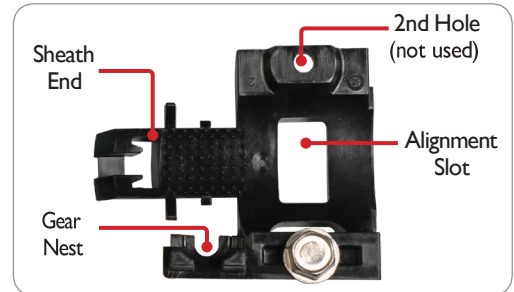


Figure 12

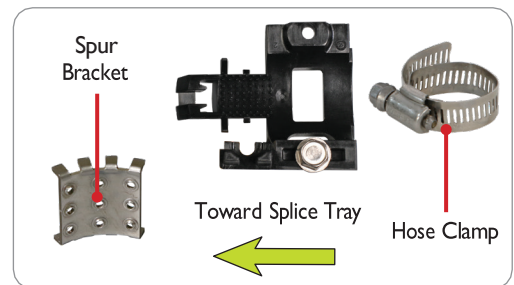


Figure 13

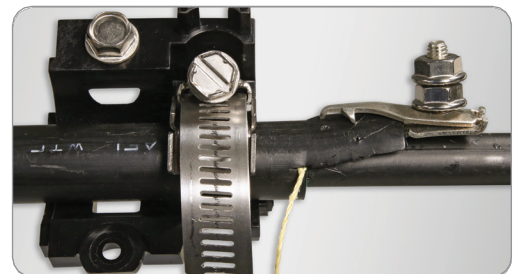


Figure 14

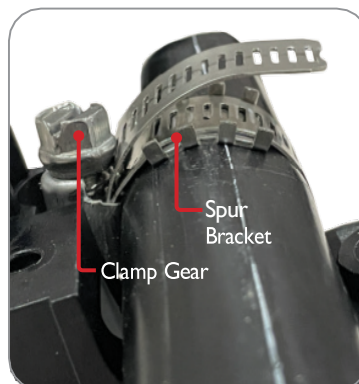


Figure 15

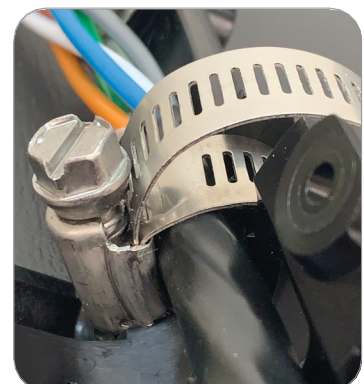


Figure 16

CABLE GROUNDING

The AFL RTD Splice Terminal comes with two ground studs which may be externally bonded if desired.

Cable bonding hardware is available using the AFL Apex® grounding clamps (AFL No. AX-KIT-GROUND-10).

Bonding hardware is typically defined by local practice or end user, however, two grounding eyelet straps for up to a ¼" ground stud are pre-installed in the terminal. **(Figure 17)** If cable grounding is not required, the ground straps can be removed or cut off.

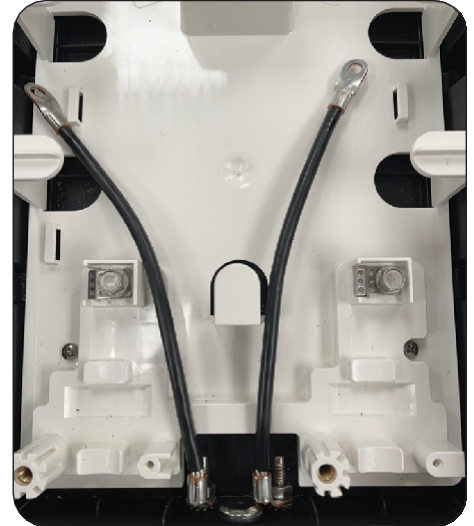


Figure 17

If cable grounding is required:

1. Slit the cable armor on both sides at approximately 1" to leave a tab of armor. This will be just past where the cable attachment unit (CAU) will be installed. **(Figure 18)**
2. Attach bonding hardware to the cable armor, following local accepted practice.
3. Install CAU, as outlined in the previous section above. **(Figure 19)**
4. After installing the cable in the closure, the grounding strap can be attached to the bonding hardware. **(Figure 20)**

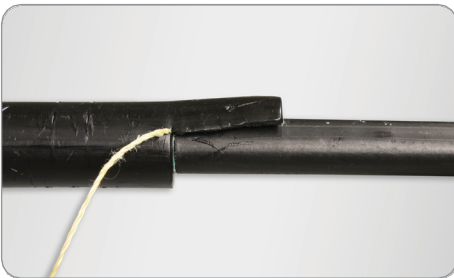


Figure 18

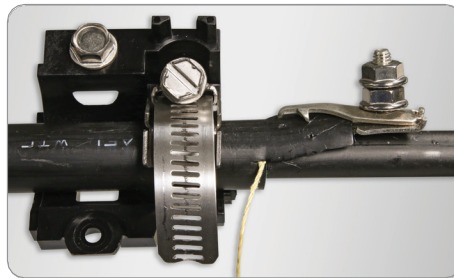


Figure 19

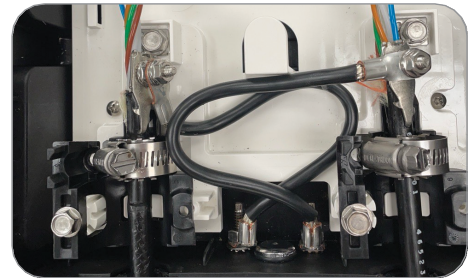


Figure 20

FEEDER CABLE INSTALLATION

The AFL RTD Splice Terminal has two feeder cable ports that support one cable per port, with an outer diameter ranging from 0.25" to 0.83" in. (6.4 to 21 mm).

