# 1. General Product Information

This installation practice provides instructions for installing Raychem’s FOSC 400 A4 fiber optic splice closure, henceforth referred to as the A4.

The A4 is a combination cable closure and splice organizer. The closure combines mechanical seals and heat-shrinkable sleeves with hot-melt adhesives to environmentally seal fiber cable splice points.

The primary application of an A4 closure is for “tap-off” splices where a main distribution cable is spliced into low fiber count drop cables. Most of the fibers in the main cable end up being expressed “uncut” through the closure. The A4 can also be used for small fiber count straight and branch cable splices.

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A4 kits are available in several configurations, as described by the kit naming convention described below.

### Cables

The A4 supports a butt splice configuration with one oval cable entry port and four small round cable entry ports. The chart below indicates each port’s capacity:

<table>
<thead>
<tr>
<th>A4 Port</th>
<th>Capacity</th>
<th>Cable Diameter Range (inches)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oval</td>
<td>2 cables</td>
<td>0.4 - 1.0</td>
</tr>
<tr>
<td>Round</td>
<td>1 cable each</td>
<td>0.2 - .75</td>
</tr>
</tbody>
</table>

The A4 accommodates cable with any combination of the following characteristics:

- **Cable Types:**
  - Loose buffer tube (stranded-fiber and ribbon)
  - Central core tube (stranded-fiber and ribbon)
  - Slotted core

- **Strength Member/Shield Types:**
  - Dual strength member
  - Central member
  - Multiple strength member
  - Unshielded
  - Shielded
  - Double-shielded

- **Fiber Types:**
  - Single-fiber (250 micron or 900 micron [tight-jacketed]) and Ribbon

### Splices

The standard A4 closure kits are usually supplied with one splice tray which can accommodate two splice modules. There are different types of splice modules. Refer to the Naming Convention section (above) to determine which type of splice module is included in the tray for this kit. The chart which follows identifies the number and type of splices accommodated by each type of splice module:

<table>
<thead>
<tr>
<th>Splice Modules</th>
<th>Splice Accommodation</th>
<th>Splices per Tray</th>
<th>Tray Kit (SOQ=2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SM6</td>
<td>Single fusion</td>
<td>12</td>
<td>FOSC-ACC-A-TRAY-12</td>
</tr>
<tr>
<td>SM8</td>
<td>Single fusion</td>
<td>16</td>
<td>FOSC-ACC-A-TRAY-16</td>
</tr>
<tr>
<td>SM12</td>
<td>Single fusion</td>
<td>24</td>
<td>FOSC-ACC-A-TRAY-24</td>
</tr>
</tbody>
</table>

### Locations

The A4 accommodates unpressurized fiber cable in these locations:
- direct buried
- aerial
- underground (manhole)

### Warnings

As with any electrical equipment, various safety precautions should be noted when operating a hot-air gun. Please take note of these warnings:

1. Keep the area clear of all combustible materials and gases, such as gasoline, solvents, and dirty rags. Consult your company-approved practice for procedures to clear and ventilate the work area to avoid the potential for fire and/or explosion.

2. The cleaning tissues provided in the kit are extremely flammable, and should not be exposed to excessive heat or open flame.

3. Do not immerse the hot-air gun in water, as electrical shock could occur.

### Required Tools and Materials

You will need these tools and materials to install the A4:

- AC power source capable of providing at least 1750 watts of power
- FOSC work stand (FOSC-ACC-Work Stand (optional))
- Snips and sheath knife
- Buffer tube cutter
- Hot-air gun with tip (FOSC ACC CV 1981)
- Assorted hand tools, such as a hacksaw, screwdriver, pliers, crescent wrench, can wrench
- White marking pencil
- Locally approved cleaning solution
- Tape measure
- Clean, dry rags
4. Standard Components

The following items are included in A4 Fiber Optic Splice Closure kits:

Basic Components:
- base
- splice organizer tray(s) with dust cover
- velcro strap
- dome
- mechanical dome-to-base seal and O-ring

Cable Termination Components:
- 1 heat-shrinkable cable seal for the oval port
- aluminum tape
- branch-off clip
- abrasive strip
- cleaning tissues
- bond wires and clamps
- 2 distribution funnels and caps
- 2 heat-shrink tubes for use with funnels
- small transportation tubes
- large transportation tubes
- buffer tube identification labels
- tie wraps
- installation instructions

Cable Blocking Components**:
- yellow adhesive rings
- adhesive foam strips
- clear heat-shrinkable tubes
- abrasive strip
- cleaning tissues
- tie wraps
- installation instructions

** Cable blocking components are not included in all kits. Refer to the Naming Convention section of this practice (Page 2) for further details.

