COMMSCOPE®

Installation Instructions

OFDC-C12

Contents

1   General product information

The OFDC-C12 is an environmentally sealed enclosure for fiber management system that provides the function of splicing (96 splices)/patching and passive component integration in the outside plant network.
The closure is sealed with gel for longitudinal seal and features a wrap around gel block for cable sealing compliant with IP68 2m waterhead. The organizer is fully removable from the closure body and the addition of customers is transient free.

Cable diameters:
        2 feeder cables*:   5.5 -17.5 mm/ 0.21 - 0.68 inch
        2 branch cables*:   5.5 - 13 mm/ 0.21 - 0.51 inch
        12/24 drop cables round: 0 - 5.5 mm / 0 - 0.21 inch
        12 drop cables flat: 8 x 4.5 mm/ 0.3 x 0.17 inch
*   Feeder cables from 5.5-13 mm/0.21-0.51 inch and branch cables from 5.5-8 mm/0.21-0.51 inch need to be enlarged with 50 mm/2 inches gel tape. (See section 7).

2   Product image

3 Warnings and cautions

3.1   Fiber optic cables may be damaged if bent or curved to a radius that is less than the recommended minimum bend radius. Always observe the recommended bend radius limit when installing fiber optic cables and patch cords.

3.2   Exposure to laser radiation can seriously damage the retina of the eye. Do not look into the ends of any optical fiber. Do not assume the laser power is turned off or that the fiber is disconnected at the other end.

4 Kit content
4.1   Kit with bracket 1
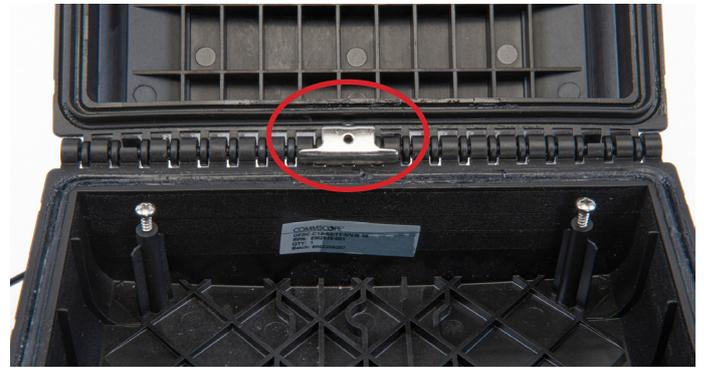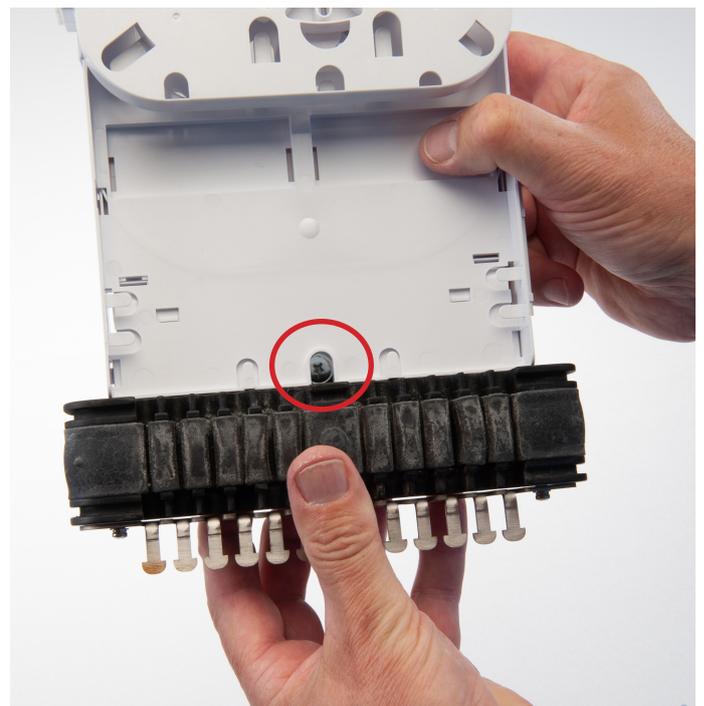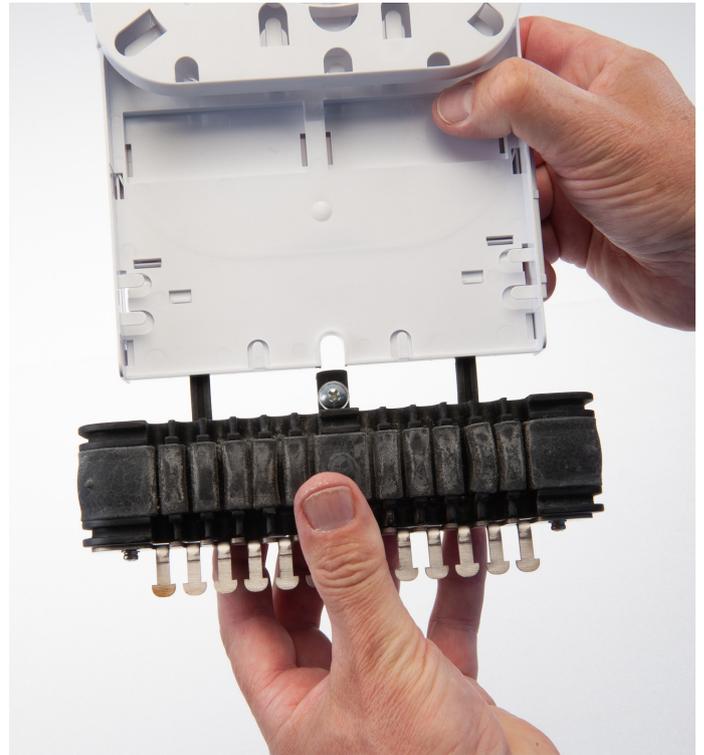

4.2   Kit with bracket 2

5 Closure preparation
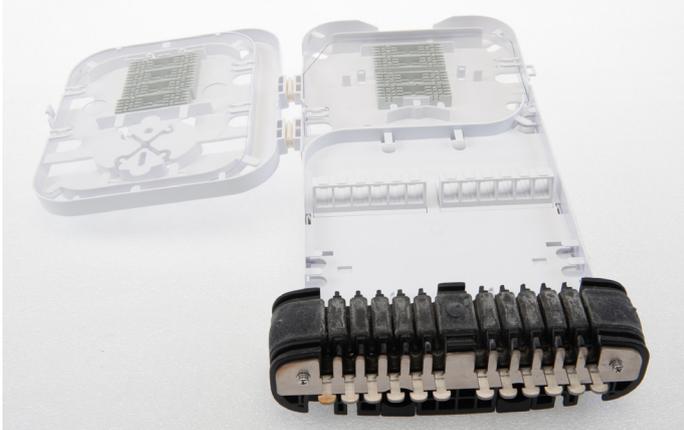

5.1   Open the closure by lifting the latches using a screw driver.
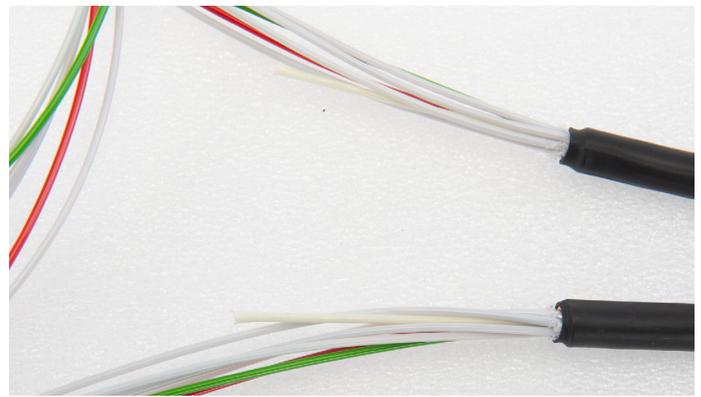

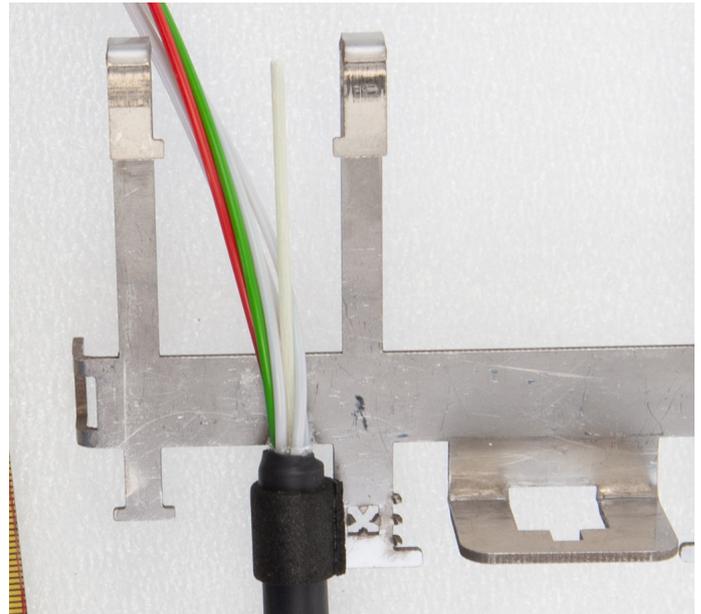5.2   Install the wedge (if needed).