****For Loose Tube cable, it is recommended to return the helical stranding of the tubes to its original lay as best as possible for storing slack loops****

1. Referencing the [Feeder Cable Length Table on Page 6](#), determine the total length needed in the enclosure. Measure and mark the cable accordingly.
2. Use locally accepted practices to remove the cable sheath where it has been marked and leave several inches of any strength members remaining. They will be trimmed and secured under the strength member retention bolt later.
 - a. If the cable is armored and requires grounding, leave a tab of armor as detailed in the above Cable Grounding section.
3. Install the Cable Attachment Unit (CAU) at the cable sheath end, following the steps outlined in the Cable Attachment Unit section above for the appropriate cable type. (Figure 21)
4. Remove the orange port plug from the cable port entrance. (Figure 27)
5. Place the CAU in its alignment tab and trim strength members to the necessary length to fit under the retention bolt. This is typically 1.75"-2". (Figures 22 and 23)
6. Secure the strength member(s) under the retention bolt without trapping or pinching any tubes. (Figure 24)
7. Begin to thread the CAU retention screw using a 216 can wrench. (Figure 25)
 - Confirm alignment of CAU, spur bracket, and cable orientation.
 - o If using a cable with preferential bend, such as AFL WTC, have their strength members aligned in the proper orientation to follow the necessary cable tail routing/coiling. (Figure 26)
 - Confirm the hose clamp tail is in a position to be retained. The tail can be tucked and retained underneath the CAU.
 - Ensure the CAU is fully seated and flush on both sides.
8. If the cable requires grounding, bond the cable armor to the ground stud via the provided ground strap.
9. After verifying everything is installed properly, hand-tighten the hose clamp to 30 in-lb. to secure the cable.

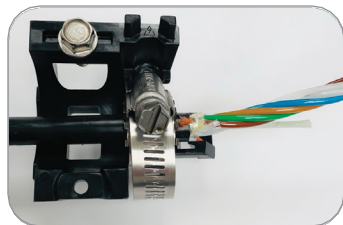


Figure 21



Figure 22

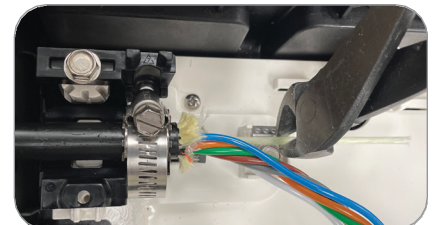


Figure 23

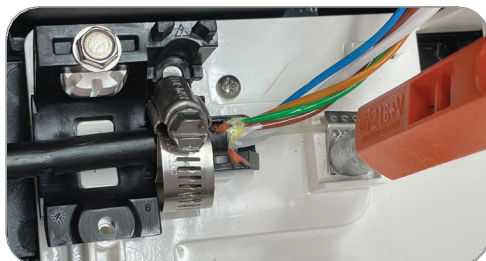


Figure 24

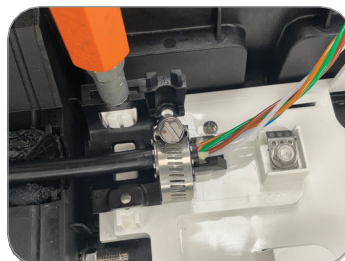


Figure 25



Figure 26



Figure 27

ROUTING IN BACKPLATE

LOOSE TUBE CABLE ROUTING

1. Separate the tube(s) to be brought to the splice trays and store the remaining slack in the backplate. The bundle should route around the splice tray yoke. (Figure 28)
 2. Neatly secure the slack bundle to the lances using the supplied Velcro. (Figure 28)
 3. Route the tube(s) to be used under the retention tabs and under the stored bundle. Secure under the Velcro. (Figure 28)
 4. Re-Install the splice tray(s) by engaging the hinge pin onto the yoke, and rotating the tray into place. (Figure 29)
- **NOTE: Splice trays should always be installed and used from the bottom up.****
5. Route the tube(s) to be used into the splice tray and mark the tube slightly beyond the wall of the splice tray. Ensure the tube(s) will have the proper amount of slack behind the yoke and will not kink or catch on anything with the tray hinged. (Figure 30)
 - a. The splice tray will lock in its upper position when raised. The tray will unlock simply by pushing it back down.
 6. Secure the tube(s) to the splice tray entrance using the supplied adhesive foam and tie wraps. (Figure 31)

