COYOTE® CLOSURE ADOBE™ SERIES
FOR UNDERGROUND, AERIAL, AND BURIED SPLICES
6.0" x 22" • 8.5" x 22"
(152.4 mm x 558.8 mm • 215.9 mm x 558.8 mm)

Be sure to read and completely understand this procedure before applying product. Be sure to select the proper PREFORMED™ product before application.

PLEASE NOTE: For OPGW application, see procedure entitled, “OPGW Cable and End Plate Preparation for COYOTE® Closure” (SP2849).

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1.00 NOMENCLATURE

FIGURE 1 - SHELL KIT
1. Two COYOTE® Closure shell halves, neoprene gasket is applied at factory.

<table>
<thead>
<tr>
<th>PLP® Catalog Number</th>
<th>COYOTE® Closure Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80805258</td>
<td>6.0&quot; x 22&quot; (152.4 x 558.8)</td>
</tr>
<tr>
<td>80805259</td>
<td>8.5&quot; x 22&quot; (215.9 x 558.8)</td>
</tr>
</tbody>
</table>

FIGURE 2 - SPLICE TRAY KIT
1. Cover  3. Tie Wraps (not shown)
2. Tray   4. Felt Strips (not shown)

<table>
<thead>
<tr>
<th>PLP Catalog Number</th>
<th>Splice Tray</th>
<th>Splice Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8001122</td>
<td>ADOBE-12 Splice Tray for Heat-Shrink Protected Fusion Splice</td>
<td>12</td>
</tr>
<tr>
<td>8001121</td>
<td>ADOBE-24 Splice Tray for Heat-Shrink Protected Fusion Splice</td>
<td>24</td>
</tr>
</tbody>
</table>

FIGURE 3A - THREE-SECTION SIX PORT END PLATE KIT
1. End Plate Sections
2. Torque Bar Brackets (2)
3. 3/4" (19.05 mm) Plugs (2), 7/8" (22.23 mm) Plugs (3)
4. "L" Brackets (2)
5. LOCK-TAPE™ Sealant (factory-applied)
6. Internal Ground Inserts (6; factory-installed)
7. COYOTE Cable Mea-SURE™ Tape (not shown)

<table>
<thead>
<tr>
<th>PLP Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80805105</td>
<td>Three-Section Six Port End Plate Kit</td>
</tr>
<tr>
<td>8003371</td>
<td>Future Cable Port Kit for 7/8&quot; (22.23 mm) port (.56&quot; [14.22 mm] max. cable diameter)</td>
</tr>
<tr>
<td>8003291</td>
<td>Future Cable Installation Kit</td>
</tr>
<tr>
<td>8003289</td>
<td>Future Cable Port/Installation Kit (includes cat. no. 8003371 and cat. no. 8003291 for 7/8&quot; (22.23 mm) port)</td>
</tr>
<tr>
<td>80806037</td>
<td>3/4&quot; (19.05 mm) End Plate Plug Kit (2/kit)</td>
</tr>
<tr>
<td>80806180</td>
<td>7/8&quot; (22.23 mm) End Plate Plug Kit (2/kit)</td>
</tr>
</tbody>
</table>
FIGURE 3B - THREE-SECTION FOUR PORT END PLATE KIT

1. End Plate Sections
2. Torque Bar Brackets (2)
3. 1" (25.4 mm) Plugs (2), 1-1/4" (31.75 mm) Plugs (2)
4. "L" Brackets (2)
5. LOCK-TAPE™ Sealant (factory-applied)
6. Internal Ground Inserts (4; factory-installed)
7. COYOTE Cable Mea-SURE™ Tape (not shown)

FIGURE 4 - BLANK END PLATE KIT

1. End Plate
2. Torque Bar Brackets (2)

<table>
<thead>
<tr>
<th>PLP Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>80805260</td>
<td>Blank End Plate Kit</td>
</tr>
</tbody>
</table>

FIGURE 5 - LOOSE BUFFER TUBE STORAGE KIT

1. Torque Bar   3. Splice Tray Hold
2. Retainer Brackets   Down Strap
**ACCESSORY KITS**

<table>
<thead>
<tr>
<th>PLP Catalog Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8003285</td>
<td>Color-Coded Transport Tube Kit (6 per kit), 34&quot; (.863 m) long</td>
</tr>
<tr>
<td>80050293</td>
<td>Transport Tube Kit (6 per kit), 34&quot; (.863 m) long</td>
</tr>
<tr>
<td>8005107</td>
<td>Strength Member Bracket Kit (2 per kit)</td>
</tr>
<tr>
<td>8005431</td>
<td>Long Strength Member Bracket Kit (2 per kit)</td>
</tr>
<tr>
<td>8003280</td>
<td>Transition Tube Kit</td>
</tr>
<tr>
<td>8003281</td>
<td>External Bond Clip Kit (2 per kit)</td>
</tr>
<tr>
<td>80050286</td>
<td>Bracket Adaptor Kit for AT&amp;T Bond Connector (4 per kit)</td>
</tr>
<tr>
<td>8003325</td>
<td>Adjustable Aerial Hanger Bracket Kit</td>
</tr>
<tr>
<td>8003448</td>
<td>Moisture Blocking Sealant Kit (3 oz. tube)</td>
</tr>
</tbody>
</table>