5.3   Slide the gel block on to the organizer. Verify the correct orientation. Make sure the screw is underneath the tray.

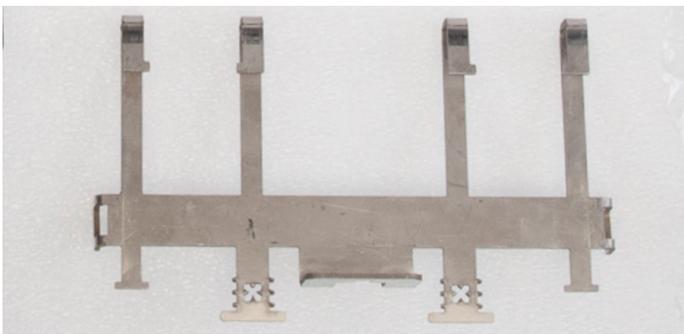5.4   Install the 2 empty adapter panels (will be used as fiber guides in splice only applications.

6   Feeder and branch cable preparation

6.1   Feeder cable preparation with bracket 1
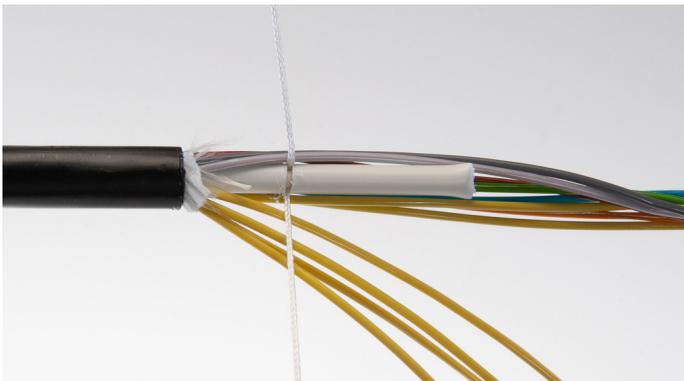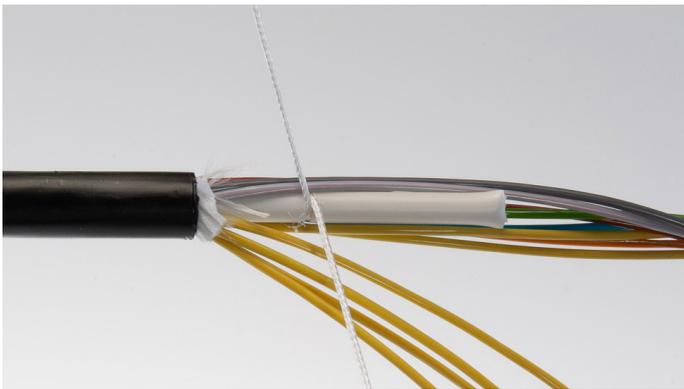

6.1.1   Bracket 1
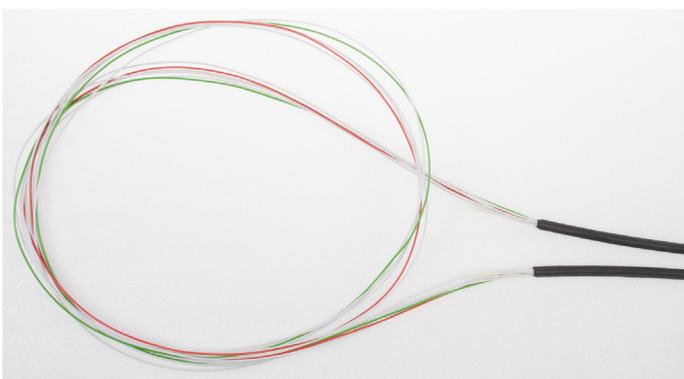
6.1.2   Make a window cut of 2.2 m/86.6 inches, 1.1 m/43 inches from the centerpoint. For midspan make sure the reversal point (SZ) is in the middle.

6.1.3   Cut the strength members at 60 mm/2.36 inches from jacket end.

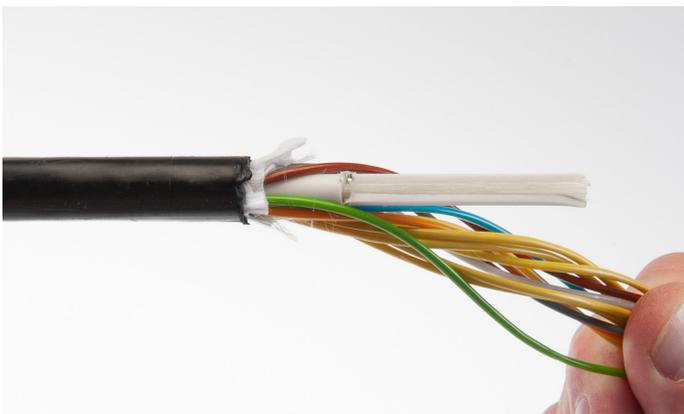6.1.4   Apply a layer of foam at the jacket end.

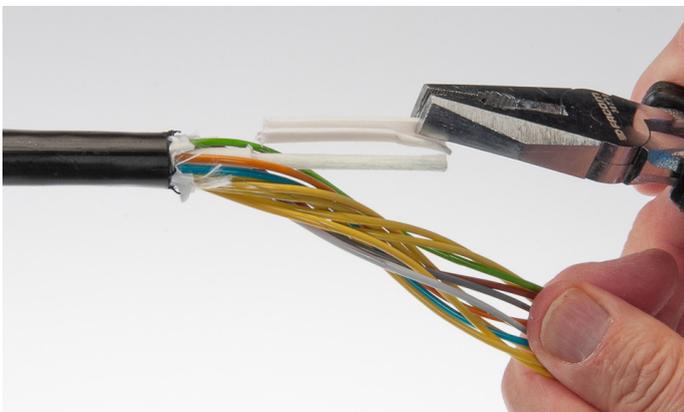6.1.5   Secure the strength member with the metal lug.
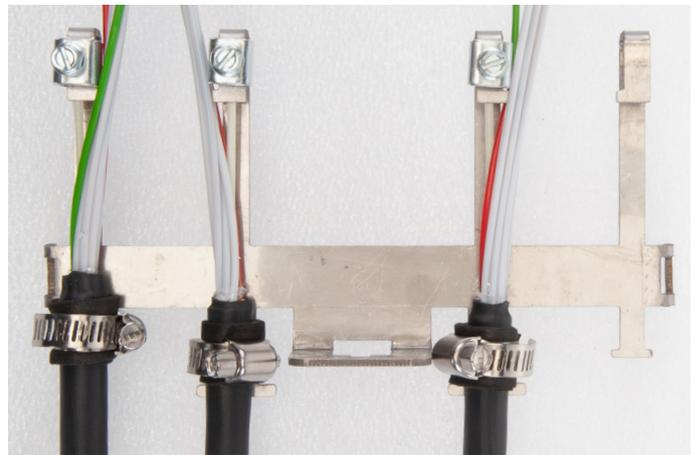
6.1.6   Shaving large strength members

One can use a rip cord to make a circumferential cut.

If the outer layer is tight, cut of a part of the top layer.
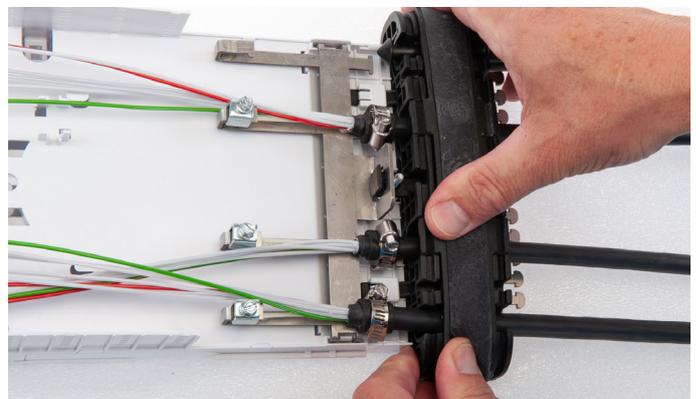
Remove outer layer.