5. General Installation Notes

To ensure the proper performance of the heat-shrinkable sleeve, take note of these precautions:

1. Do not install the heat-shrinkable sleeve at temperatures below -1°C (30°F).
2. If the cable is wet, dry the cable before installing the heat-shrinkable sleeve. Steam generated during heating will cause gaps in the adhesive, resulting in a faulty seal.
3. Flash test the closure to no more than 5 p.s.i.

6. Supplementary Kits

The following chart identifies supplementary kits available for use with the A4 closure, and briefly describes their uses.

<table>
<thead>
<tr>
<th>Kit Name</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOSC ACC Cable Seal - 1 NT</td>
<td>Cable sealing kit (T=tubular seal) for installing one cable in any round port.</td>
</tr>
<tr>
<td>FOSC ACC Cable Seal - 1 BT</td>
<td>Same as above with cable blocking components.</td>
</tr>
<tr>
<td>FOSC ACC Cable Seal - 1 NW</td>
<td>Wraparound cable seal (sleeve only) for use on any round port.</td>
</tr>
<tr>
<td>FOSC ACC Branch Off Clip</td>
<td>Branch-off clip plus aluminum tape for installing two cables in one port. (Use with FOSC ACC Cable Seal 1-XX Kits).</td>
</tr>
<tr>
<td>FOSC ACC A/B O-Ring Seal</td>
<td>Replacement O-ring.</td>
</tr>
<tr>
<td>FOSC ACC A Tray 12</td>
<td>A splice tray with 2 SM6 splice modules (12 splices/tray).</td>
</tr>
<tr>
<td>FOSC ACC A Tray 16</td>
<td>A splice tray with 2 SM8 splice modules (16 splices/tray).</td>
</tr>
<tr>
<td>FOSC ACC A Tray 24</td>
<td>A splice tray with 2 SM12 modules (24 splices/tray).</td>
</tr>
<tr>
<td>FOSC ACC A Basket</td>
<td>Slack basket for storing express (uncut) loose fiber or ribbon.</td>
</tr>
<tr>
<td>FOSC ACC A Basket - B</td>
<td>As above with wraparound sleeve for cable blocking looped cable.</td>
</tr>
<tr>
<td>FOSC ACC TTube Lrge 16&quot;</td>
<td>Large (3/16&quot;) transportation tubes, 16&quot; (for 12-fiber loose buffer tubes).</td>
</tr>
<tr>
<td>FOSC ACC TTube Sml 16&quot;</td>
<td>Small (5/32&quot;) transportation tubes, 16&quot; (for 6-fiber loose buffer tubes and funnels).</td>
</tr>
<tr>
<td>FOSC ACC TTube Ribn 16&quot;</td>
<td>Transportation tubes for 12 fiber ribbon (6 ribbons/tube).</td>
</tr>
<tr>
<td>FOSC ACC Fiber Ext Grnd</td>
<td>External ground or “FEG” kit to isolate one cable ground through port.</td>
</tr>
<tr>
<td>FOSC ACC Aerial Clamps</td>
<td>Clamps for mounting A, B, or D closures to an aerial strand.</td>
</tr>
<tr>
<td>FOSC ACC A/B Pole Mount</td>
<td>Brackets to mount A or B closures to pole or wall.</td>
</tr>
</tbody>
</table>
7. Cable Preparation

Cable core blocking is optional with the A4 Closure Kit. If cables are to be blocked prior to installation in a splice closure, ignore the instructions in this section and refer to the instructions on cable preparation included with the Cable Blocking Components.

