

CORNING

OptiSheath™ Advantage Sealed 4-, 6-, 8- and 12-Port Multiport Terminals

P/N 206-338
Issue 10

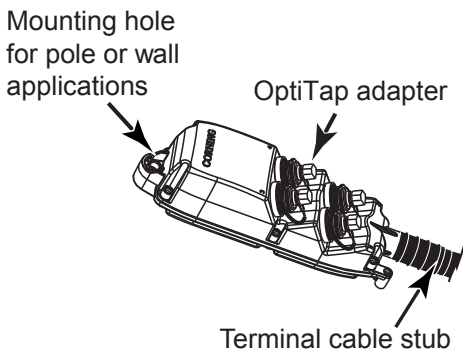
related literature |

006-111	Instruction, Optical Access Connector Cleaning Kit
006-156	Instruction, OptiTip™ MT Connector Cleaning Tool
0273_NAFTA_AEN	Family Spec Sheet, OptiSheath® Multiport Terminals
0275_NAFTA_AEN	Family Spec Sheet, OptiSheath® UltraNAP™ Terminals

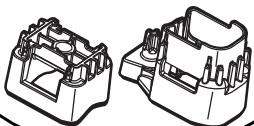
1. Carton Contents

- OptiSheath Advantage terminal, one 4-, 6-, 8- or 12-port terminal (Figure 1)
- Universal multiport mounting adapter kit (p/n MOB-KT-UNIV-BKT)

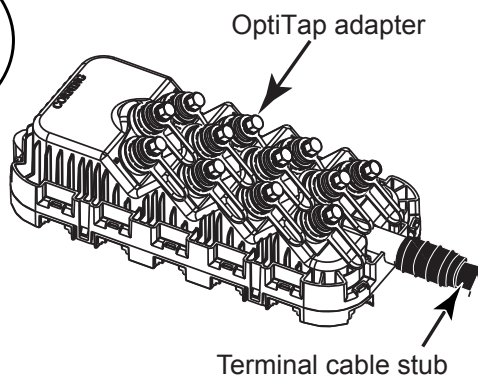
4-Port terminal



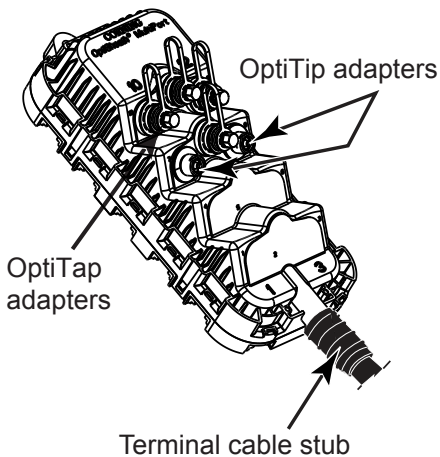
Mounting adapter kit



12-Port terminal

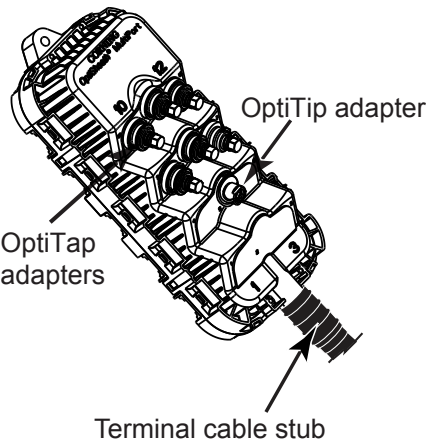


4-port UltraNAP™ terminal (2 OptiTip adapters)



TPA-2763

6-port UltraNAP™ terminal (1 OptiTip adapter)



6-/8-port terminal

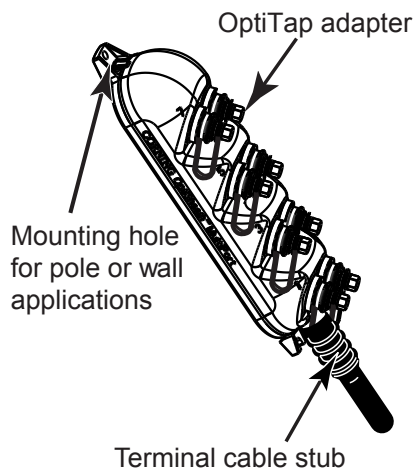


Figure 1

2. Materials and Tools Required

2.1 Materials

The following materials are required to install the terminal in all applications described in this instruction:

- Universal multiport mounting adapter kit requires cable straps or bands and cable spacers for metal or concrete pole applications; or lag bolts or screws for wooden pole applications
- OptiTap preconnectorized drop cable

2.2 Tools

The following tools are required:

- Corning Cable Systems' connector cleaning kit (TKT-OTAP-CLN-001) (purchased separately)
- Corning Cable Systems' OptiTip™ MT cleaning kit (TKT-OTMT-CLN-001) (purchased separately), if installing the terminal onto a FlexNAP™ cable tether
- Tools appropriate for the wall or wooden pole fasteners
- $\frac{7}{16}$ -inch hex socket or can wrench (216B Tool)

3. Planning

This instruction describes installation of the OptiSheath Advantage 4-, 6-, 8- and 12-port sealed multiport terminals. The terminal has a fiber optic cable factory-installed into one end of the terminal. The terminal can be ordered in several configurations:

- Unconnectorized for splicing to distribution cable,
- Connectorized with an OptiTip connector for mating with a FlexNAP cable or with an OptiTip adapter on another multiport terminal, or
- Connectorized with an OptiTap® connector for mating with a splitter multiport terminal with an expansion port option.

The following Figures 2 and 3 illustrate the cable connectivity options:

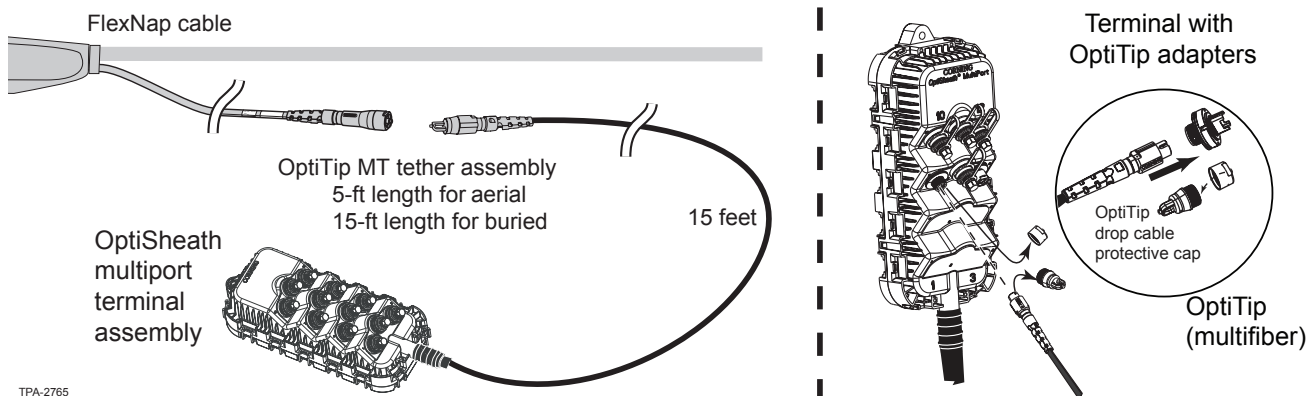
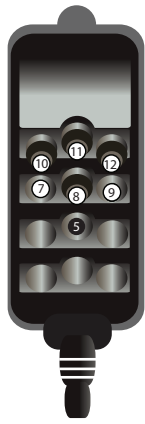
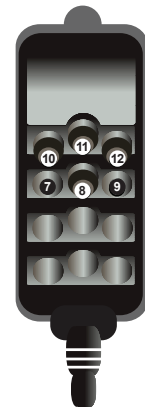
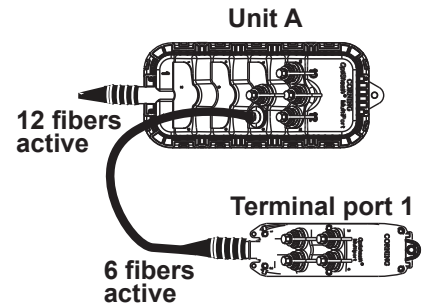