6.1.7   Secure cable jacket with hose clamps.
For the branch cable: make sure the head of the hose clamp is facing upwards and it's positioned at the inside of the bracket.
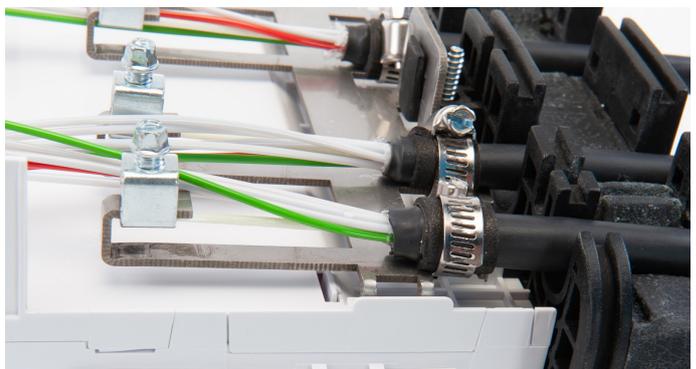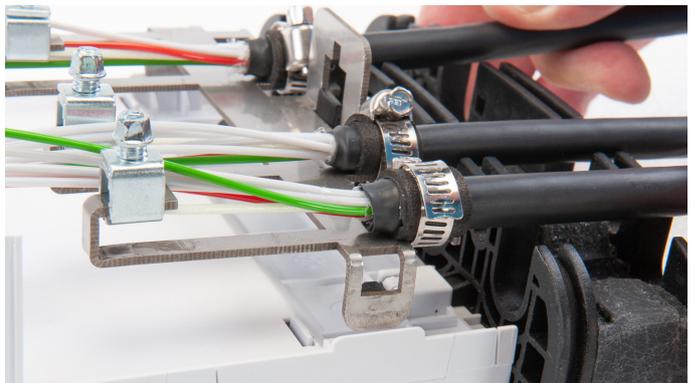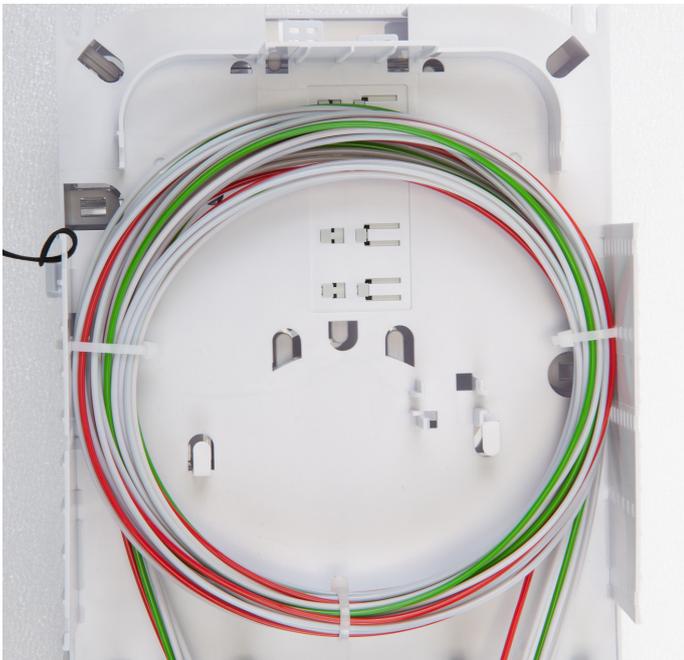
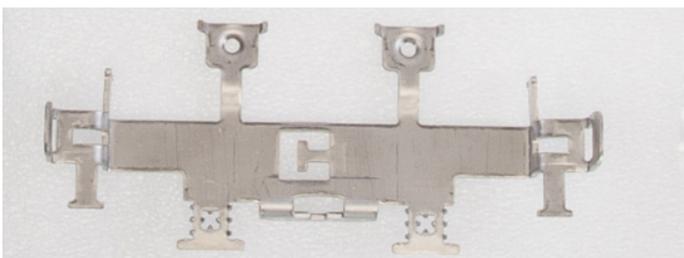6.1.8   Install the assembly to the organizer (snap fit at both sides).

6.1.9   Install the top gel piece. Verify orientation and dummy rods in unused ports.
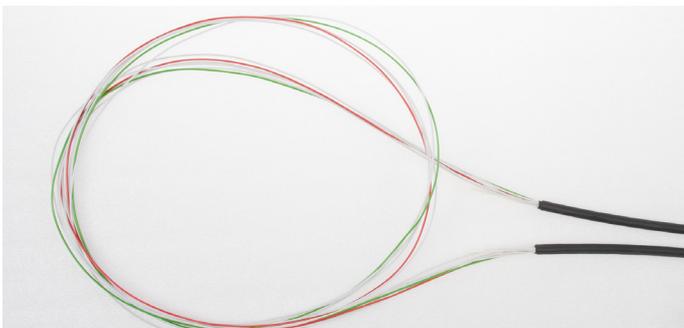
Note: No tape into the gel!

6.1.10   Loop storage, attach bundle to the sides with tie-wraps.

6.2   Feeder cable preparation with bracket 2

6.2.1   Bracket 2

6.2.2   Make a window cut of 2.2 m/86.6 inches. When uncut fibers need to be stored, make sure that the twisting point (SZ) is in the middle.
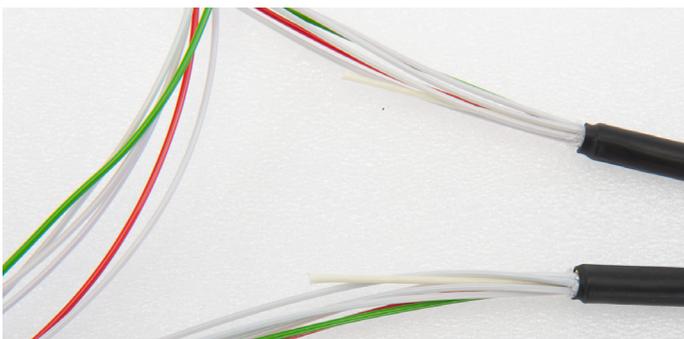
6.2.3   Cut the strength members at 40 mm/1.57 inches from jacket end.
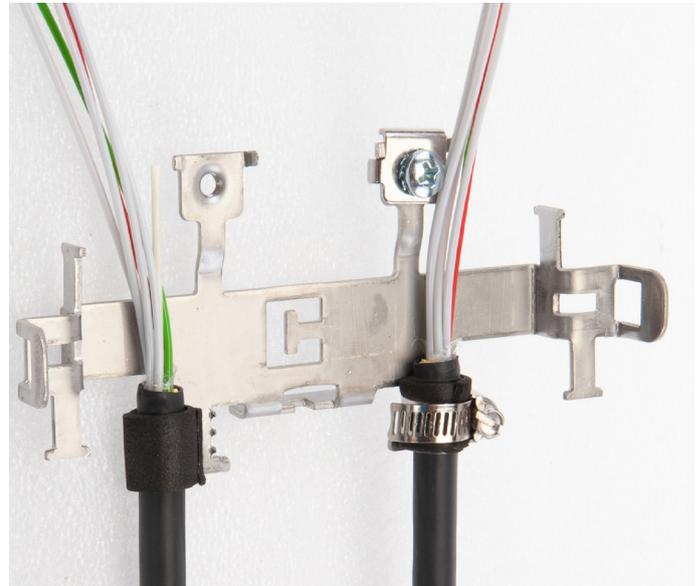
6.2.4   Apply a layer of foam at the jacket end. Secure strength members with metal plate and screw.
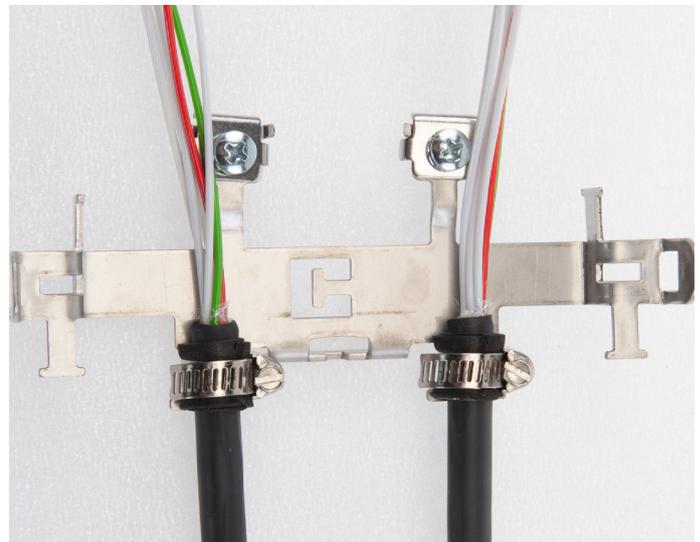
6.2.5   Secure cable jacket with hose clamps, position head of hose clamp at the inside of the bracket.
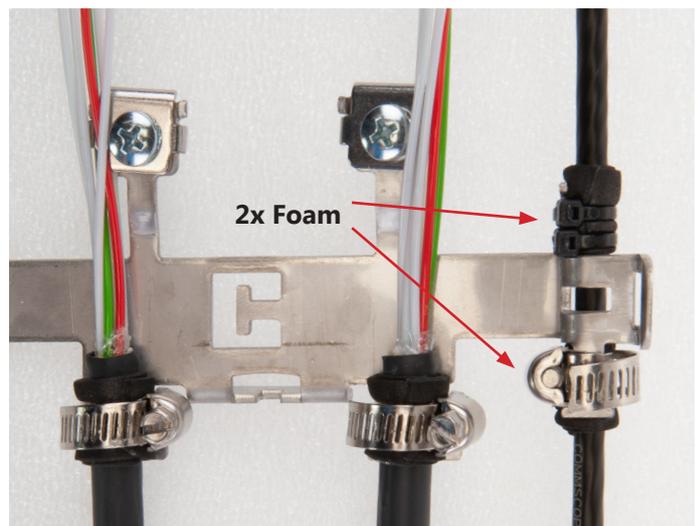
6.2.6   Note that the strain relief of the branch cable does not include the strength member. Apply foam on each side of the bracket as shown and secure with hose clamp and tie-wraps or with 2 hose clamps.