**DESCRIPTION AND CLOSURE CAPACITIES**

2.01 For Safety Considerations, refer to Section 18.00 of this procedure.

2.02 The COYOTE Closure ADOBE Series organizes, distributes and protects all types of fiber optic cable with a water and air tight seal. Low profile ADOBE Splice Trays are incorporated to minimize the number of splices per splice tray (12 or 24) and to maximize the overall capacity of the closure.

2.03 The COYOTE Closure ADOBE Series provides the following capacities for heat-shrink protected fusion splices (Table 1):

<table>
<thead>
<tr>
<th>Splice Tray Catalog Number</th>
<th>Description</th>
<th>Splice Capacity Per Tray</th>
<th>Maximum No. of Trays Per Closure</th>
<th>Maximum Closure Splice Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8001122</td>
<td>Heat-Shrink Protected Fusion Splice</td>
<td>12</td>
<td>12</td>
<td>144</td>
</tr>
<tr>
<td>8001122</td>
<td>Heat-Shrink Protected Fusion Splice</td>
<td>12</td>
<td>18</td>
<td>216</td>
</tr>
<tr>
<td>8001121</td>
<td>Heat-Shrink Protected Fusion Splice</td>
<td>24</td>
<td>12</td>
<td>288</td>
</tr>
</tbody>
</table>

**TABLE 1**

1.01 The COYOTE Closure contains everything needed for installation except hand tools, vinyl tape, filled cable cleaning fluid, and C-Cement.

1.02 Tools Needed:
- 1/2" socket
- 7/16" socket
- 3/8" socket/Can wrench
- Snips
- Ratchet Wrench
- Torque Wrench (capable of reading 150 inch lbs. [16.9 Nm])
- Fiber optic cable opening tools

*Available from Preformed Line Products
3.00 END PLATE CONFIGURATIONS

3.01 Two versions of the Three-Section End Plate are available for the COYOTE Closure; one which accepts up to six cables, and one which accepts up to four larger cables. (Figures 6A and 6B)

A = 7/8" (22.2 mm) diameter
B = 3/4" (19.0 mm) diameter

FIGURE 6A - DIAGRAM OF SIX PORT END PLATE

A = 1" (25.4 mm) diameter
B = 1-1/4" (31.8 mm) diameter

FIGURE 6B - DIAGRAM OF FOUR PORT END PLATE

3.02 See Figure 7 for hardware that can be used with the Three-Section End Plate.

4.00 CABLE PREPARATION–LOCK-TAPE SEALANT APPLICATION

NOTE: For OPGW application, see procedure entitled, “OPGW Cable and End Plate Preparation for COYOTE® Closure” (SP2849).

4.01 Cable sheath opening measurements, for both size closures, whether using unitube or buffer tube, are 152" (3.8 m) for continuous loop/expess applications, and 76" (1.93 m) for cut cable.

NOTE: The COYOTE Closure is designed for main cables to enter the bottom outside cable ports and for branch cables to enter the bottom middle and upper cable ports in the End Plate.

PLP TIP: Where irregular cable ends exist, measure from the shortest cable to establish End Plate location.

4.02 The color-coded COYOTE Cable Measure Tapes are used to determine the number of half-lapped layers of LOCK-TAPE Sealant required to seal the cable in the End Plate. The back of the Measure Tape is used to check whether the LOCK-TAPE Sealant wrap is the proper diameter to ensure a water and air tight seal. (Figure 8)

For the Six Port End Plate, the orange-colored end is used to measure cables entering the 7/8" (22.2 mm)
Using the provided Emery Cloth, thoroughly scuff the cable sheath for 5" (127.0 mm) from measured opening. Always scuff **around** the cable, never lengthwise.

4.05 Coat the scuffed area with C-Cement and allow to dry. It is important that the C-Cement dries to a tacky base before LOCK-TAPE Sealant is applied.