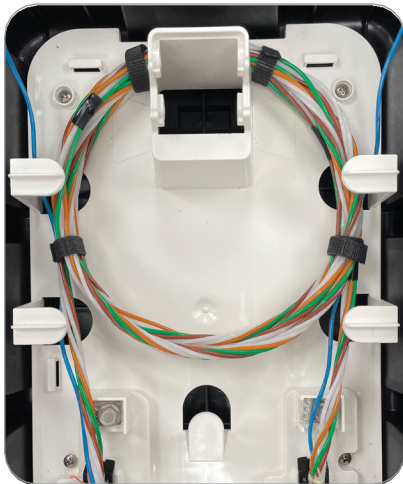


Figure 28



Figure 29

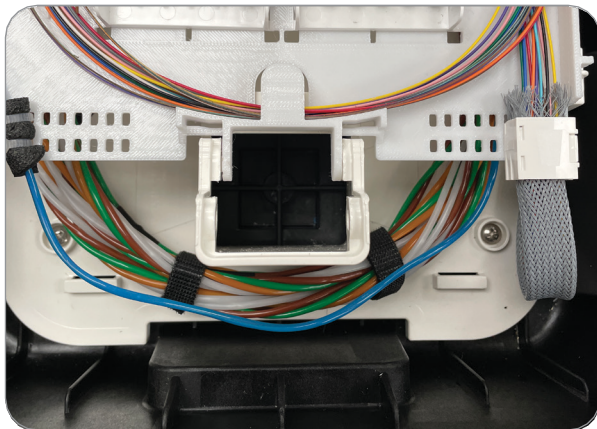


Figure 30

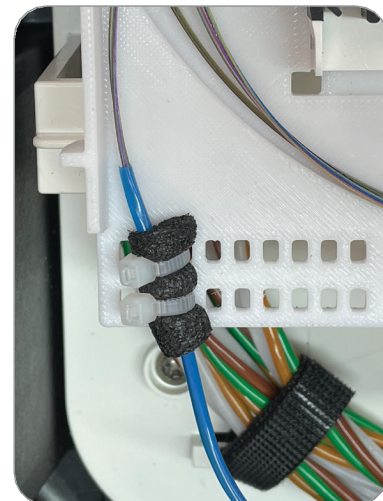


Figure 31

RIBBON CABLE ROUTING

1. Separate the ribbon(s) to be brought to the splice trays and store the remaining slack in the backplate. Ribbon fiber can be stored in front of the splice tray yoke, to reduce risk of fiber trapping. (Figure 32)
2. For AFL WTC, the water-blocking tape can extend over the CSM retention piece to provide additional protection. (Figure 33)
3. Neatly secure the slack bundle to the lances using the supplied Velcro. Use the Velcro with the soft side facing down on the fiber. (Figure 32)
4. Route the ribbon(s) to be used under the retention tabs and under the stored bundle. Secure under the Velcro. (Figure 32)

5. Re-Install the splice tray(s) by engaging the hinge pin onto the yoke, and rotating the tray into place. (Figure 34)

****NOTE: Splice trays should always be installed and used from the bottom up.****

6. Route the ribbon(s) to be used around the yoke and secure at the splice tray entrance. AFL recommends the following options:

- a. Secure with the AFL WTC/SWR® Foam Retention (Part No. HW000406) and tie wraps. (Figure 35)
- b. Use the supplied adhesive foam and tie wraps with the non-adhesive side on the fiber. (Figure 36)

****NOTE: The fiber should have movement after being secured to ensure no attenuation.****

7. Ensure the ribbon(s) has the proper amount of slack behind the yoke and will not kink or catch on anything with the tray hinged. (Figure 37)

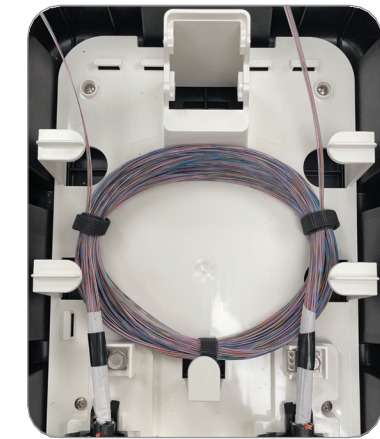


Figure 32



Figure 33

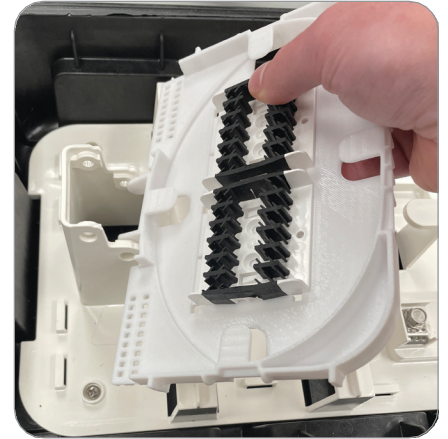


Figure 34

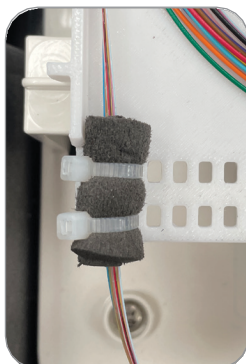


Figure 35

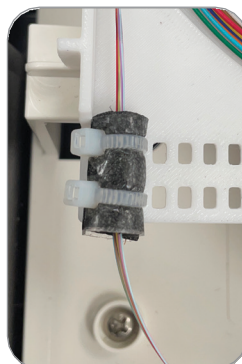


Figure 36

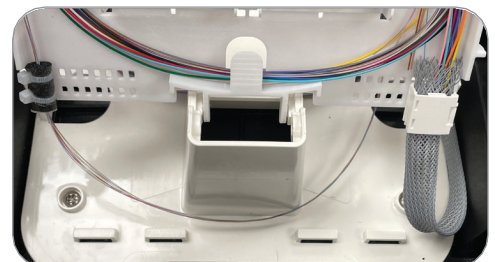


Figure 37

SPLICE TRAY OPTIONS AND ROUTING

The AFL RTD Splice Terminal holds 2 splice trays, and each tray holds 2 splice modules. The splice trays are universal for Loose Tube, Ribbon and SWR® splicing applications.

****NOTE: The fiber capacity listed below is based purely on the splice module's capacity. Overall fiber storage capacity in the terminal varies depending on cable type and application.****

Fiber	Sleeves Per Module	Loaded Splice Tray - 2 Modules
Single Fiber Loose Tube	18 splices (triple stacked)**	36 fibers**
Flat Matrix Ribbon	6 (single-stacked)	144 fibers
AFL SWR or Rollable Ribbon	12 (double-stacked)	288 fibers

****Single fiber splices can be quad stacked for a total of 24 splices per module (48 total per tray), if using AFL's Slim Protection Splice Sleeves.****

Splice trays for the AFL RTD Splice Terminal come fully loaded, but splice modules are field removable.

1. To remove a splice module, disengage the locking tabs on the back with a pair of shears or similar, and slide module to release the latches. (Figure 38)
2. To re-install a splice module to the splice tray, align the latch tabs with the module slot on the splice tray. (Figure 39)
3. Slide to engage. (Figure 40)
4. Loose Tube fiber and SWR or other rollable ribbon is spliced using slack storage in the tray. (Figure 41)
5. Flat matrix ribbon is routed differently to avoid any crossover of flat matrix ribbons in the splice tray.
 - a. Splicing flat matrix ribbon to the flat matrix ribbon pigtail should be routed similar to Figure 42 to avoid any ribbon crossover. This leaves ~15" of the ribbon pigtail.
 - b. Splicing SWR to the flat matrix ribbon pigtail should be routed the same way, except the SWR can have additional slack loops in the tray like loose tube fiber.