6.2.7   Install the assembly to the organizer (snap fit at both sides).

6.2.8   Loop storage, attach bundle to the sides with cable ties.

7   Preparing cables with small outside diameters

For feeder cables from 5.5-13 mm/0.21-0.51 inch and branch cables from 5.5-8 mm/0.21-0.51 inch

7.1   Set up for bracket 1

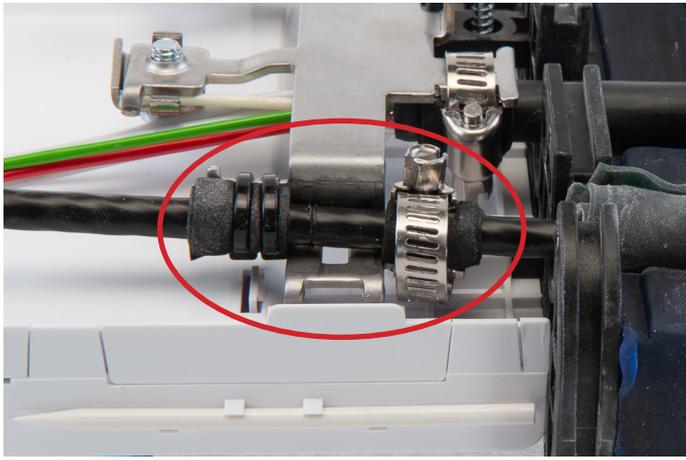3 wraps of foam   50 mm / 2 inches   1-2 wraps of foam

7.1.1   Apply foam tape and 50 mm gel strip.
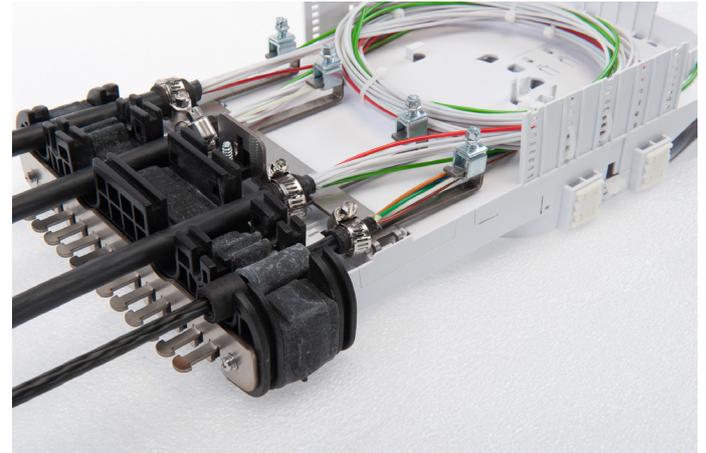
7.1.2   Bracket 1 installed.

7.2   Set up for bracket 2

3 wraps of foam   50 mm / 2 inches   1-2 wraps of foam
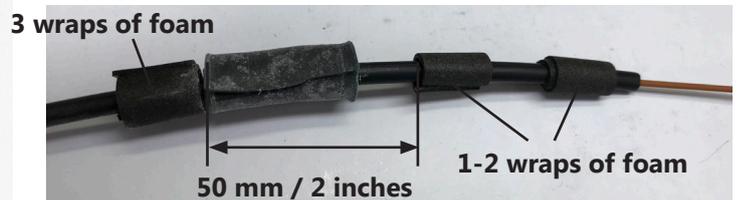
7.2.1   Apply foam tape and 50 mm gel strip.
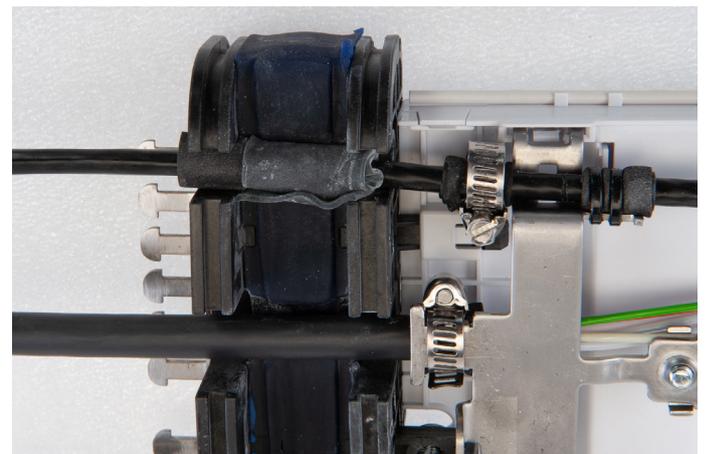
7.2.2   Bracket 2 installed.

8 Feeder/branch cable fiber routing

8.1 Loose tube cable construction

8.1.1   Select the tube(s) to be used and store the others. Recommend routing the designated tube(s) under the looped bundle.

8.1.2   Make a mark even with the attachment device, add 1 layer of foam tape and secure with cable tie.
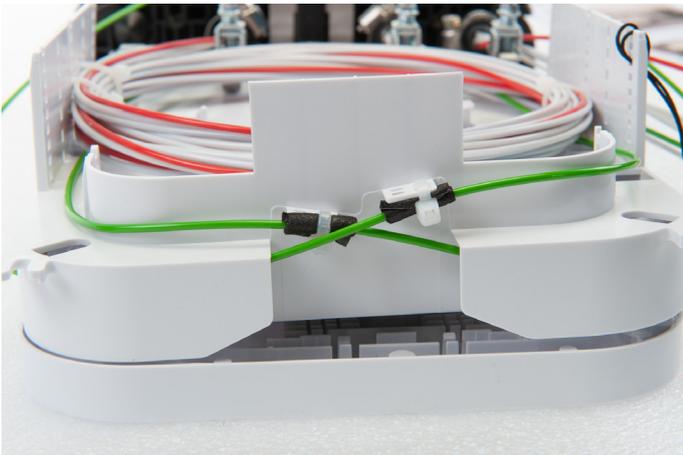
8.1.3   Guide the tubes carefully to the splicing area of the organizer.

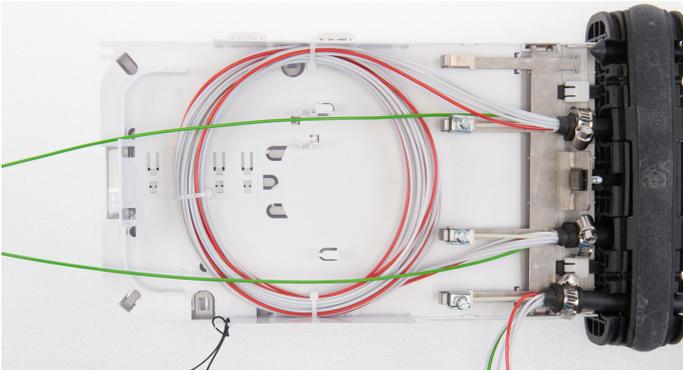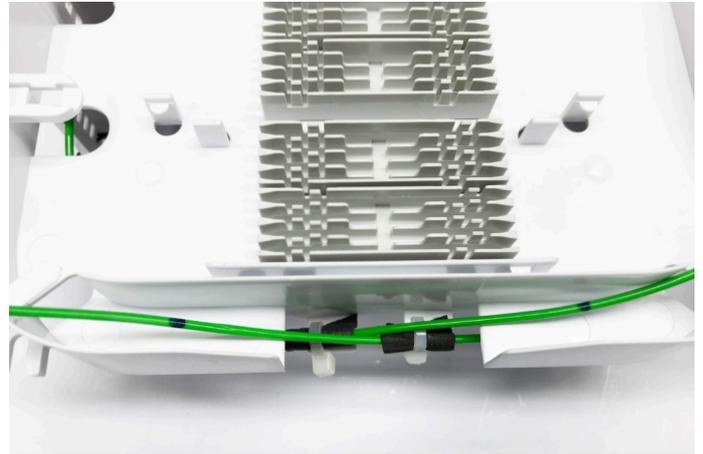8.1.4   Turn the organizer to its back side. Make a mark in the straight area. This mark indicates the point from where the tube jacket needs to be removed.

8.1.5   Tube can be shaved when uncut fibers need to be stored. When all fibers need to be spliced, cut to length following local practice.