**PLP TIP:** Use removed LOCK-TAPE Sealant backing from Step 4.06 to dry and remove excess C-Cement applied to cable.

4.06 Remove backing from LOCK-TAPE Sealant and wrap LOCK-TAPE Sealant onto the cable with the black side up. Stretch the 1" (25.4 mm) LOCK-TAPE Sealant to a width of 7/8" (22.2 mm). (Figure 10) Apply the required numbers of half-lapped layers of LOCK-TAPE Sealant, as indicated on the Cable Measure Tape, to the area coated with C-Cement. (Figure 11)

4.03 TO USE COYOTE CABLE MEASURE TAPE:
- Wrap the **correct end** of COYOTE Cable Measure Tape around cable where it will enter the End Plate.
- If the index line falls directly between two numbers use the higher number.
- The number on the COYOTE Cable Measure Tape indicates the number of half-lapped layers of LOCK-TAPE Sealant to be applied around the cable. (Figure 9)

4.04 Diameter ports while the blue-colored end measures cables entering the 3/4" (19.0 mm) diameter ports.

For the Four Port End Plate, the COYOTE Cable Measure Tape has a green-colored end for the 1" (25.4 mm) diameter port and a red-colored end for the 1-1/4" (31.75 mm) diameter port.

**FIGURE 8 - COYOTE CABLE MEASURE TAPE**
**FIGURE 9 - MEASURING CABLE — BE SURE TO USE CORRECT END OF CABLE MEASURE TAPE**

**FIGURE 10 - STRETCH LOCK-TAPE**
**FIGURE 11 - APPLIED LOCK-TAPE**
4.07 To check LOCK-TAPE Sealant application, wrap the proper end of the COYOTE Cable Measure Tape check gauge around the applied LOCK-TAPE Sealant. If the measurement line falls outside of the index lines of the check gauge, LOCK-TAPE Sealant must be reapplied. It is acceptable to reapply the original LOCK-TAPE Sealant. (Figure 12)

FIGURE 12 - CHECK GAUGE

4.08 To protect LOCK-TAPE Sealant from cable grease, cover the LOCK-TAPE Sealant with vinyl tape.

NOTE: If strength members are to be secured, leave 4-5" (101.6-127.0 mm) of metallic or non-metallic strength members exposed from the sheath opening.

4.09 Open and clean cable according to accepted company practices.

5.00 INTERNAL BOND PROCEDURE

5.01 Install a shield connector on each cable according to accepted company practices. Use the slot on the "L" bracket to attach the shield connector to the "L" bracket. (Figure 13A & B)

PLP TIP: A long "L" bracket is available (Catalog #80805431) for bonded loose buffer tube cable with a dielectric central strength member.

FIGURE 13A - SLOT IN "L" BRACKET

5.02 If it is not practical to secure the shield connector to the "L" Bracket, a 6" (152.4 mm) braid with eyelets is available from PLP (Cat. 80806179) to connect the shield connector to the stud in the end plate.

6.00 END PLATE PREPARATION

6.01 Disassemble the End Plate by removing the two long bolts holding the three End Plate sections together. Remove the packaging plugs.

6.02 Refer to Table 2 for the measurement of sheath to extend beyond the inside of the End Plate for the type of cable and bond connector being used. For all non-metallic cables the sheath will extend 3/4" (19.0 mm) inside the End Plate.

<table>
<thead>
<tr>
<th>CABLE POSITIONS IN COYOTE CLOSURE END PLATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable Type</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Dielectric</td>
</tr>
<tr>
<td>Metallic</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

TABLE 2

7.00 END PLATE ASSEMBLY

7.01 Loosely attach "L" brackets to the ground insert on the inside of the End Plate adjacent to the cable ports being used with the nut provided. (Figure 14 A & B)
7.05 Remove cable from the End Plate port(s) and apply C-Cement along the edge of all End Plate ports. Make sure C-Cement is dry before continuing. The End Plate center section is illustrated in Figure 16.

7.06 Lay prepared cable and appropriate plugs into ports and loosely tighten all three sections of End Plate. Use care that no grease from the cable contacts the LOCK-TAPE Sealant on the End Plate ports. (Figure 17)

**PLP TIP:** Use white line on End Plate as alignment guide. (See Figures 17 & 18)
7.07 Future cable entry ports and End Plate grommets cannot be added once End Plate assembly is complete. Therefore, when using future cable entry ports, insert ports at this time. Future cable entry ports will fit in only the 7/8” (22.23 mm) ports of the Six Port End Plate, and different future cable entry ports are available for both the 1” (25.4 mm) ports and the 1-1/4” (31.75 mm) ports in the Four Port End Plate (see page 3 for details). Also see the Application Procedure accompanying the Future Cable Entry Port Kits and End Plate Grommet Kits. (Figure 18)

7.08 Slide strength members under cap and tighten. Tighten "L" bracket. (Figure 19)

7.09 When all cables and/or plugs have been installed, tighten End Plate bolts by rotating 2 or 3 turns on each bolt so the End Plates come together evenly. Tighten bolts with torque wrench to 150 inch pounds (16.9 Nm). (Figure 20)

7.10 Apply vinyl tape to the remaining 1/4–1/2” (6.4-12.7 mm) (Paragraph 7.03) of exposed LOCK-TAPE Sealant on the cable outside the End Plate.