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



Figure 38

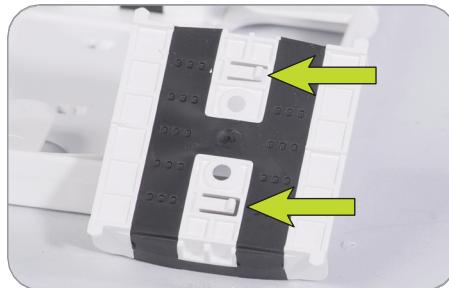


Figure 39

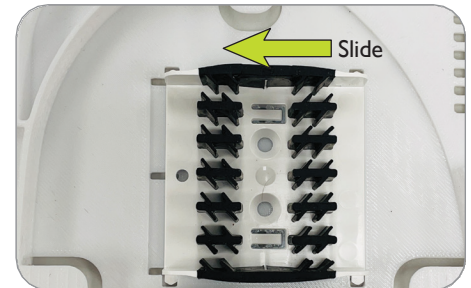


Figure 40

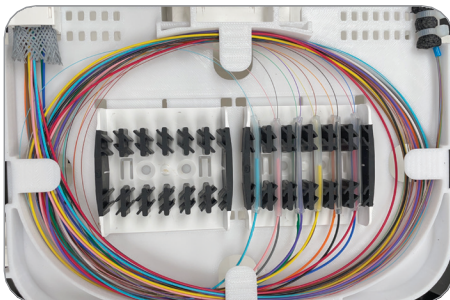


Figure 41

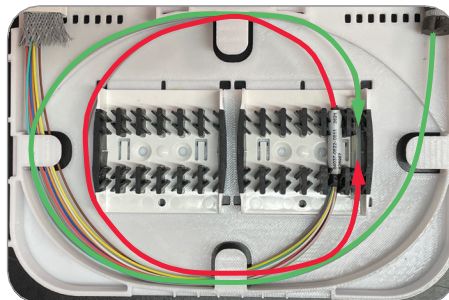


Figure 42

****NOTE: Alternate Splicing Method – Splicing can be done PRIOR to routing the fiber in the backplate to allow more room for splicing on a table, if desired. Refer to the Feeder Cable Length Table above for determining appropriate length.****

Once all splicing is complete:

1. Ensure all slack is dressed neatly in the splice trays and backplate.
2. Return splice trays to their original horizontal position with their covers on.
3. Re-route meshed pigtails back to their original position.
4. Ensure cables are properly secured to the CAUs.
5. Close the cover of the terminal and secure all the wire latches.

FEEDER CABLE SEALING

After completing the cable installation and splicing, the supplied drive screws and quick-release hose clamps are needed to seal the cable ports.

1. Ensure the cable jacket is free from all tape, dirt, or contamination for proper sealing.
2. Install the quick-release hose clamp around the cable port entrance. Position the hose clamp gear to the side, away from the drop cable bracket for easy re-entry. (Figure 43)
3. Tighten the quick-release hose clamp by turning the integrated thumb tab/wing handle clockwise until the two port halves are flush with each other. Ensure the hose clamp is secure, and the cable port is properly compressed to provide an effective seal.
4. Pull apart the two halves of the drive screw and place around the cable tail. (Figure 44)
5. Align the drive screw with the port entrance and thread the drive screw by hand into the port. The drive screw should be hand-tightened until it reaches a positive stop. (Figures 45 and 46)

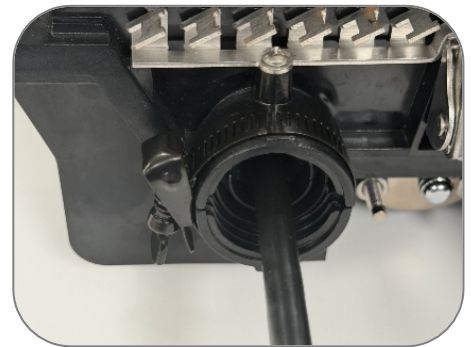


Figure 43



Figure 44



Figure 45

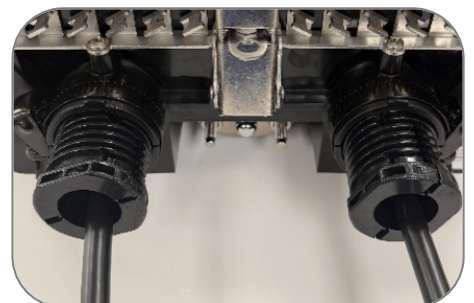


Figure 46

OPENING DROP LID

The AFL RTD Splice Terminal has an articulating hinge that can be locked in place when installing drop cables.

1. With the front latch and two side wire latches disengaged, lift open the drop lid. (Figure 47)
2. Swivel the hinge up and rotate to place it in the upper slot, and pull the lid down to lock it in place. (Figures 48 and 49)



Figure 47

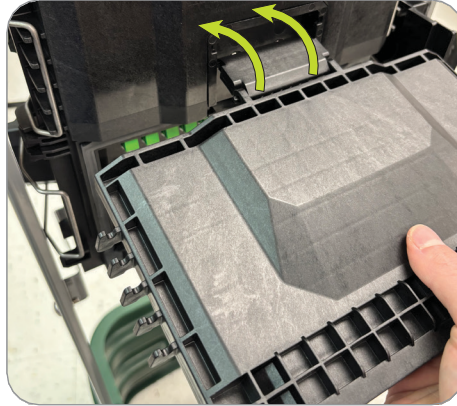


Figure 48

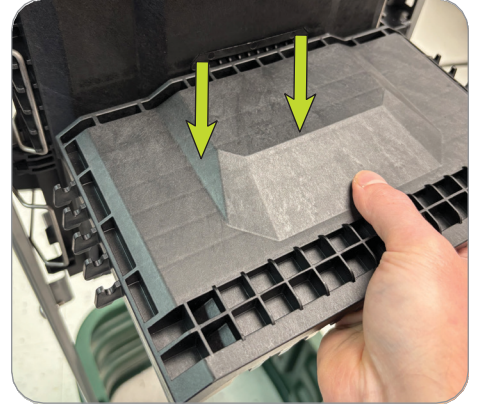


Figure 49

DROP CABLE INSTALLATION

The AFL RTD Splice Terminal has 12 drop cable slots, with each slot accommodating an outer diameter range of 0.12" - 0.2" (3 mm - 5 mm), or flat drop cable.