8.1.6   Uncut fibers stored.

8.2 Microsheath cable construction

8.2.1   Prepare cable as described in section 6.1.2/6.1.3.
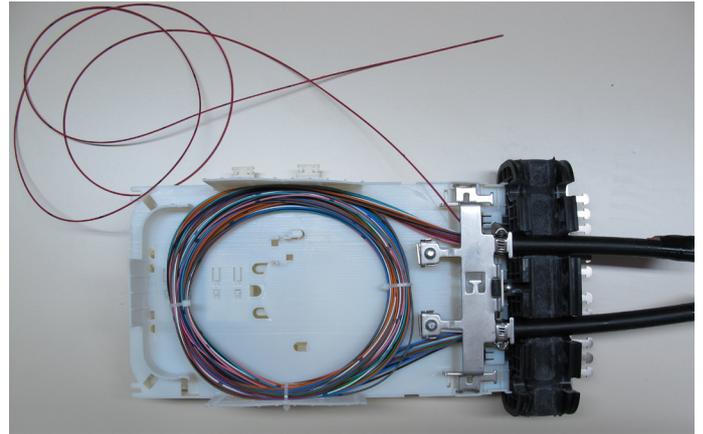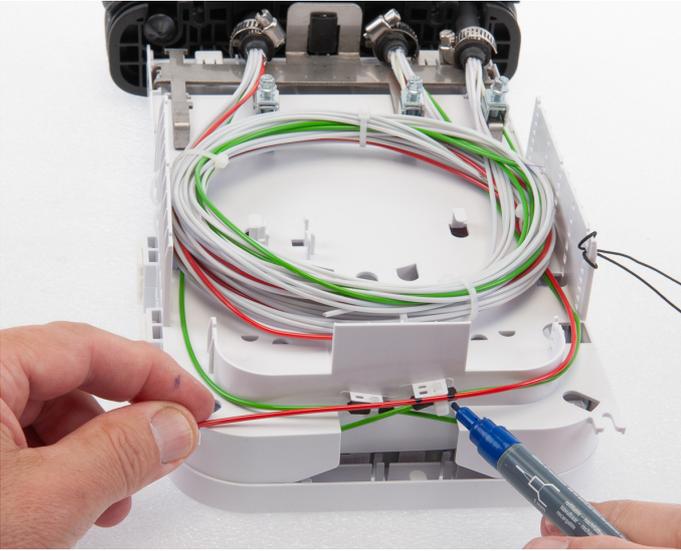
8.2.2   Select the bundle to be used and store the others as shown.
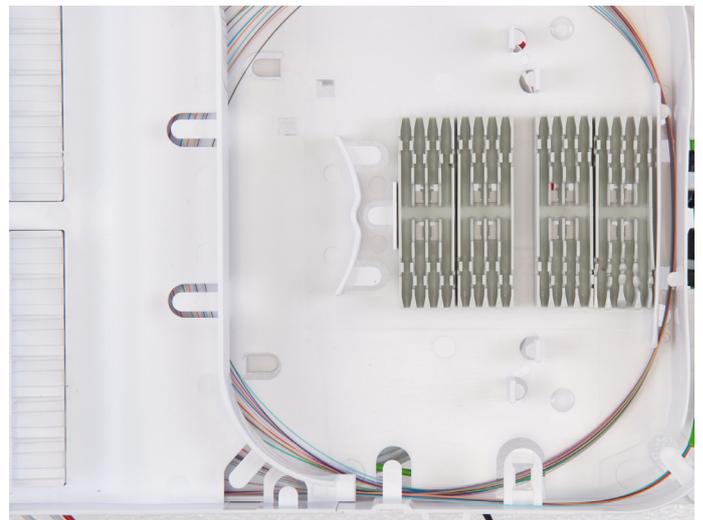

8.1.7   Follow the same process for the branch cable.
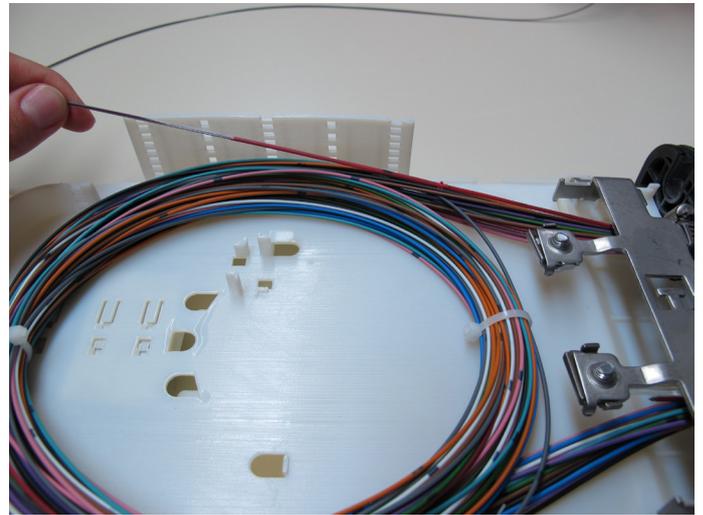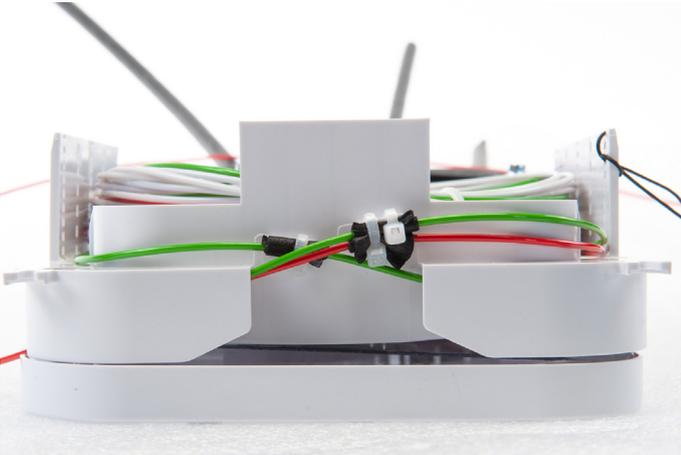
8.2.3   Remove jacket in the middle of the organizer.

8.1.8   Make splices and install splice protector and fiber over length properly.
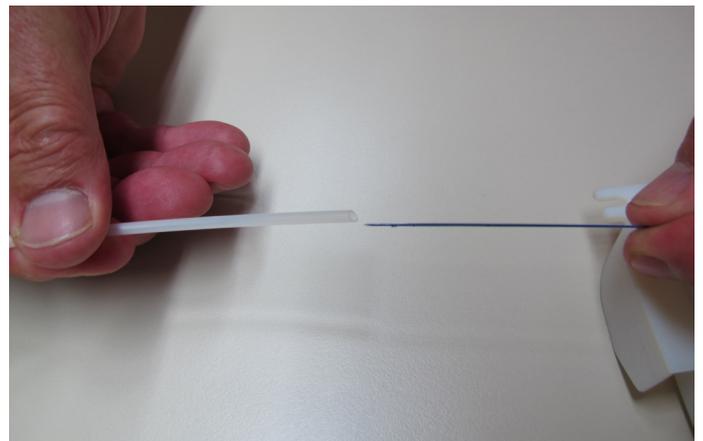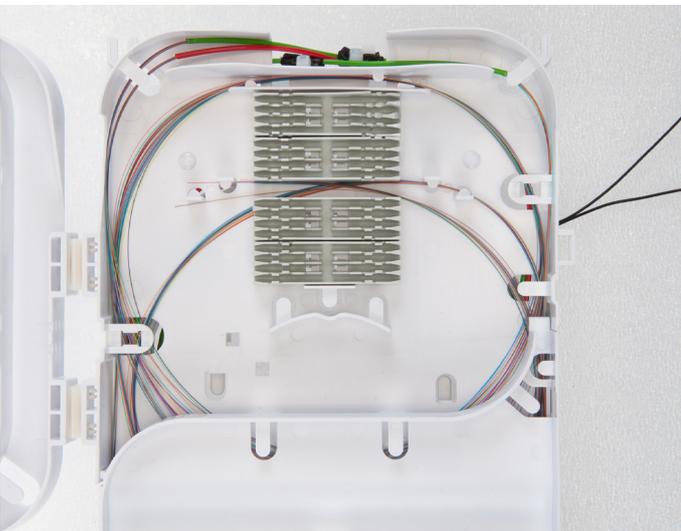
8.2.4   Degrease the fibers and feed them through the transportation tube.

8.2.5   Push the transportation tube into position 2 cm/0.8inch from jacket end.
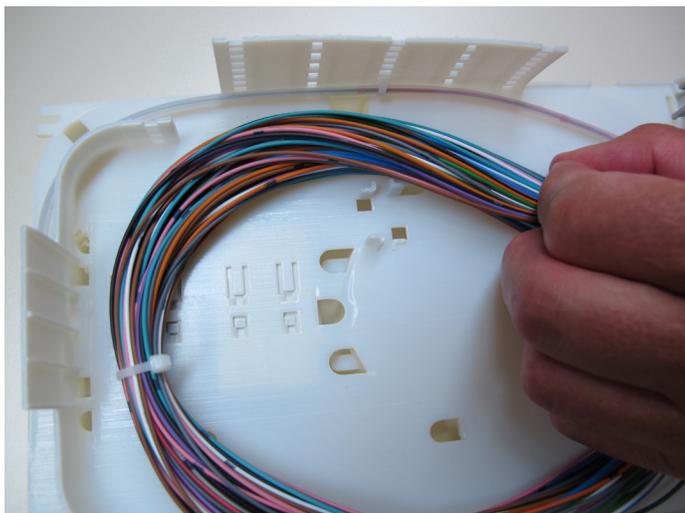
8.2.6   Secure the transportation tube to the side of the organizer with cable tie.
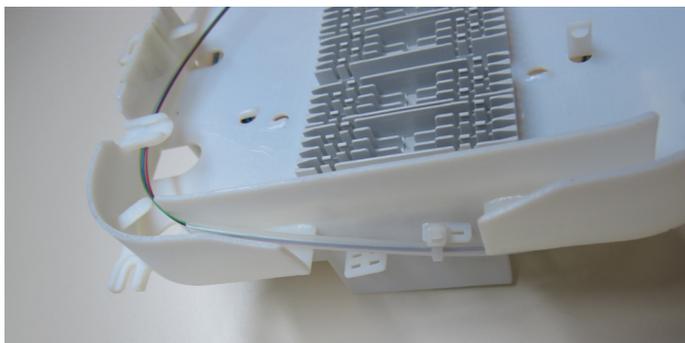
8.2.7   Route transportation tube to top of organizer and secure with cable tie.