Figure 2



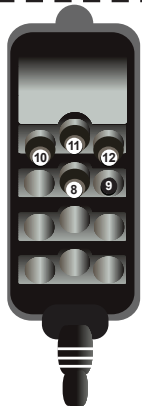
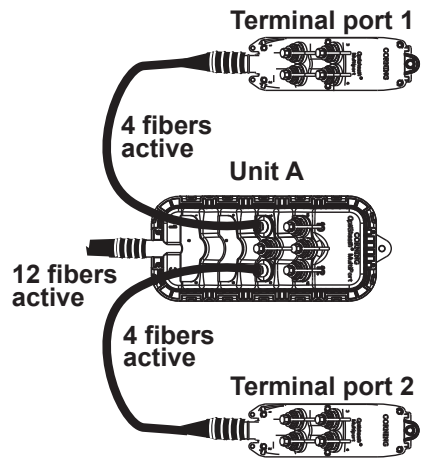
OptiSheath® UltraNAP™ terminal 6-port series-connected

Connector Type	6-Port Type	Port Location	Fiber Color	Fiber Count
OptiTap Single-Fiber	Drop 1	7	BL	1
OptiTap Single-Fiber	Drop 2	8	OR	2
OptiTap Single-Fiber	Drop 3	9	GR	3
OptiTap Single-Fiber	Drop 4	10	BR	4
OptiTap Single-Fiber	Drop 5	11	SL	5
OptiTap Single-Fiber	Drop 6	12	WH	6
OptiTip Multi-Fiber (6-fiber)	Terminal Port 1	5	RD	7
			BK	8
			YL	9
			VI	10
			RS	11
			AQ	12



OptiSheath® UltraNAP™ terminal 4-port branch-connected

Connector Type	4-Port Type	Port Location	Fiber Color	Fiber Count
OptiTap Single-Fiber	Drop 1	8	BL	1
OptiTap Single-Fiber	Drop 2	10	OR	2
OptiTap Single-Fiber	Drop 3	11	GR	3
OptiTap Single-Fiber	Drop 4	12	BR	4
OptiTip Multi-Fiber (4-fiber)	Terminal Port 1	7	SL	5
			WH	6
			RD	7
			BK	8
OptiTip Multi-Fiber (4-fiber)	Terminal Port 2	9	YL	9
			VI	10
			RS	11
			AQ	12



OptiSheath® splitter terminal

Connector Type	Port Type	Port Location
OptiTap® Single-Fiber	Expansion	9
OptiTap Single-Fiber	Drop 1	8
OptiTap Single-Fiber	Drop 2	10
OptiTap Single-Fiber	Drop 3	11
OptiTap Single-Fiber	Drop 4	12

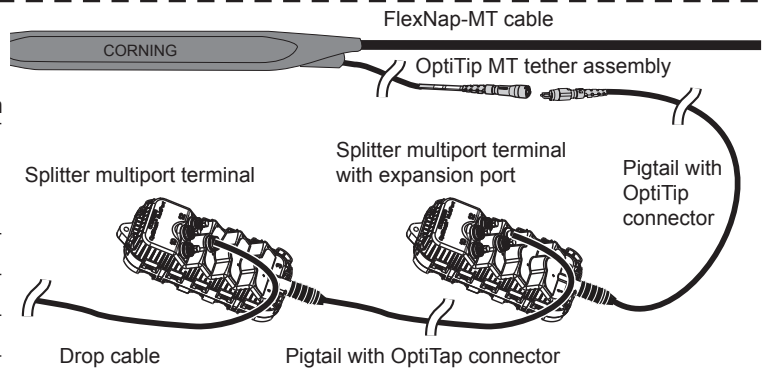


Figure 3

4. Mounting the Terminal



WARNING: Never look directly into the end of a fiber that may be carrying laser light. Laser light can be invisible and can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.



WARNING: This product is designed to meet specifications for Class 3 lasers only and should not be used with optical fiber transmission systems containing lasers of classes for which they have not been certified. DO NOT use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure be suspected, arrange for an eye examination immediately.



WARNING: Do not install telecommunications equipment or work with telephone wiring during a lightning storm. Telephone lines can carry high voltages from lightning causing electrical shock resulting in severe injury or death.