The instructions that follow address the preparation of loose buffer tube and central core tube (stranded fiber and ribbon) cable. Preparation of cable ends and mid-span cables is explained. Refer to the appropriate section:

<table>
<thead>
<tr>
<th>Fiber Type</th>
<th>Cable Type</th>
<th>Cable Ends (See Sect. #)</th>
<th>Midspan Opening (See Sect. #)</th>
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<td>Loose Buffer Tube</td>
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<td>7.2</td>
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<td></td>
<td>Central Core Tube</td>
<td>7.3</td>
<td>7.5</td>
</tr>
<tr>
<td>Ribbon Fiber</td>
<td>Loose Buffer Tube</td>
<td>7.6</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>Central Core Tube</td>
<td>7.4</td>
<td>7.5</td>
</tr>
</tbody>
</table>

7.1 Loose Buffer Tube Cable End Preparation

To prepare the ends of loose buffer tube cable, follow these steps:

1. Clean the cable and remove 48” of the outer cable sheath and shield if present. Remove the aramid and fiber yarns to the ring cut.
2. Cut central member 9” from the ring cut. (Figure 1)
3. Strip away any insulation present on the central member all the way back to the ring cut.
4. If a shield is present in the cable, tab the cable 1” from the ring cut. Crimp the alligator bond clamp to the tab in the sheath.
5. If you are using a B-Bond clamp on double-armored cable, remove a 1” square section of the outer cable sheath around the tab. (Figure 2) Slide the lower plate of the bond clamp under the inner shield so that the stud bolt sticks up through the tab. Place the upper plate of the B-Bond clamp over the bolt. Place a double-eyelet bond wire (available in the FOSC ACC Bond Wire kit) over the bolt. Install the nut on the bolt and tighten it. Cut off the excess stud bolt and file it flush with the nut. (Figure 3)
6. Attach cable end to the FOSC Work Stand using a tie wrap as shown. (Figure 4)
7. Carefully ring cut and remove all but three inches of each buffer tube. Clean the remaining buffer tubes, exposed fibers, strength member, and 6” of the cable sheath with a rag and company-approved cleaning solution. (Figure 5)
8. Install one transportation tube on each buffer tube and slide it down to the sheath ring cut.

Note: Two sizes of transportation tubes are provided for six-fiber and twelve-fiber buffer tubes.

9. Wrap cable with vinyl tape from 1” below the bond clamp to 2” above the ring cut to hold transportation tubes in place.
10. Place an identification marker on each transportation tube. On feeder tubes (in cable), place the markers 6” above the ring cut. On distribution tubes (out cable), place the markers 9” above the ring cut.

7.2 Loose Buffer Tube Cable - Midspan Opening Preparation

1. Clean the cable and remove 96” of cable sheath (and shield, if present).
2. Prepare both sides of the midspan opening as described in Section 7.1, but do not remove buffer tubes from fibers that will be looped, uncut, through the closure.
7.3 Central Core Tube Stranded Fiber Cable End Preparation
(for installation in the oval port)

Important: Central core tubes should not be routed directly from the oval port to the bottom organizer tray in an A4 closure. A metal slack basket (FOSC ACC A Basket Kit) or distribution funnels are required for central core tube cable in the A4 closure.

FOSC 400 B2 or B4 closures are recommended for ribbon fiber cable end splices and for most stranded fiber cable end splices.

To prepare the ends of central core tube stranded fiber cable for installation in the oval port, follow these steps:

1. Clean the cable and remove 48” of outer cable sheath.
2. If dual strength members (e.g., LXE) or multiple metallic strength members (e.g., crossply) are present, expose each strength member and cut it off 9” from the ring cut. (Figure 6)
3. If multiple non-metallic strength members (e.g., EST) are present, cut them off at the ring cut.
4. If metal shield is present, remove all but 1” of the metal shield. Pry open a 1” tab in the exposed metal shield where the shield overlaps. Crimp the bond clamp onto the edge of the shield.
5. Attach the cable to the FOSC Work Stand with a tie wrap. (Figure 4)
6. Cut the central core tube 2-1/2” from the ring cut (1-1/2” beyond the metal shield if present) and remove the excess tube. (Figure 6)
7. Separate the fiber groups and clean the exposed components with a clean rag and company-approved cleaning solution.
8. Slide the small end of the distributor funnel over the fiber groups, and slide it down over the central core tube.
9. Place one fiber group in each hole of the distributor cap. (Figure 7)
10. Carefully slide the distributor cap down until it seats in the funnel.
11. Place the fibers from each distributor cap hole into a transportation tube, and slide the tube down into the hole.
12. Place a tie-wrap 1” below the ring cut. Slide the 4”-long heat-shrinkable tube over the cable components and allow it to rest on the tie wrap. The top of the tube should be roughly 1/2” below the top of the funnel. (Figure 8)
13. Place a tie wrap around the transportation tubes to hold them in place.
14. With the CV1981 on setting 6, begin shrinking the tube around the top of the funnel. After recovering 1” of tube on funnel, pause for 15 seconds to allow the adhesive to set on the funnel. Complete shrinking the tube. (Figure 9)
15. After the tube has cooled, remove the tie wraps.
7.4 Central Core Tube Ribbon Cable End Preparation
(for installation in the oval port)

**Important:** A metal slack basket (FOSC ACC A Basket) and ribbon-sized transportation tubing (FOSC ACC TTube Ribn) are required.

