COMMSCOPE®

FDC - A8

INSTALLATION INSTRUCTION

Fiber Drop Closure for Aerial Applications

Contents

1   General

1.1 Installation Instruction description

The installation instruction describes the necessary steps to install the FDC-A8 at strand. The installation instruction illustrates the use on loose tube cables and drop cables. If other cable types are used, supplementary installation steps have to be made. Contact the local agent to get the relevant accessories and instructions.

1.2 Product description

The FDC-A8 is a gel sealed in-line distribution closure for aerial application or up to 0.5m underwater. It accommodates up to 24 fusion splices and 8 SC adapters and has 3 in and 3 out main cable ports, 1 in and 1 out branch cable ports and 8 drop cable ports.

2   Sizing and product kit information

2.1   Dimensions

Main cable diameter range	7 - 17 mm
Branch cable diameter range	3 - 7 mm
Drop cable diameter range	3mm
Closure outer dimension	270 x 160 x 83 mm

2.2 Kit content

Below listed is a standard kit, alternative kits and accessories are available.
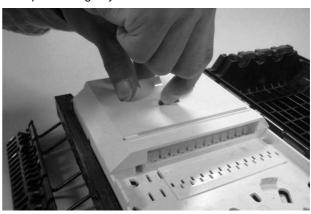
1. Cover and bottom with latch
2. Splicing / patching tray with lids on both sides
3. SC adapters   (8pcs)
4. Left cable attachment assembly
5. Right cable attachment assembly
6. Transportation tube L=0.26m   (8pcs)
7. Set of cable blocking ring   (6sets)
8. Cable plug
9. Foam strip
10. Cleaning tissue   (4pcs)
11. Installation instruction
12. Fusion splice protectors   (24pcs)
13. Tie wraps   (16pcs)
14. Cover fixation pin
15. Wire saddle and screws   (2pcs)
16. Hanger bracket and screws
17. Cable supporting block   (6pcs)

3   Installation conditions precautions

3.1 The closures can be installed at temperature between -5℃ and 45℃.

3.2 Follow the installation instruction steps to ensure the performance of the closure.

3.3 It is necessary to take precautions and keep the working space clean to protect the closure sealing materials and splices.
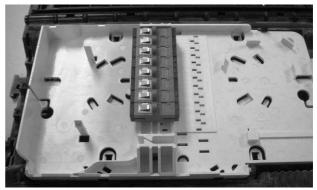
4   Adapter installation
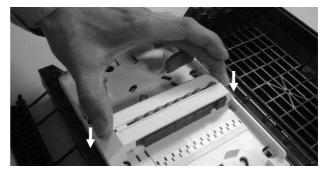
4.1 Open the big tray cover as shown.
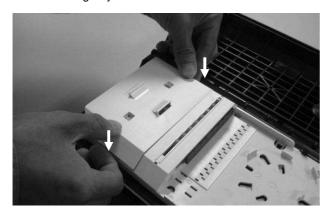

4.2 Open the small tray cover.

4.3 Position the adapters with spring leftwards.

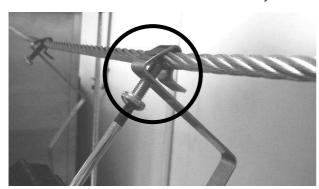4.4 Add on small tray cover as shown.

4.5 Add on big tray cover as shown.

5 Hanger bracket installation

5.1 Install the hanger bracket onto the closure.

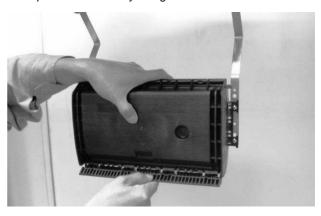Note: The screw head faces frontward.
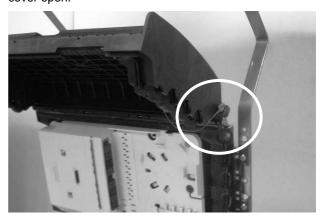

5.2 Secure the closure onto the strand wire firmly.

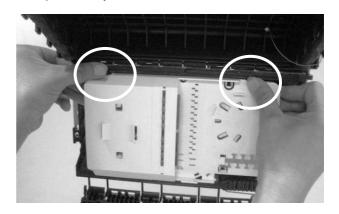
6 Splitter installation

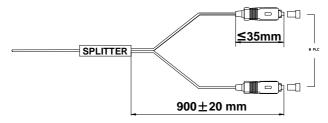6.1 Open the closure by lifting the latch.