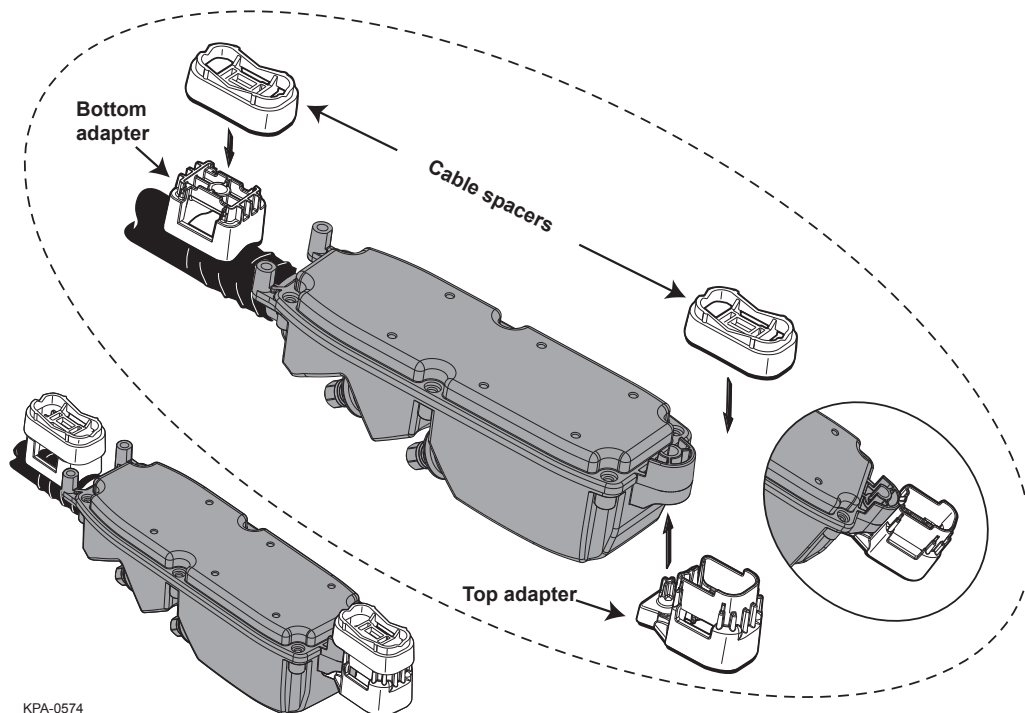
Step 1: Following your engineering plan, determine the location where the terminal will be **installed**.

Step 2: Install the terminal as described below for your installation location. Use the universal mounting adapters, if necessary.

4.1 In an Aerial Application

4.1.1 4- or 12-port Terminals

Step 1: Insert stud on top adapter into mounting hole at the top of the terminal (Figure 4) (cable spacers not included).



KPA-0574

Figure 4

Step 2: Run cable straps through one side of the spacers and back through the other side of the mounting adapters and spacers, then secure the terminal to the strand (Figure 5).