8.2.8   Continue with fiber management as described above (loose tube cable construction).

9   Drop installation (splice version)

9.1   Installing 1 cable per drop port (0-5.5 mm/0-0.21 inch)
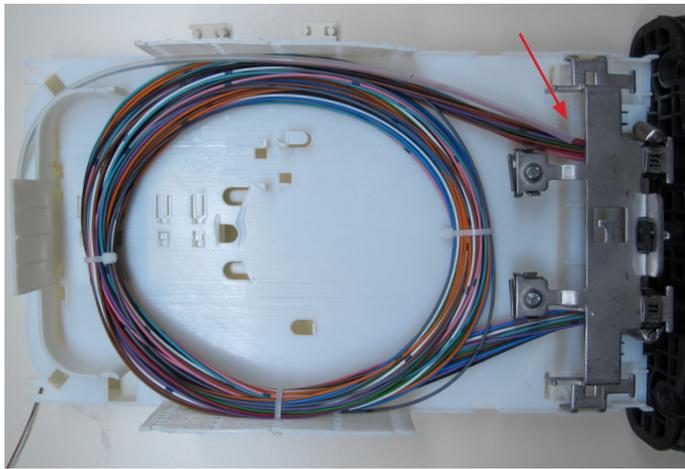

9.1.1   Remove the cable jacket over a length of 1 m/39 inches. Degrease the jacket and install a wrap of foam at 50 mm/2 inches from the jacket end.

Note: For flat cables install 2 wraps of foam. Only 1 flat cable per port is possible!
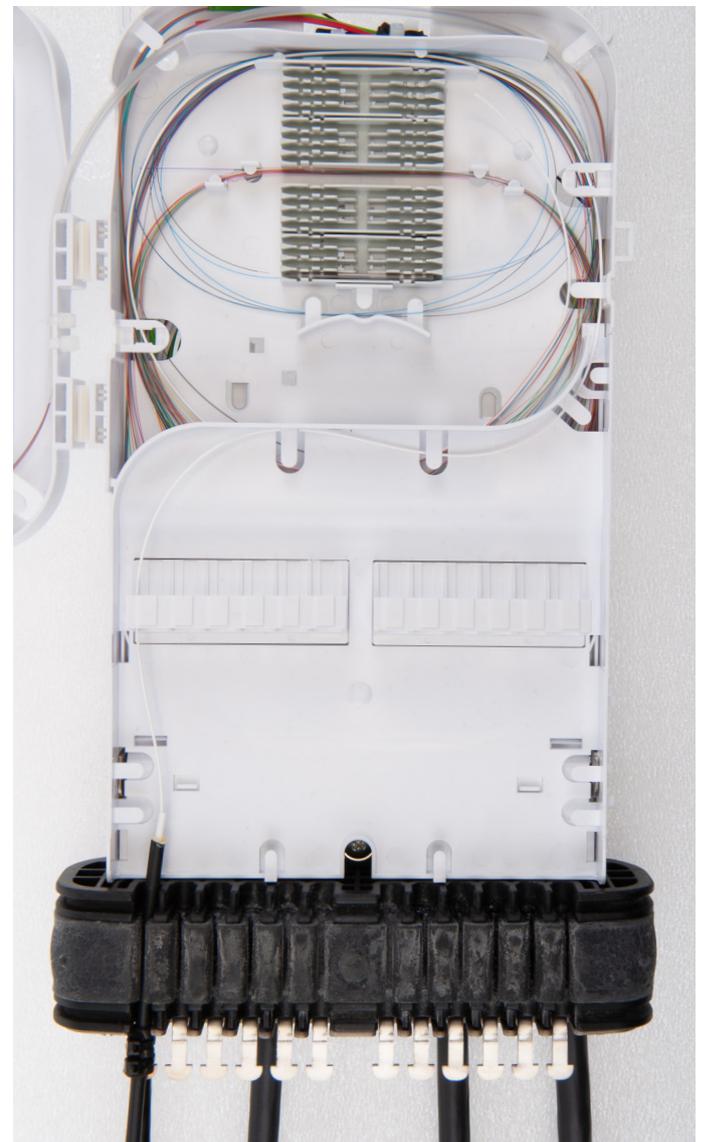
9.1.2   Secure the cable with 2 cable ties to the external metal bracket. Route the fiber through the adapter panel to the splicing zone.
Note: Transition from 900μ to 250μ always in a straight line.

9.1.3   Make fusion splice and store splice protector and fiber over length properly.

9.2 Installing 2 cables per drop port (0-5.5 mm/0-0.21 inch)

9.2.1 Cut 20 mm/0.78 inch of gel strip. Place the gel strip on top of the first cable.

9.2.2 Prepare the 2nd drop as described 9.1.1.

9.2.3 Cut 1 of the 2 black cable ties from the first cable, put 2nd drop cable on top of the gel strip and push down. Gel conforms to a U shape around cable.
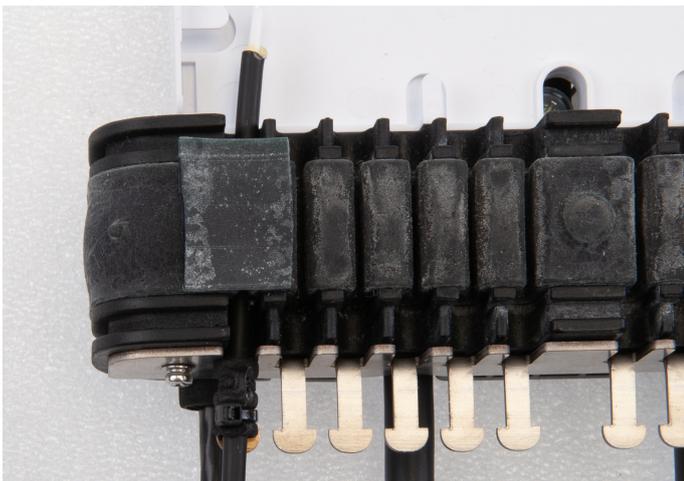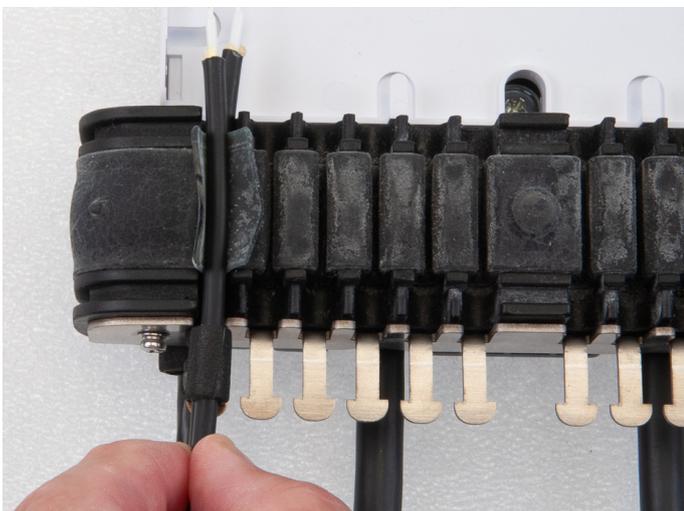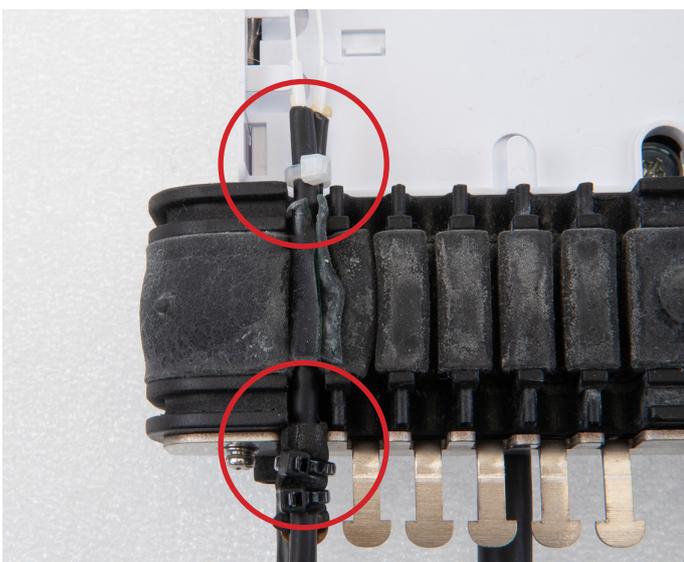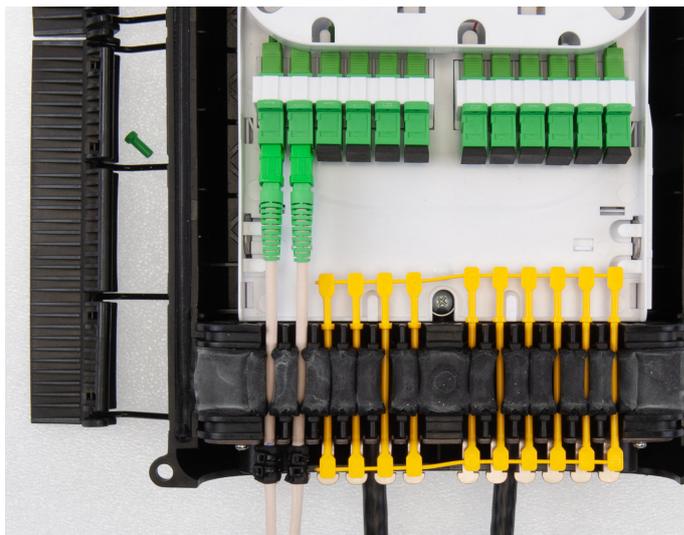

9.2.4 Secure both cables together: internal with 1 white cable tie, external with 2 black cable ties to the metal bracket. Route fiber through the adapter panel to the splicing zone.