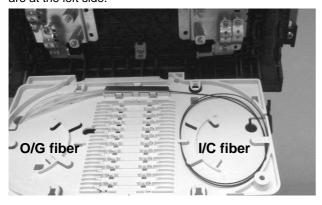6.2 Use the pin stored on cover inner side to keep the cover open.
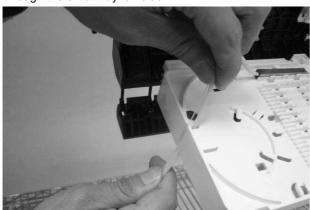

6.3 Open the tray.

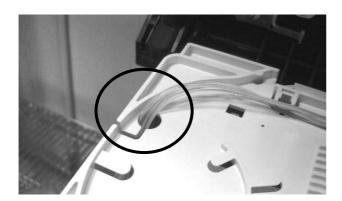6.4 Recommended connector and connectorized splitter pigtail length is shown below.

6.5 Install the splitter on the tray. Make sure that the incoming fibers are at the right side and outgoing fibers are at the left side.

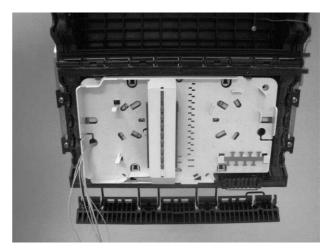6.6 Route the outgoing fiber to the tray patching side through the slit at tray left side.

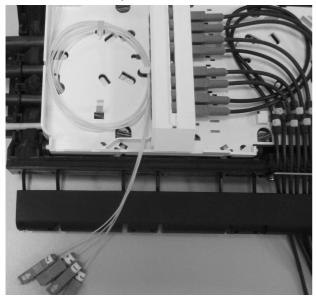6.7 Store the incoming fiber at the right side properly.

6.8 Install the second splitter and store incoming fiber and outgoing fiber properly.

6.9 Close the tray to install the pigtails.

6.10 Store **ALL** pigtails on tray properly before connect the connectors to adapters.

6.11 Route the **TOP** 4 pigtails as shown.
Note: Route the pigtails along the tray sides to make the circle as big as possible.
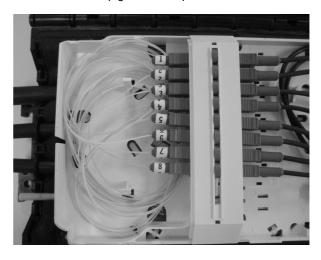

6.12 Route the **BOTTOM** 4 pigtails as shown.
Note: Route the pigtails along the tray sides to make the circle as big as possible.
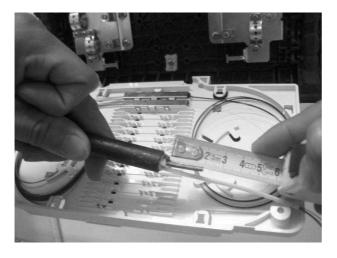

6.13 Connect the pigtails to adapters.

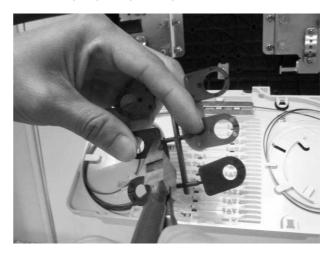6.14 Add on cover and close the tray

7　Cable installation

7.1 Remove the cable sheath over 1300mm.

7.2 Cut the strength member up to 20mm from the cable jacket end.

7.3 Clean the cable sheath up to 80smm cable jacket end.

7.4 For **MAIN** cables outer diameter ≤12mm, use cable supporting block to support the cable.

7.5 For **MAIN** cables outer diameter ≤ 12mm, use 2 pieces cable blocking rings for each cable port.

7.5.1 Select the appropriate cable blocking rings according to the cable outer diameter. It is preferred that the blocking ring is slightly larger than the cable diameter.