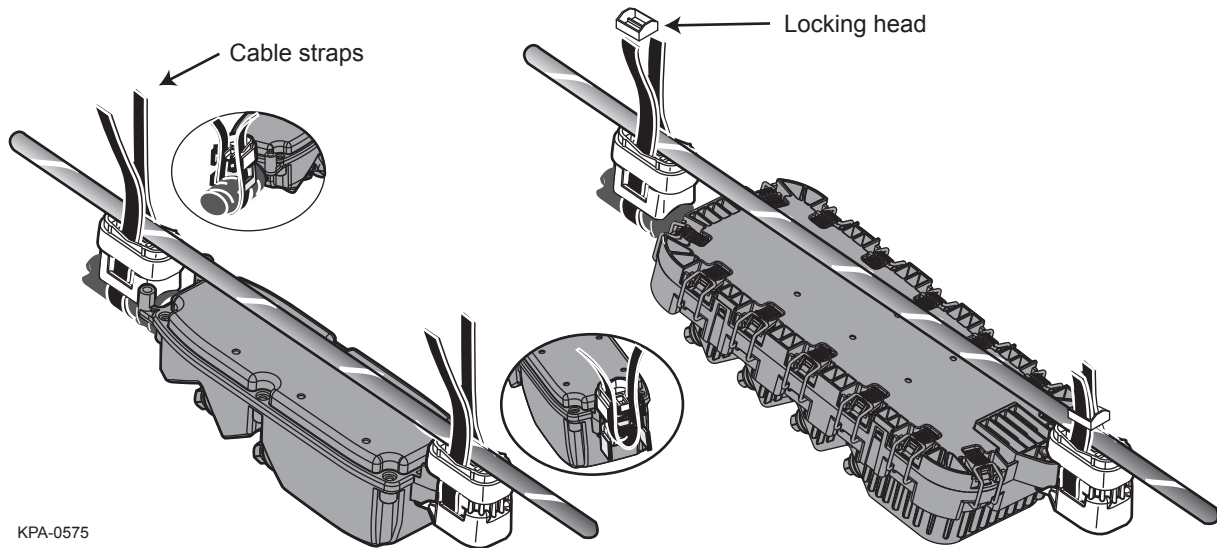


Figure 5

4.1.2 6- or 8-port Terminals

Thread straps through spacer and slots in base of terminal. With strand between strap, insert locking head onto strap and tighten onto the strand (Figure 6).

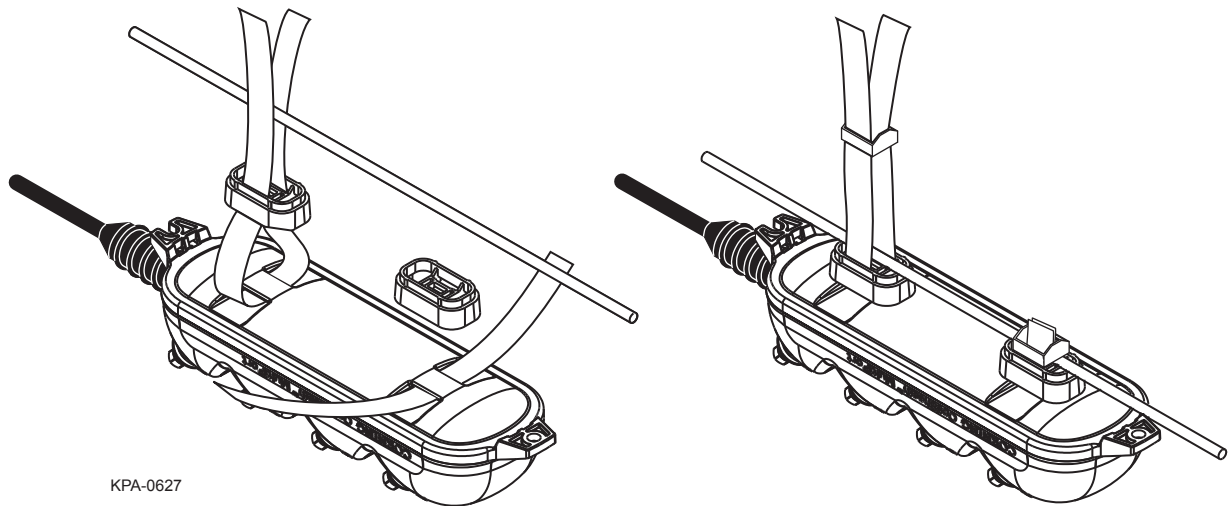


Figure 6

4.2 On a Wall or Wooden Pole

4.2.1 4- or 12-port Terminals

Step 1: Use threaded fasteners to secure the bottom adapter to the wall or pole and secure the terminal to the pole with a cable strap (Figure 7).

Step 2: Complete installation by securing the top of the terminal with another threaded fastener.