To prepare the ends of central core tube ribbon cable for installation in the oval port, follow these steps:

1. Perform Steps 1-5 in Section 7.3.
2. Carefully cut the central core tube 12” from the sheath ring cut. (Figure 10)
3. Separate the ribbons and clean the exposed components with a clean rag and company-approved cleaning solution. Stack the ribbons in the order in which they appear in the central core tube. Temporarily wrap a piece of vinyl tape around the ribbons about 1” from the tube to help keep the ribbons stacked.

**Note:** If the ribbons are not stacked properly, or if they are twisted, light signals may be attenuated.

7.5 Central Core Tube Cable - Stranded Fiber and Ribbon Midspan Opening (for installation in the oval port)

**Important:** A metal slack basket (FOSC ACC A Basket Kit) is required to store expressed stranded fibers or ribbons.

1. Clean the cable and make two ring cuts 96” apart, centering the point at which the cable will be spliced. Remove the outer cable sheath between the ring cuts.
2. Prepare both sides of the midspan opening as described in Section 7.3

7.6 Loose Buffer Tube Ribbon Cable Ends

**Important:** A metal slack basket (FOSC ACC A Basket) and ribbon-sized transportation tubing (FOSC ACC TTube Ribn) are required.

This section pertains to loose buffer tube cable that contains ribbons inside the individual loose buffer tubes. To prepare the cable, follow the instructions in Section 7.1 of this practice, but leave 12” of each loose buffer tube intact beyond the sheath ring cut. Do not install transportation tubes on the loose buffer tube ends.

7.7 Loose Buffer Tube Ribbon Cable Mid-Span Openings

**Important:** A metal slack basket (FOSC ACC A Basket) and ribbon-sized transportation tubing (FOSC ACC TTube Ribn) are required.

This section pertains to loose buffer tube cable that contains ribbons inside the individual loose buffer tubes. A mid-span opening of loose buffer tube ribbon cable can only be installed in the oval port. To prepare the cable, open 96” of cable, exposing the loose buffer tubes. Prepare as in Section 7.1, removing all but 12” of each buffer tube. Do not cut ribbons or install transportation tubes.
Splice Closure Installation Instruction

As indicated in Figure 11, the “right” side of the base is the feeder (or in cable) side of an A4 Closure, and the “left” side is the distribution (or out cable) side.

8. Remove Dome/Base Seal

1. Push the handle to the side to release the pin from the notch, then lift the handle. (Figure 12, Step 1)

2. Hook the “feet” of the handle behind the two posts and pry open one half of the clamp. (Figure 12, Steps 2 and 3)

3. Move the handle out of the way and gently tap the other half of the clamp to release it from the dome.


5. Protect dome from dirt during installation. DO NOT SIT ON DOME!

6. Attach the A4 base to the FOSC Work Stand. (Figure 13)

9. Install Cables

1. Select the appropriate port to open on the A4 base. These instructions assume that the oval port is selected.

*Note: An oval port seal is included with most A4 closure kits. If you intend to open a round port, you will need one FOSC ACC Cable Seal 1XX kit to seal each opened round port. (Section 12)*

2. Cut the end off the selected port at the ridge with a hacksaw. (Figure 13)

*IMPORTANT: Slide tubular cable port seal over cables before installing cables in the port!!! The arrow on the seal should point at the base. (If you forget this step, you may need to order a wrap-around oval port sleeve.)*

3. Insert the cables through the port. For cables installed in the oval port, place the distribution cable on the left, and the feeder cable on the right. (Figure 11) Align each cable so that the sealed end of the cable block (if present) is flush with the inside edge of the opened port. If no cable block is used, align inside edge of port with the end of the vinyl tape wrap (loose buffer tube cable) or the distribution funnel cap (central core tube cable). For cables installed in the oval port, place the distribution (out) cable on the left, and the feeder (in) cable on the right. (Figure 11)

9.1 Bond and Ground Metal Components

Insert the “hooked” bond wire eyelet between the bolt head and square washer opposite the port being used. Do not tighten the bolt until strength members are placed under the washer. (Figure 14)

A4 closures support two methods of external grounding:

- Grounding using the FOSC-ACC-Fiber Ext Grnd Kit (common or isolated grounding)
- Grounding using one ground feed-through stud. (Figure 11)

*Note: All steel strength members are bonded in common when captured under a square washer.*
9.2 Attach Central Members

To attach central members from the cables to the metal tray bracket, follow these steps:

1. Align the central member with the square washer with which it will be attached to the base. Trim the central member 1/4" beyond the edge of the square washer.