****Drop cables should be installed in the slots from left to right, with a slack loop in the drop storage area.****

⚠ Caution: When working with fiber optics, do not look directly into the end of the fiber cable or adapter port. A power meter may be used to determine if the cable or port is dark. Always use locally accepted fiber optic safety practices.

The ideal length for routing drop cables is 16-20", depending on the port position.

**** 900 μ m fiber or jacketed drop cable is recommended for routing in the drop storage area. Bare 250 μ m fiber should be furcated to add protection.****

1. Remove the blank port plug from the drop slot using a pair of cutters. (Figures 50 and 52)
2. Install the drop cable in the drop slot with the cable sheath extending just past the drop seal.
 - a. If using a field-installable connector, prep the end of the cable to expose 16-20" of fiber, using approved cable tools.
3. Secure the cable sheath to the drop retention bracket using UV-resistant, black tie wraps. It is recommended to use tie wraps rated for at least 50 lbs tensile strength. (Figure 51)

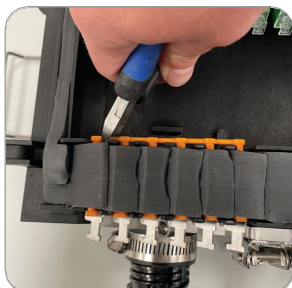


Figure 50



Figure 51



Figure 52

4. Plug in connector and route slack fiber in the drop storage area underneath the adapters and routing tabs. The lances can be used to secure the slack fiber, if desired. (Figures 53 and 54)
5. If toning wires from the drop cables are required to be grounded to the terminal, they can be attached to the external ground studs on the terminal base.

****AFL recommends always cleaning and inspecting connectors and adapters before making a connection. Always follow locally accepted practices and cleaning procedures.****

6. Once done installing drop cables, close the drop lid and secure with the two side wire latches and front latch.



Figure 53

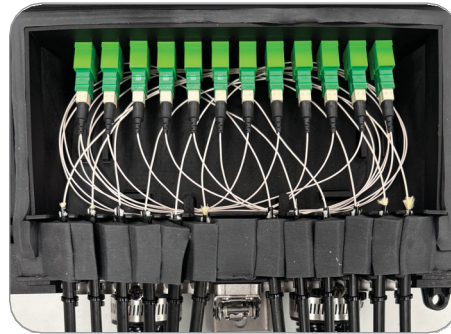


Figure 54

PRODIGY® HARDENED DROP CABLE INSTALLATION

The Prodigy® hardened drop lid allows for quick and easy drop connections with Prodigy® hardened drop cables. For specifications on AFL RTD™ drop cables with Prodigy®, refer to Appendix A at the end of this document.

****NOTE: Before installing hardened drop cables, ensure the proper strain relief is available to secure the drop cables outside of the terminal and prevent cable pullout or connector damage.****

CONNECTING PRODIGY® HARDENED CONNECTOR



Caution: When working with fiber optics, do not look directly into the end of the fiber cable or adapter port.

A power meter may be used to determine if the cable or port is dark. Always use locally accepted fiber optic safety practices.

****NOTE: Ensure that the terminal is clear from any environmental debris before removing the adapter dust cap. When cleaning the outside of the terminal, only clean water is to be used.**

1. Using local engineering practices, determine the terminal port to be used for connecting with the Prodigy® Hardened Connector cable assembly.

****NOTE: Each port on the terminal is identifiable by an embossed port ID located next to each adapter. (Figure 55)**

2. Remove the adapter dust cap on the terminal by twisting a quarter turn to the left and pulling. (Figure 56)



Figure 55



Figure 56

****Note: AFL recommends inspecting and cleaning the adapter before making a connection to verify the adapter end face is clean.****

3. To clean, insert a dry, lint-free swab into the adapter to clean the adapter end face. Apply light pressure against the end face and fully rotate the dry swab three times. Use a new swab for each adapter. (Figure 57)

****Note: The adapter dust cap and connector dust cap should only be removed immediately prior to connection in order to avoid any contamination.****

4. On the Prodigy® hardened connector, twist the connector dust cap counter-clockwise to unlock and pull off the cap. (Figure 58) Pull off the ferrule dust cap as well. (Figure 59)

****Note: The connector dust cap has a breakaway piece that breaks off once the cap is removed, and is used to indicate whether the drop is still factory sealed. (Figure 60)**

5. Use a One-Click® SC Cleaner or similar to clean the connector end face. Always insert the cleaner straight into the connector (not at an angle), and press in until an audible click is heard. (Figure 61)
6. Align the key on the Prodigy® hardened connector with the top of the adapter housing. (Figure 62)
7. Insert the connector and twist a quarter turn to the right to engage the connector. An audible click will be heard. (Figure 63)
8. Lock the connector in place by pulling the locking ring down toward the connector housing. (Figure 64)
9. Secure the dust caps by threading the connector dust cap into the adapter dust cap. (Figure 65)
10. Repeat Steps 1-9 for each additional drops that need to be connected.



Figure 57

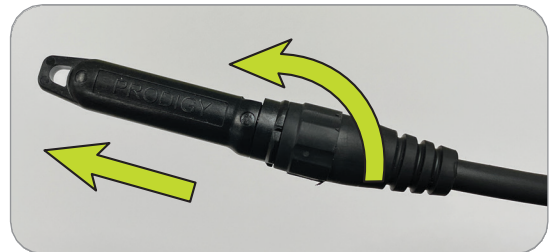


Figure 58

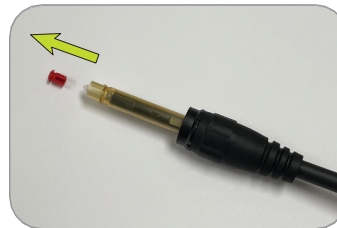


Figure 59



Figure 60



Figure 61



Figure 62



Figure 63



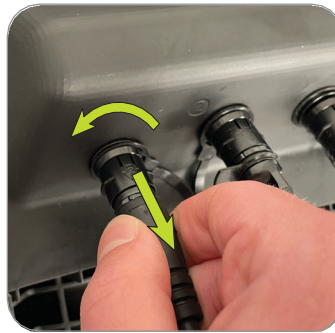
Figure 64



Figure 65

DISCONNECTING PRODIGY® HARDENED CONNECTORS

1. Unscrew the connector dust cap from the adapter dust cap. (Figure 66)
2. Push the locking ring up toward the port to unlock the connector. (Figure 67)
3. Twist the connector a quarter turn to the left to disengage and pull the connector out. (Figure 67)
4. Re-install the adapter dust cap over the adapter with a quarter turn to the right. (Figure 68)
5. Re-install the connector dust cap and lock it with a clockwise turn. An audible click will be heard when engaged. (Figure 69)