7.5.2 Cut the selected rings on the mark.

7.5.3 Install the rings over the cable.

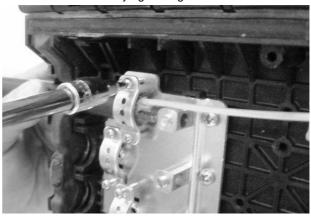7.5.4 Secure the rings into the designated ports.
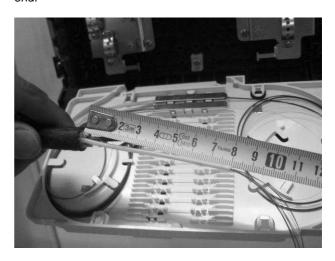

7.6 Loosen the screw to put on the cable.

7.7 Secure the strength member as shown.
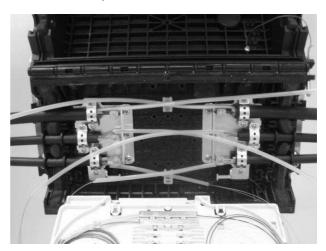

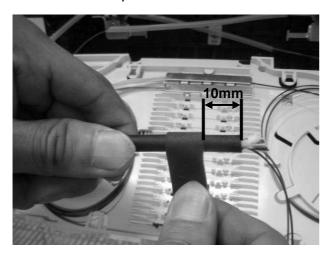7.8 Secure the cable by tightening the screws.

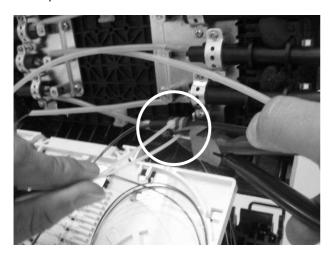7.9 Cut the loose tube up to 80mm from the cable jacket end.

7.10 Put on transportation tubes.

7.11 Branch cable installation

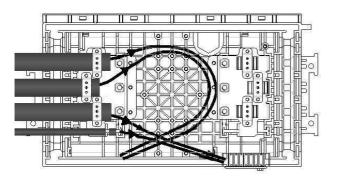7.11.1 Wrap the branch cable with foam strip at a distance of 10mm from cable jacket end.

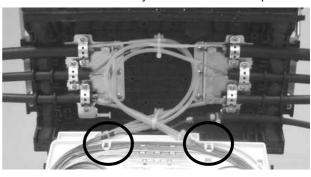7.11.2 Secure the branch cable onto the closure with two tie wraps.
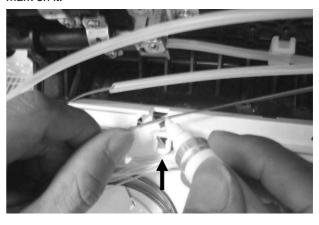

8   Splicing and fiber storage
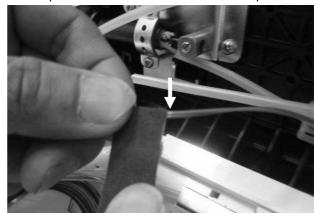
8.1 Route the transportation tube as shown.
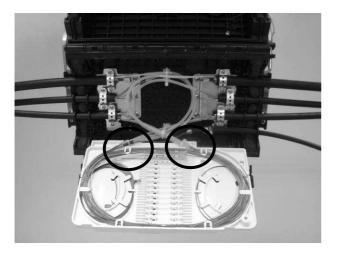

8.2 Fix the tubes at the tray entrance with tie wraps.

8.3 For 900µm fiber, route the fiber to tray entrance and mark on it.
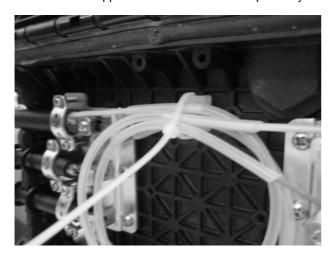

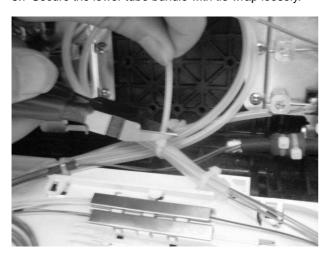8.4 Wrap the fiber where marked with foam strip.

8.5 Secure the tubes and fiber with foam part with tie wraps as shown.
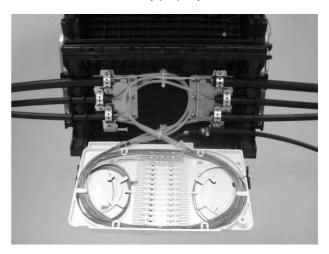

8.6 Secure the upper tube bundle with tie wrap loosely.
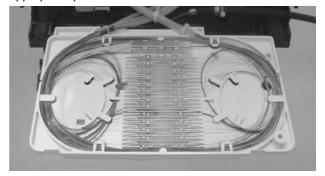

8.7 Secure the lower tube bundle with tie wrap loosely.
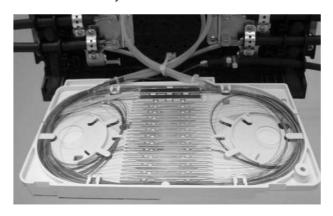

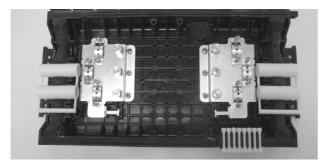8.8 Store the fiber onto tray properly.