2. Loosen the square washer and place the central member(s) underneath it. Tighten the square washer to secure the central members against the base. (Figure 14)

3. It may be necessary with large central members to place a piece of the member under each side of the washer to keep the washer level.

9.3 Seal Cables in Oval Port

To seal cables in the oval port, follow these steps:

1. Clean the port and 8" of cable sheath beyond the port edge with the supplied cleaning tissue.

2. Abrade the port and 8" of cable with the supplied abrasive strip, and remove any abraded material from the port and sheath with a clean, dry rag.

3. Slide the tubular cable port seal up around the port and cable. Be sure that the inside edge of the tube butts against the A4 base. Squeeze the tube down onto the cable and place a white pencil mark on the cable just beyond the end of the tube.

4. Slide the tube back off the port.

5. Wrap one lap of aluminum tape around each cable. The edge of the tape closest to the closure should be 1/2" inside the white mark on the cable as shown in Figure 15.

6. Re-install the heat-shrinkable tube, being sure that the edge of the tube butts against the A4 base.

7. Install the branch-off clip as shown. The clip’s base must touch the tube. (Figure 16)

8. Tie the cables together with a tie wrap 1" beyond the end of the tube.

9. Using the CV1981 hot-air gun on setting 10, begin shrinking the tube at the end closest to the base of the closure. Direct the air around the tube until the green paint turns black.

10. Continue heating the remainder of the tube as evenly as possible until it has completely conformed to the cable(s). (Figure 17)

11. The seal is completely installed when:
   - Melted adhesive appears at the cable end of the tube around the branch-off clip, and
   - All green thermochromic paint on the tube has turned black.

*Note: Do not overheat the tube or the closure base.*

10. Fiber Organizing and Splicing

10.1 Loose Buffer Tube Cable Ends and Central Core Tube Cable - Stranded Fiber with Funnels

*Note: For mid-span openings, expressed loose fibers or ribbons are stored in the FOSC ACC A Basket, and buffer tubes are stores in the "sock" provided with all closure kits.*

1. If two trays are present, fill the bottom tray first. Use the supplied tray support wedge to hold the upper tray out of the way. (Figure 18)

2. Remove the tray cover and route the “feeder” (in) and “distribution” (out) tubes to the appropriate...
3. Place a pen mark on each tube 1/4" beyond the tie-down slots. Use a buffer tube cutter to cut each tube at the mark, and remove the excess tube from each fiber group. (Figure 18)

4. Secure the transportation tubes to the tray with two tie wraps. (Figure 19)

5. Arrange the fiber around the tray for storage. Replace the tray cover.

6. Repeat Steps 1 - 5 for each tray until all fiber has been stored in a tray.

10.2 **Loose Buffer Tube Cable - Midspan Opening.**

Form the uncut buffer tubes into loops and store in the poly sock as shown. (Figure 20) Later, the tubes and polysock will be secured to the tray(s) with a velcro strap.

10.3 **Central Core Tube Stranded Fiber Cable - Alternative Method**

If funnels are not used, route both central core tubes directly into the metal basket (FOSC ACC A Basket). Attach the core tubes to the basket with two tie wraps. Add intertray jumpers as described in Section 10.6 to route fibers onto trays for splicing. If distribution funnels are being used, route transportation tubes directly to trays as described in Section 10.1. (Figure 18)

*Note: If closure is being used to straight splice two cable ends, it may be preferable to use two round ports and route the central core tubes directly onto the bottom tray for splicing.*

10.4 **Central Core Tube and Loose Buffer Tube Cable - Ribbon Fiber**

Route both central core tubes or buffer tubes into a FOSC ACC A Basket. Add intertray jumpers as described in Section 10.6 to route individual fibers onto trays for splicing.

10.5 **Add/Remove Splice Trays**

Additional splice trays are available as described in Section 6. To add a splice tray, align the tray pins with the holes on the base bracket. Squeeze the tray pins and slip the tray into the base basket. (Figure 21)

To remove splice trays, reverse this procedure. (Use a screwdriver to pry the hinge away from the bracket if necessary.)