**Figure 66****Figure 67****Figure 68****Figure 69**

MOUNTING OPTIONS

The AFL RTD Splice Terminal comes with mounting brackets that have three mounting positions to allow for mounting to a pole, wall, pedestal, and aerially on a messenger wire strand. (Figure 70)

Mounting aerially to a messenger wire strand requires an additional kit (see details below).

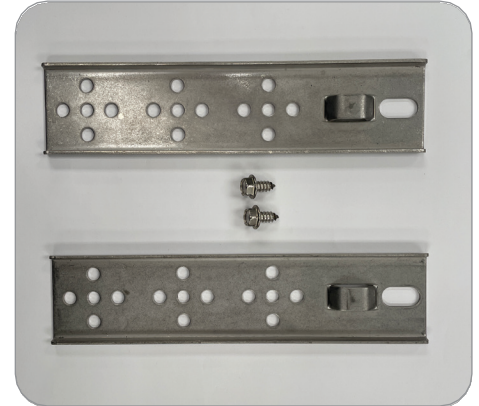


Figure 70

POLE/WALL MOUNT

1. Attach the mounting brackets to the back of the terminal. Use the middle mounting position on the top bracket, and the top position on the bottom bracket. (Figure 71)
2. Determine the mounting position of the terminal on the pole or wall and mark the screw locations to be pre-drilled. The distance between the mounting holes is approximately 18 inches.
3. Drill pilot holes in both previously marked locations.
4. Using local accepted practices and approved hardware, install screws to secure the terminal to the pole. For pole mounting, AFL recommends using ¼" lag screws or similar hardware to mount the terminal. (Figures 72 and 73)

****NOTE: The mounting brackets also accept up to a 5/8" band for banding to a pole.****

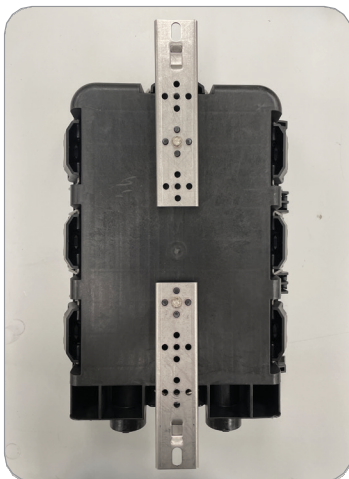


Figure 71



Figure 72



Figure 73

POLE MOUNT WITH COIL BRACKET

The AFL RTD Splice Terminal can be mounted to AFL's CB-30-3AL and CB-AX2SH coil brackets to allow storage of slack cable on a pole. To mount the terminal to either coil bracket, the hardware kit (AFL No. HW150510) is needed.

CB-30-3AL Mounting

1. Attach the mounting brackets to the back of the terminal in their fully extended positions. (Figure 74)
2. Align the brackets with the holes shown in Figure 75 and attach to the coil bracket using the hardware in kit, AFL No. HW150510.

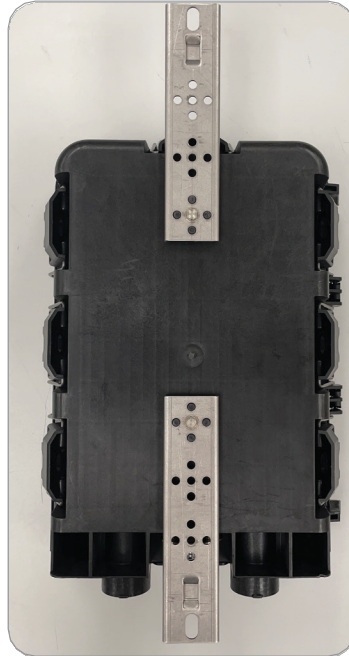


Figure 74

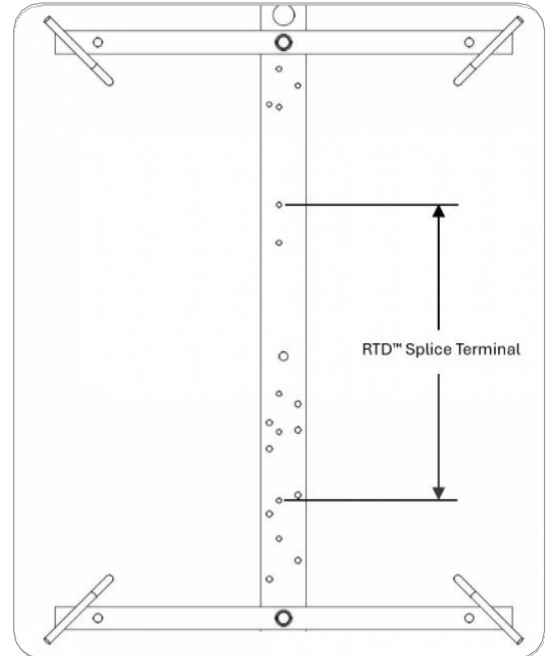


Figure 75

CB-AX2SH Mounting

1. Attach the mounting brackets to the back of the terminal using the middle mounting position on the top bracket, and the top position on the bottom bracket. (Figure 76)
2. Align the brackets with the holes shown in Figure 77 and attach to the coil bracket using the hardware in kit, AFL No. HW150510.