10 Connectorized drop cable

10.1 Pre-connectorized drops

10.1.1 Install the pre-connectorized drop cable as shown, determine correct spot where to place 1 wrap of foam and secure with 2 black cable ties to the external bracket.
Note: For LC adapters and 2 cables per port see section 9.2 (2 cables per drop port)

10.2 Field installable drops (FIC)
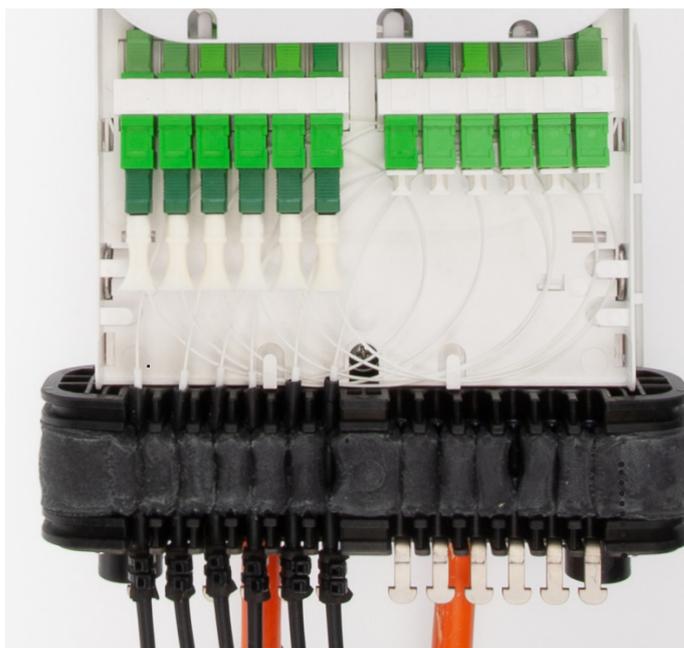
10.2.1 Prepare cable per standard practice (foam) and secure the cable to the bracket with 2 black cable ties.
Note: Recommended 900μ fiber length is approximately 300 mm/11.8 inches. Install connector and store 900μ fiber over length as shown.

11   Field installable splitters

11.1   In order to install splitters, 1 or more splice holders need to be removed. To remove the splice holders on the 2nd organizer tray, gently lift the plastic lip and push out the splice holder from the other side.
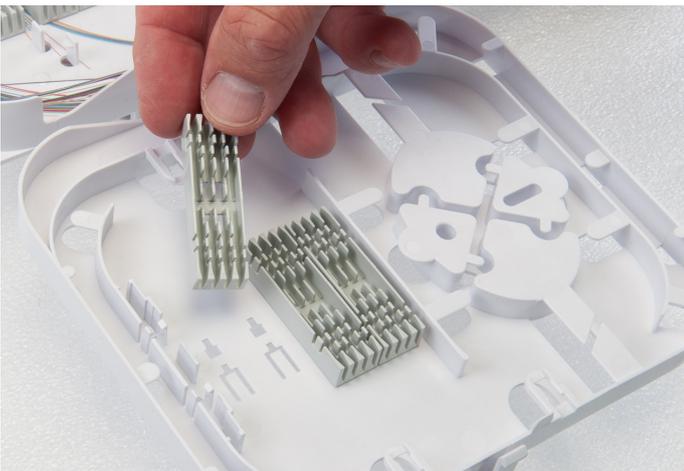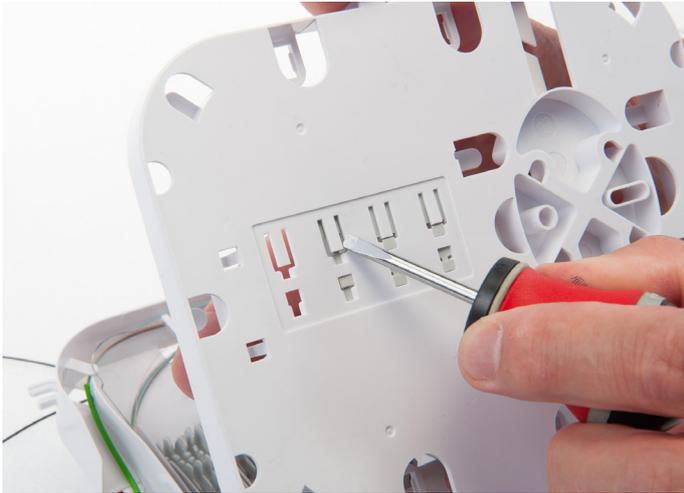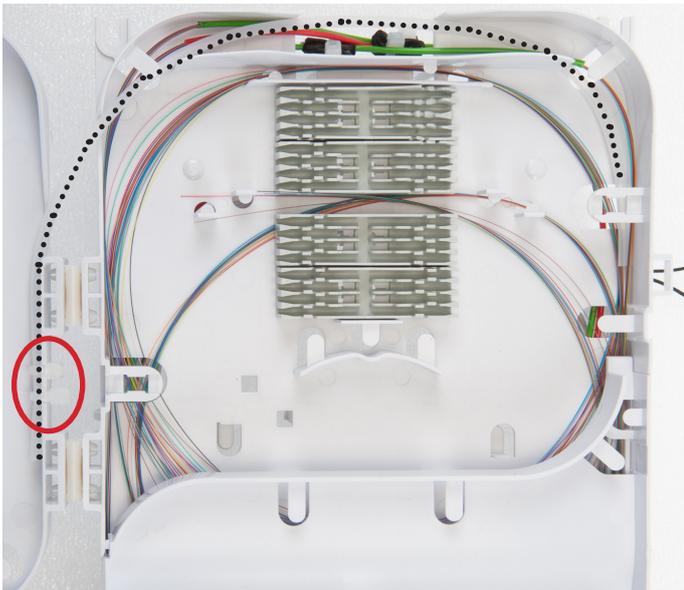

11.2   Take a transportation tube and secure it at the side of the 2nd organizer tray with 2 cable ties. Route the tube over the top and guide as shown (see dotted line).
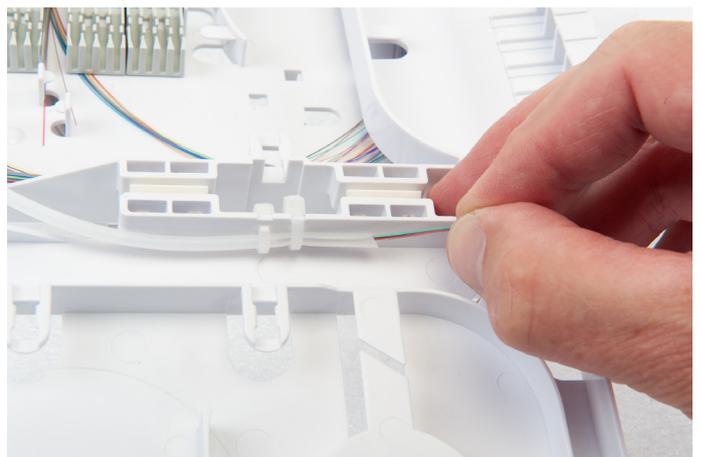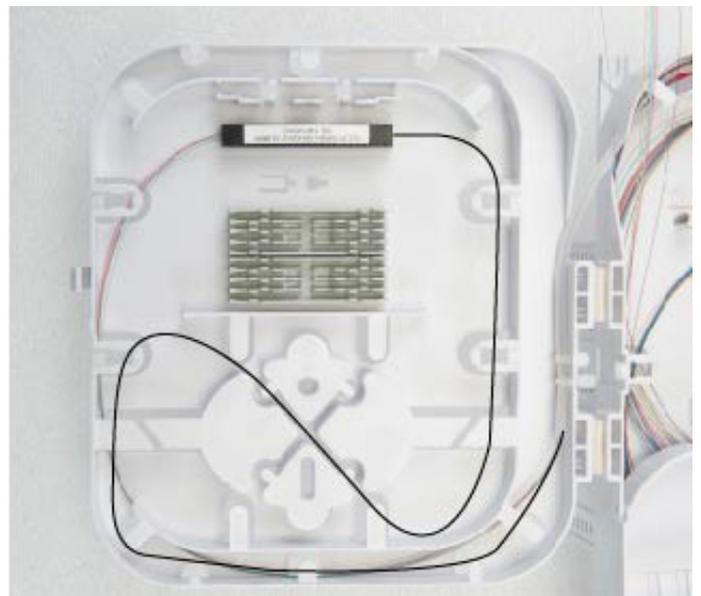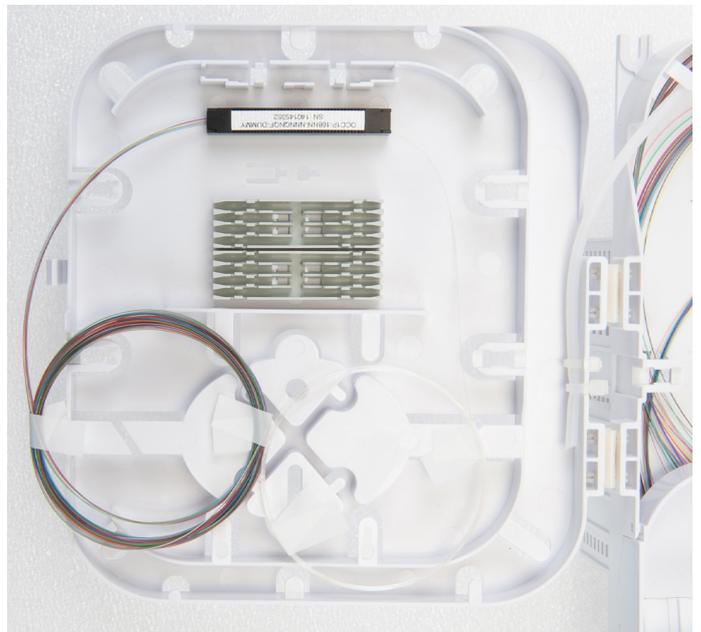
11.3   Install the splitter. Route all fibers through the transportation tube to tray 1 (using a figure of 8 for the feeder fiber to maintain the correct bend radius).