8.9 Splice the fiber. After each splice is made, the splice protector should be stored in the splice holder in the appropriate position.

8.10 Add on the tray lid.

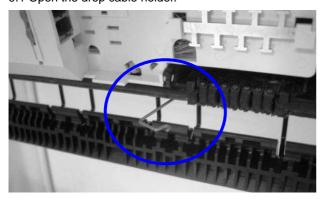8.11 Install appropriate cable plug on all unused cable ports.
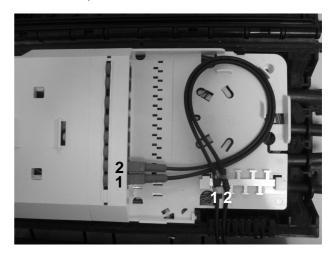

8.12 Close the tray.

9　Drop cable installation
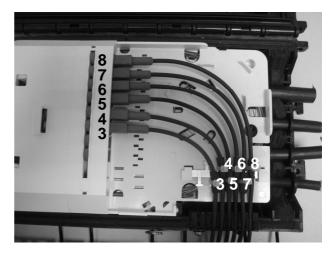
9.1 Open the drop cable holder.
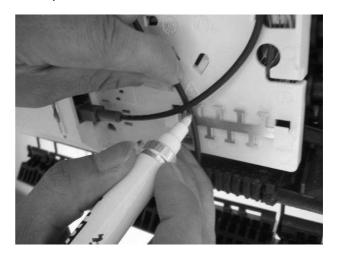

9.2 Route the drop cables as shown.

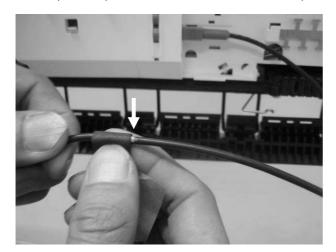Note: The drop cable 1-2 is shown below.
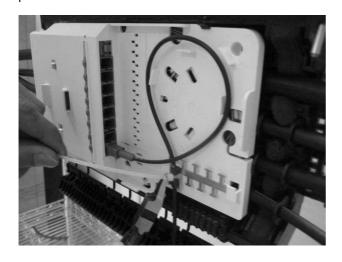

Note: The drop cable 3-8 is shown below.

9.3 Route the drop cables. Mark on the drop cable where the drop cable fixation area is.
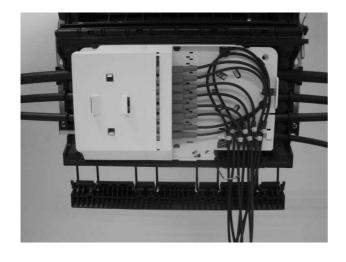
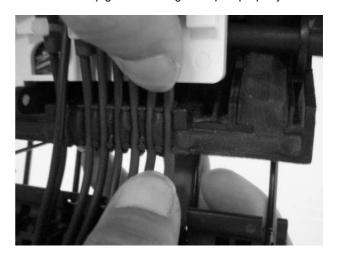9.4 Wrap the drop cable at the mark with the foam strip.

9.5 Secure the drop cable with the tie wrap at the foam part.
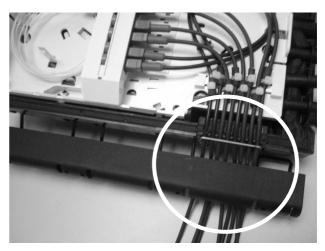

9.6 Install all the drop cables.

9.7 Push each pigtail into designated port properly.
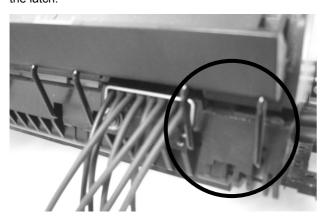

9.8 Close the drop cable holder.

9.9 Put the drop cable behind the latch as shown.

9.10 Take off the closure cover fixation pin and store at the cover.

9.11 Hook the spring at the latch right end and then close the latch.

9.12 Close the closure.