Figure 76

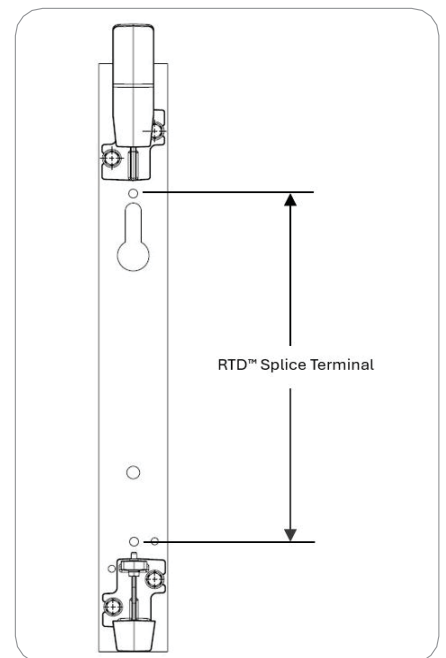


Figure 77

PEDESTAL MOUNT

1. Attach the mounting brackets to the back of the terminal. To maximize space in the pedestal, use the top mounting position for both brackets. (Figure 78)
2. Determine mounting position in the pedestal and adjust brackets in the pedestal accordingly. The distance between the mounting holes is approximately 16 inches.
3. Using local accepted practices and approved hardware, secure the terminal inside the pedestal at the top and bottom mounting holes. (Figures 79 and 80)

****NOTE: Ensure there will be enough room to store any cable slack needed without violating the cable's bend radius.****

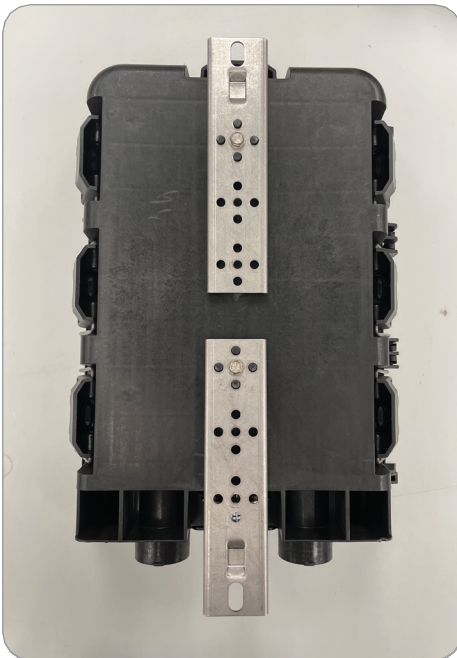


Figure 78

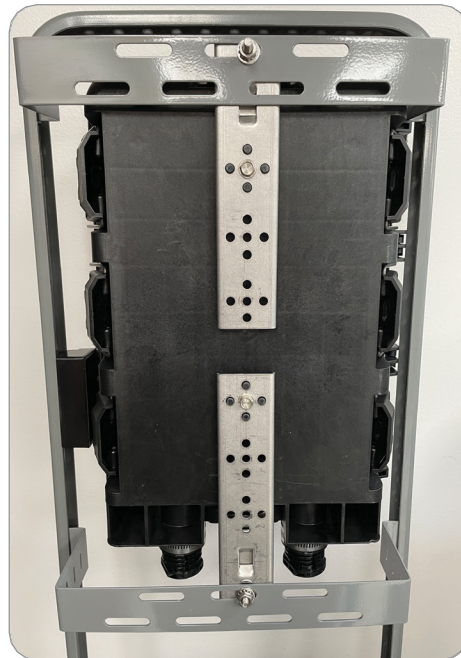


Figure 79



Figure 80

AERIAL MOUNT

Mounting aerially on a messenger wire strand requires using the supplied mounting brackets with the Aerial Strand Mount Bracket Kit, AFL No. FC150793. The kit includes a pair of the brackets pictured below, as well as hardware. (Figure 81)

1. Position the brackets 90° and attach them to the back of the terminal in their fully extended position. (Figure 82)

****NOTE: Ensure the brackets are positioned so that the cables will be oriented toward the pole.****



Figure 81

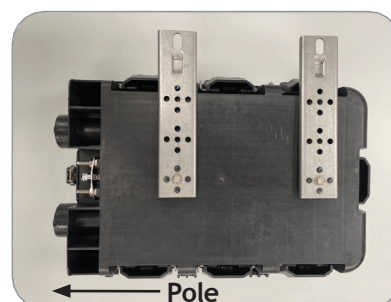


Figure 82

2. Attach bracket labeled “B” to bracket labeled “A” using the supplied hardware. (Figures 83 and 84)
3. Attach clamps labeled “C” to the end of bracket labeled “B” using the supplied hardware. Leave the clamps loose as they will be clamped around the messenger wire later. (Figure 85)

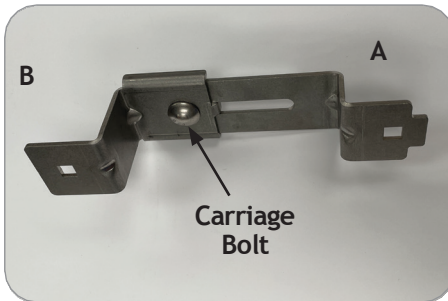


Figure 83



Figure 84

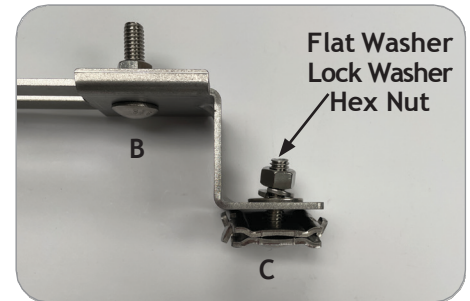


Figure 85

4. Attach the assembled pieces A, B, and C to the terminal mounting bracket using the supplied hardware. (Figure 86)
5. Repeat steps with the other mounting bracket. (Figure 87)



Figure 86

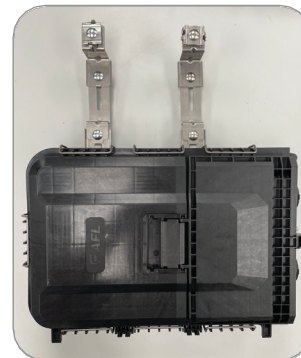


Figure 87

6. Slide the messenger wire between the clamps and hand-tighten to secure. (Figure 88)
7. Adjust bracket labeled “B” to the desired height, if needed. (Figure 89)



Figure 88



Figure 89

INSTALLING SPLITTERS

The AFL RTD Splice Terminal can be ordered empty with no adapters and no pigtails when using the standard drop lid version, to allow for PLC splitter assemblies to be installed in the field.