8.00 INSTALL ORGANIZER ASSEMBLY

8.01 Install the loose buffer tube storage assembly (Figure 21) to the torque bar bracket on the bottom of the End Plates with the bolts provided. Make sure the side of the torque bar labelled “3 Section End” is nearest the Three-section End Plate. The torque bars are labelled for in-line as well as butt installation.
10.00 ROUTING FIBER IN SPLICE TRAYS

10.01 There are two sizes of ADOBE splice trays available for the COYOTE Closure ADOBE Series. The narrow splice tray is configured with one splice block for 12 heat-shrink protected fusion splices. The wide splice tray has two splice blocks to accommodate up to 24 heat-shrink protected fusion splices (Figure 24).

9.00 ROUTING BUFFER TUBES

9.01 When routing loose buffer tubes in the 6.0” x 22” (152.4 mm x 558.8 mm) and 8.5” x 22” (215.9 mm x 558.8 mm) COYOTE Closure. Route the loose buffer tubes to be spliced through the storage compartment, exiting them both at the opposite end on the same side. Store any unspliced loose buffer tubes or continuous loop loose buffer tubes by routing them inside the storage brackets. (Figure 23)

10.02 Remove the cover from a splice tray by placing your thumbs on the snap post and pulling up on the end of the tray cover (Figure 25). Repeat for the other end of the tray cover.

10.03 Position a splice tray on the threaded posts of the organizer assembly.
10.04 Route the buffer tube(s) for this splice tray (office and field) into the corner of the splice tray with the tie-down holes and mark the buffer tubes just beyond the tie-down holes (Figure 26).

![Figure 26 - Mark Buffer Tubes Just Beyond Tie-Down Holes](image)

10.05 Remove the buffer tube to the mark and thoroughly clean the fibers per standard company practices.

10.06 Apply a wrap of blue felt over the buffer tube at the end where they will be tied down.

10.07 Secure each buffer tube to the splice tray using two of the tie-wraps provided.

PLP TIP: For easy installation, install the tie wraps in holes on splice tray ahead of time.

10.08 Route the fibers from the office side 1-3/4 times around the splice tray and into the right side of the splice block(s) as shown in Figure 27.

![Figure 27 - Routing Office Side Fibers on Splice Tray (Narrow Tray Shown)](image)

10.09 Rotate the fibers from the field side 2-1/4 times around the splice tray and into the left side of the splice block(s) as shown in Figure 28.

![Figure 28 - Routing Field Side Fibers on Splice Tray (Narrow Tray Shown)](image)

10.10 Splice Fibers according to accepted company practices.

10.11 Replace the cover on the splice tray by pressing with both thumbs, one on each side of snap post. Repeat for other side of cover.
10.12 Repeat steps 10.02 through 10.11 for the remaining splice trays.

11.00 SPLICE TRAY STORAGE AND BUFFER TUBE ROUTING

11.01 Route all the buffer tubes into the inverted clips on the bottom of the organizer assembly.

11.02 Position all the splice trays on the threaded posts of the organizer assembly.

11.03 Secure the splice trays to the threaded parts with the splice tray hold down strap and install the top torque bar (Figure 29).

**FIGURE 29 - SECURE SPLICE TRAYS**

12.00 INSTALLING THE COYOTE CLOSURE SHELLS

12.01 The neoprene in the shells must be pliable when installed. In cold weather (below 32° F, 0° C), for new installation or re-entry, warm the shells prior to installation.

12.02 Remove protective paper liners from shells. Take care to keep gasket area clean.

12.03 The top and bottom shells are mated together around the End Plates. The top shell is identified by an air valve and bolts. Position the top and bottom shells around the End Plates in the grooves located in each shell half.

12.04 Align the closing hardware and first HAND-TIGHTEN in the torque sequence shown in Figure 30. Once all closing hardware is hand-tightened, repeat the torque sequence using a torque wrench set at 55 inch pounds (6.25 Nm). After completing torque sequence, re-torque the two outside corner bolts on all four corners (in bold).