11.4   Put clear cover back. Splice feeder fiber, store splice protector and fiber over length properly.
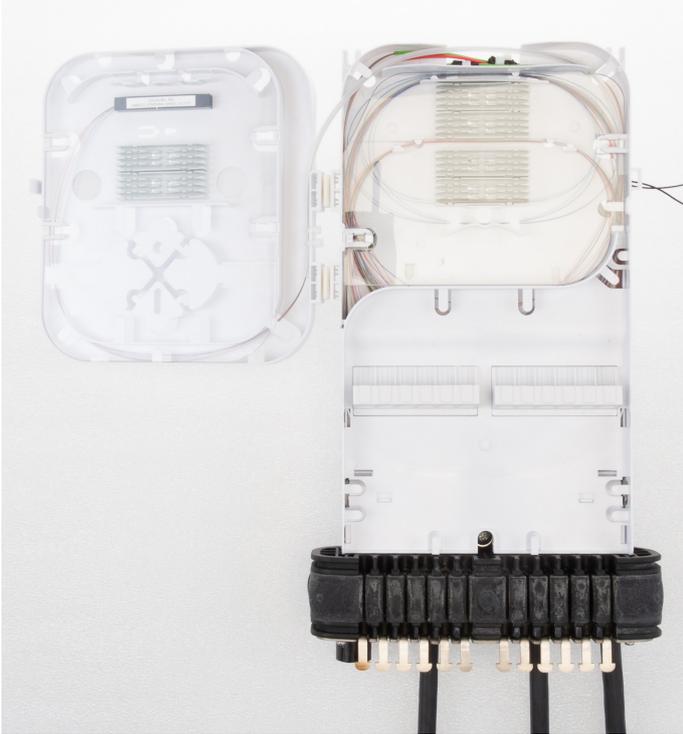
11.5   Output fibers can now be spliced to the drops.

12   TAP's
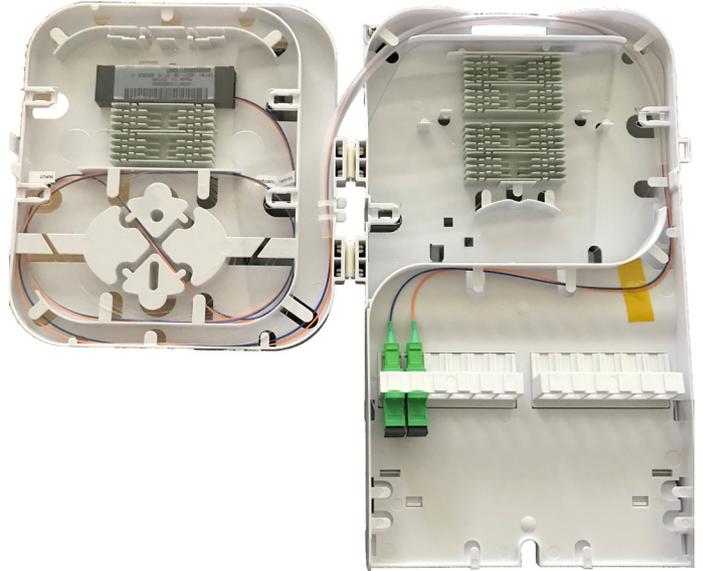
12.1   TAP pre-installed in tray 2. All fibers are routed to tray 1.
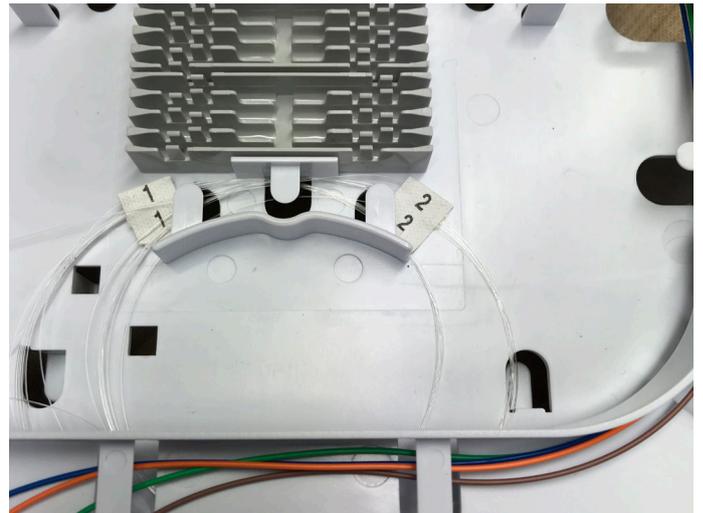
Input fiber labled number 1.
Thru fiber labled number 2.

12.2   In order to route the midspan fibers underneath the transportation tube the adapter panel can be taken out easily.
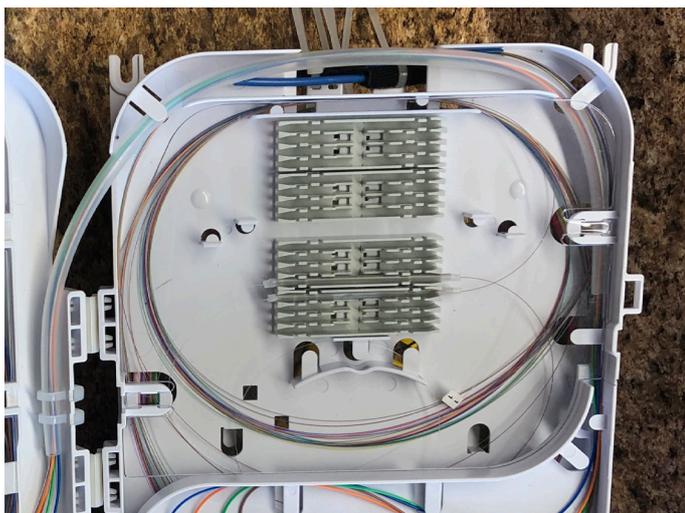
12.3   Make splices and store properly.

13   Organizer in housing

13.1   Install the tether as shown.
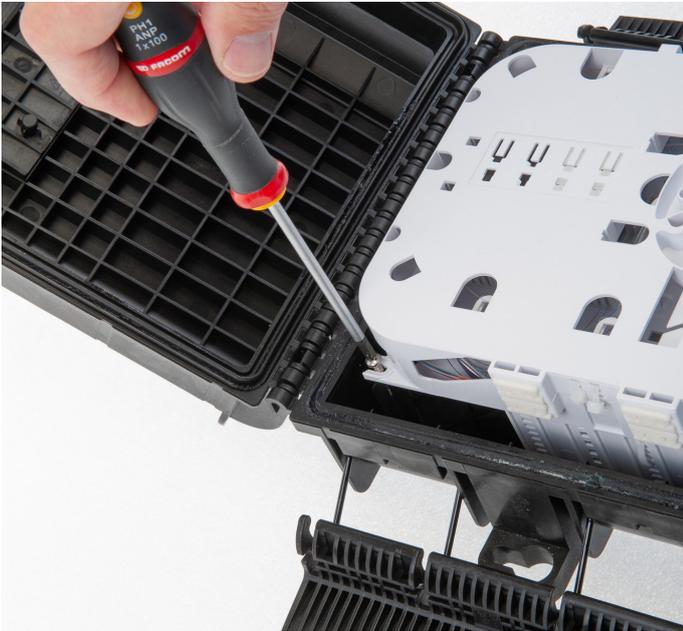
13.5   Close all latches using a screw driver.

13.2   Slide organizer under the 2 top screws. Tighten 2 top and 1 bottom screw.

13.3   Place dummy rods in all unused ports.

13.4   Store wedge next to the organizer.

14   Demarcation cover

14.1   The bottom half of the cover can be lifted to access the patch panel. This part can be locked in open position as shown.

15   Mounting options

Wall mounting: use mounting tabs. This terminal is not UL-listed.

Strand mounting: OFDC-C12 BRKSTRAND (to be ordered separately).

Pole mounting: use mounting tabs in combination with plastic or metal hose clamps.

16 Trademarks and patents

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This product may be covered by one or more U.S. patents or their foreign equivalents. For patents, see www.cs-pat.com.

17 Contact information

Visit our website or contact your local CommScope representative for more information.

For technical assistance, customer service, or to report any missing/damaged parts, visit us at: http://www.commscope.com/SupportCenter

18 Installation video and animation OFDC-12

https://www.youtube.com/watch?v=NuOYHBUhMqw

https://www.youtube.com/watch?v=GP3cJpxtWxM