AFL recommends using 900 μ m fiber splitter assemblies with 1-meter length pigtails to properly route the assembly to the splice tray. Refer to the [“Additional Kits” table on Page 2](#) of this document for AFL-offered splitter assemblies.

It is recommended to install woven mesh, spiral wrap, or similar over the 900 μ m fiber bundle for added protection. AFL offers mesh and silicone spiral wrap as options (see [“Optional Consumables” on Page 2](#)).

1. Install mesh, spiral wrap, or similar over the splitter assembly. Approximately 30 inches is needed to reach the splice tray.

2. Plug in the pigtail connectors to the adapters, ensuring they are inserted in the correct numerical order. (Figure 90)

****NOTE – AFL recommends inspecting and cleaning each connector prior to making a connection.****

3. Using the fiber management clips, route the pigtails over to the splice tray. (Figure 91)

4. Use Velcro to secure the pigtails to the lance on the backplate. (Figure 91)

5. Secure the pigtail bundle to the splice tray entrance and place the PLC splitter chip in the far splice module slot. AFL recommends using the Foam Retention pieces (AFL No.: HW000406) or similar to protect the fiber. (Figure 92)

****NOTE – Ensure the fibers still have free movement after securing to prevent attenuation.****

6. Adjust the slack as necessary.

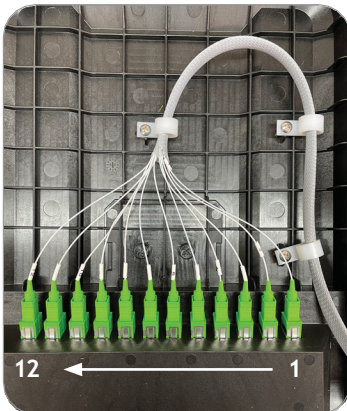


Figure 90

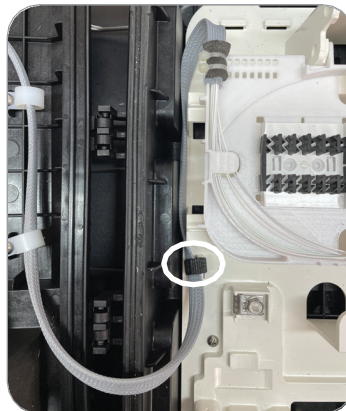


Figure 91

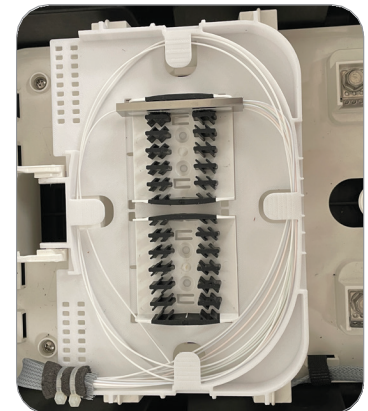


Figure 92

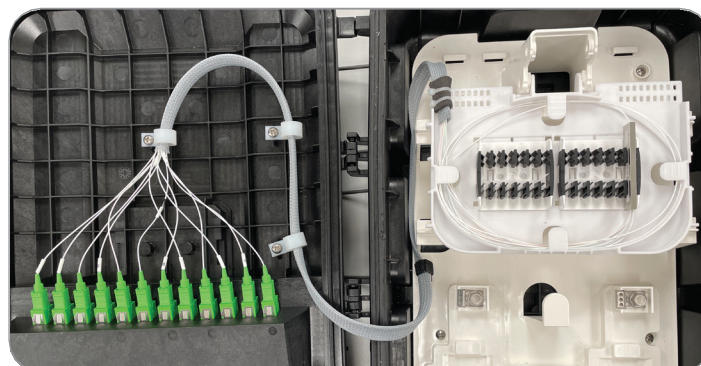


Figure 93

APPENDIX A

AFL RTD™ HARDENED DROP CABLES WITH PRODIGY® SPECIFICATIONS

Parameter	Value
Cable Nominal Diameter – in. (mm)	Flat Drop – 0.17 x 0.32 (4.5 x 8.1)
	ADSS – 0.346 (8.8)
	Pushable Round Drop - 0.20 (5.1)
Cable Maximum Tensile Loading – lbs (N)	Flat Drop - 300 (1,335) Install ; 90 (405) Long-Term
	ADSS – 1,000 (4,448) MRCL
	Pushable Round Drop – 112 (500)
Cable Minimum Bend Radius – in. (mm)	Flat Drop - 3.2 (82)
	ADSS – 7.0 (180) Install ; 6.0 (140) Long-Term
	Pushable Round Drop – 2 (51)
Maximum Span Length at 1% Sag – ft (m) at 60°F Installation per NESC loading conditions	Light Loading: Flat Drop - 375 (114) ; ADSS – 1,090 (332)
	Medium Loading: Flat Drop - 275 (83) ; ADSS – 710 (216)
	Heavy Loading: Flat Drop - 150 (45) ; ADSS – 420 (128)
Operating Temperature – °F (°C)	-49 to +149 (-40 to +65)
Prodigy® Connector Max. Insertion Loss – dB	≤ 0.4
Prodigy® Connector Typical Insertion Loss – dB	≤ 0.12
Prodigy® Connector Reflection – dB	≤ 65
Prodigy® Connector Retention Force – lbs (N)	100 (444)



INSTALLATION INSTRUCTIONS

AFL RTD™ Splice Terminal