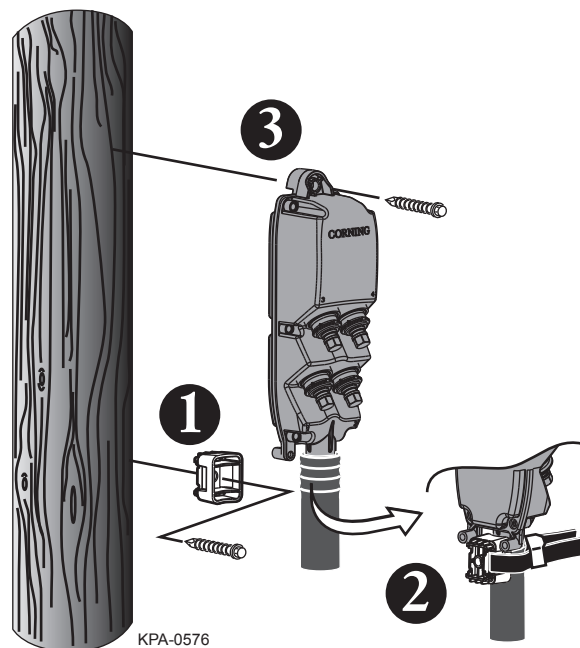


Figure 7

4.2.2 6- or 8-port Terminals

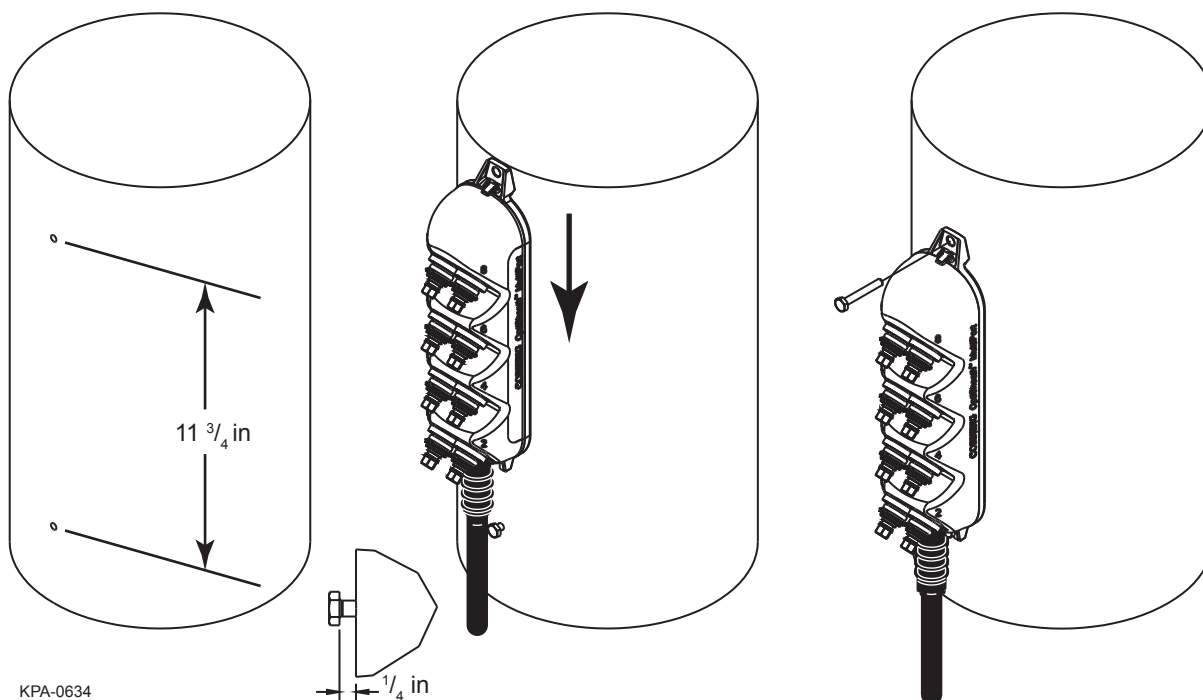


Figure 8

Step 1: Insert threaded fastener for lower mounting ear. Leave 1/4-in space behind head of fastener (Figure 8).

Step 2: Mount terminal on fastener and secure the top of the terminal with another threaded fastener.

4.3 On a Metal or Concrete Pole

4.3.1 4- or 12-port Terminals

Step 1: Install universal mounting adapters as shown in Figure 4.

Step 2: Run cable straps through the mounting adapters and secure the terminal to the pole using the locking heads (Figure 9).

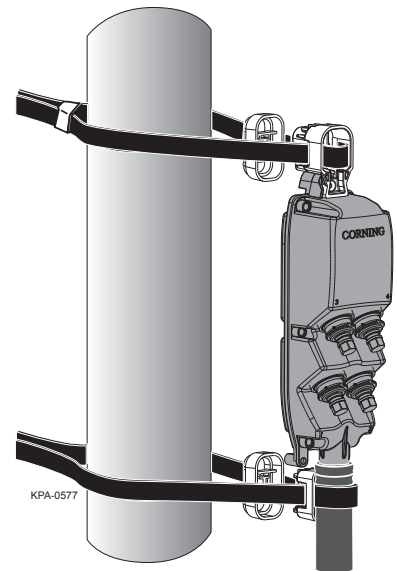


Figure 9

4.3.2 6- or 8-port Terminals

Step 1: Run cable straps through mounting slots in the back of the terminal (Figure 10).