**NOTE: SET TORQUE TO 55 INCH POUNDS (6.25 Nm)**

13.00 EXTERNAL BOND PROCEDURE

13.01 For all ground inserts with cables attached, loosely attach a bond clamp (2 per kit) (Catalog #8003281) outside the End Plate. The clamp attaches between the two nuts on the stud on the outside of the End Plate. NOTE: DO NOT REMOVE THE NUT ON THE GROUND INSERT CLOSEST TO THE END PLATE. When reattaching hex nut, secure using a can wrench, or torque wrench set no higher than 40 inch/pounds (4.5 Nm). Route bond ribbon (not supplied) through the clamps and to the ground source. Tighten all clamps. (Figure 31)

**FIGURE 30 - TORQUE SEQUENCE**

**FIGURE 31 - BOND CLAMP ATTACHMENT**
13.02 For bonding all isolated grounds together on the exterior of the COYOTE Closure, use Exterior Bond Braid Kit (Catalog #8003360).

13.03 The eyelets of the Exterior Bond Braid Kit are placed at intervals to align with isolated ground studs on the exterior of the COYOTE End Plate.

13.04 Remove one hex nut from each of the ground studs.

13.05 Apply the Exterior Bond Braid and re-apply hex nuts and tighten. When reattaching hex nuts, secure using a can wrench, or torque wrench set no higher than 40 inch/pounds (4.5 Nm).

13.06 Attach tail of the Exterior Bond Braid via the remaining eyelet to the ground source as per company practice.

13.07 For underground or buried applications where isolated external bond connections are required, PLP can provide an External Isolation Terminal Kit (two per kit) with a #6 compression splice (Cat. 8003463) or with a #6 Quick Disconnect (Cat. 8003464).

14.00 STRAND MOUNT PROCEDURE

14.01 The Adjustable Aerial Hanger Bracket (Catalog #8003325) can be used for applications where the Closure is being secured to the strand.

14.02 Remove one hex nut from each of the two upper ground inserts. (Figure 32)
14.05 Repeat Steps 13.02 through 13.04 to install hanger brackets onto other end plate.

14.06 After attaching hanger brackets to end plates, secure Closure to strand with Aerial Suspension Clamps. (Figure 35)

FIGURE 35 - SECURE CLOSURE TO STRAND

15.00 MANHOLE SUPPORT BRACKET KIT INSTALLATION

15.01 The Manhole Support Bracket Kit (Catalog #8003279) can be used for applications to secure the COYOTE Closure to manhole racking or hand hole racking.

15.02 Remove one hex nut from each of the two upper ground inserts.

15.03 Place Manhole Support Bracket onto ground studs.

15.04 Secure bracket to ground studs with hex nuts and tighten. When reattaching hex nuts, secure using a can wrench or torque wrench set no higher than 40 inch/pounds (4.5 Nm).

15.05 Repeat steps 14.02-20.04 to install Manhole Support Bracket to the other End Plate.

15.06 After attaching brackets to both End Plates, slide the long support bar over the “Ts” on top of the Manhole Support Brackets until the support bar is centered over the COYOTE Closure.

PLP TIP: Cable tie the support bar to the rack steps for added security.

16.00 BURIED INSTALLATION

NOTE: COYOTE Closures may be direct buried if the following precaution is taken.

16.01 The COYOTE Closure must be completely surrounded by 1-2’ (310-610 mm) of sand or fine gravel prior to back filling.

16.02 Ground according to accepted company practices.

17.00 RE-ENTRY AND MAINTENANCE PROCEDURES

17.01 The COYOTE Closure is designed for numerous re-entries.

17.02 Be sure to clean shells and End Plates thoroughly to remove sand, dirt and other foreign substances.

17.03 Any bent studs or stripped nuts should be replaced. Only use hardware supplied by Preformed Line Products.

17.04 The neoprene gasket in the shells should be lubricated prior to reapplication if they are dry. A uniform thin layer is all that is necessary. Only use lubrication supplied by Preformed Line Products (Catalog No. 80801566).

17.05 Any shells that are damaged must be replaced.

17.06 Prior to reinstallation, the neoprene gasket on the shells should be allowed to return to its original state. Warming the shells speeds up the process.

17.07 If additional cables are added in the future, do not reuse the Three-Section End Plate.
18.00 SAFETY CONSIDERATIONS

18.01 This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. Failure to follow these procedures may result in personal injury.

18.02 When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

18.03 For proper performance and personal safety, be sure to select the proper size PREFORMED™ product before application.

18.04 This product is intended for use by trained craftspeople only. This product should not be used by anyone who is not familiar with, and not trained to use it.