10.6 **Add Intertray Jumpers**

If fiber placed on one tray is to be spliced with fiber from another tray or basket, you must use an intertray jumper to route the fiber to the desired tray. To create an intertray jumper, follow these steps:

1. Thread the desired fibers through a transportation tube (now called an intertray jumper).

2. Secure one end of the intertray jumper to the originating splice tray with two tie wraps. If you have to remove existing tie wraps, cut and replace them one at a time to avoid moving existing transportation tubes.

3. Guide the jumper underneath the tray mounting bracket to the appropriate destination tray and position it in the tray. (Figure 22)

4. With a pen, mark the jumper 1/4" beyond the tie wrap slot. Use the buffer tube cutter to cut the jumper at the mark, and secure the jumper to the splice tray with two tie wraps. The fibers may now be stored or spliced.
10.7 Splice Fibers and Store on Trays

Note: Installation care must be used in fiber organization and splicing to ensure minimum bend radius on all fibers is not less than 30 mm.

Fiber splicing should be done in compliance with company-approved practices. This section outlines some basic splice organizing techniques to be followed in A4.

1. Always begin splicing with the bottom tray. Use the supplied tray support wedge to hold the upper tray out of the way.

2. Remove all stored, unspliced fibers from the tray and clean those that will be spliced. Refer to the splice manufacturer’s instructions for directions on fiber splicing.

Note: Protect and strain-relieve fusion splices with fusion splice support sleeves or similar company approved devices. It is not necessary to use silicone or similar compounds to secure the fibers in the splice holders. (Raychem SMOUV sleeves recommended for use with SM12 modules.)

3. Insert splices in the “top” and “bottom” splice modules and store slack fiber on the trays as shown in Figures 23 and 24. Install tray tabs if required. (Figure 25)

4. When all splices are completed and stored, replace the tray cover.

5. Secure all trays to the bottom tray bracket with velcro strap as shown. (Figure 25)

11. Closing and Mounting Closure

11.1 Install Dome

1. If desiccant is to be used (optional - not supplied), install 75 grams of desiccant on top of the uppermost splice organizer tray. Secure it in place with vinyl tape.

2. Clean the O-ring and the O-ring seating area of the dome and base with a clean, dry cloth. Use clean water or alcohol wipe if necessary. Sealing surfaces should be free of contaminants such as cable grease, cable threads, fibers, dirt, and dust. Re-install the O-ring.

3. Mount dome on base, aligning the arrows on the dome and base. Install clamp around the base/dome interface.

4. Position feet of handle in front of the two posts and push down on the handle to pull the two halves of the clamp together. (Figure 26, Steps 1-3)

5. Continue to push handle down until the small pin on the handle snaps into the triangular hole in the clamp. (Figure 26, Step 4)
6. A security lock or tie wrap can be inserted through the round holes in the handle and clamp to lock the closure.

11.2 Test Seals (Kits with Valves Only)

Ensure that all heat-shrinkable parts are cool to the touch. Pressure-test the closure with no more than 5 psi. Thoroughly soap all seals and the valve to check for seal integrity.

Important: After flash testing, bleed all pressure from the A4 closure through the valve.

11.3 Mount Closure

When the closure has successfully completed testing, it can be mounted for storage. For manhole installations, strap the closure to a mounting rod or pipe (1 1/4" galvanized water pipe). The mounting rod is not supplied. For aerial applications, use the optional FOSC ACC Aerial Clamps Kit. For wall or pole mounting use the optional FOSC ACC A/B Pole Mount Kit.

12. Adding Cables

Adding cables to a sealed A4 closure requires additional cable seal kits. Cable seal kits are available in several configurations, as described by the kit naming convention described below:

13. Removing Cable Seals

Important: When removing cable seals from an A4 closure, first remove the dome and make sure that the cable’s strength members are securely attached to the closure’s base.

1. Re-heat the seal with a hot-air gun.
2. Lightly score the seal with a knife until a split appears in the seal.
3. Apply heat to the split until it runs the length of the seal.
4. Pull the seal away from the cables and closure with a pair of pliers.
5. Any old adhesive remaining on the cables and closure can remain in place.
6. If necessary, cables can be replaced with half-inch plastic rods sold as FOSC ACC Port Rod 0.5 Kits.