Step 2: Secure the cable to the pole using a Band-It-type tool.

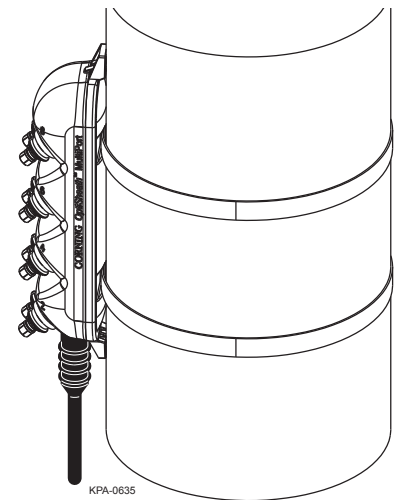


Figure 10

4.4 In a Handhole or Pedestal - All Terminals

Position the terminal in the handhole or pedestal with the mounting hole at the top of the terminal against the vertical mounting channel (Figure 11) and attach the terminal to the channel with a cable tie.

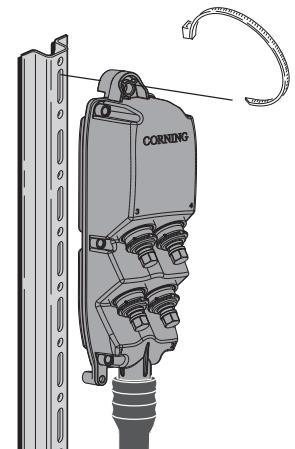


Figure 11

5. Determining Type of Terminal Stub

5.1 Unconnectorized Terminal Stub

If terminal stub is unconnectorized, splice raw end to the feeder cable per standard company practices and skip to Section 7 to install drop cables.

5.2 Connectorized Terminal Stub

Refer to Figure 4 to determine the type of cable stub attached to the Multiport Terminal:

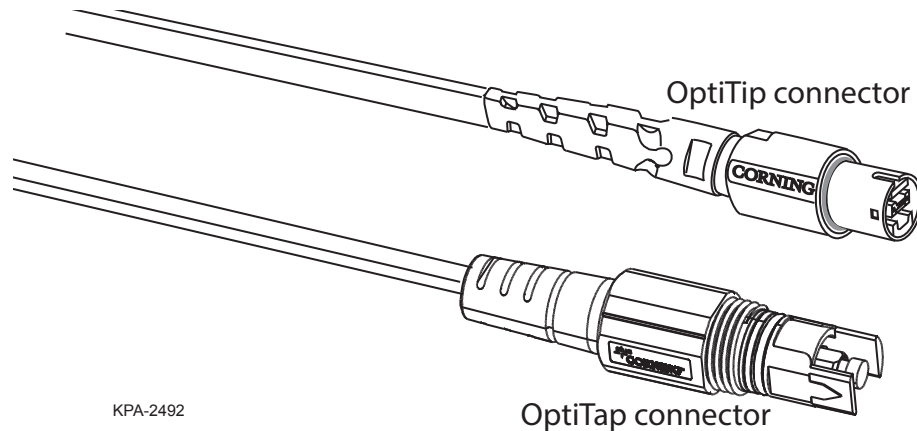


Figure 12

- If terminal stub is connectorized with an OptiTip connector, proceed to Section 6.
- If terminal stub is connectorized with an OptiTap connector, skip to Section 7.

6. Mating a Multiport Terminal with OptiTip Connector to a FlexNAP™ Distribution Cable or to OptiTip Adapter on another Terminal



WARNING: Unrestrained cable ends may cause injury to your eyes or body and damage the cable, fitting, or fibers if suddenly released from a coil (Figure 13). Wear eye protection and use extreme care when handling a coiled cable assembly which uses flat-drop cable - gently release the energy stored in the cable coil to avoid possible personal injury or damage to the cable or fitting components.

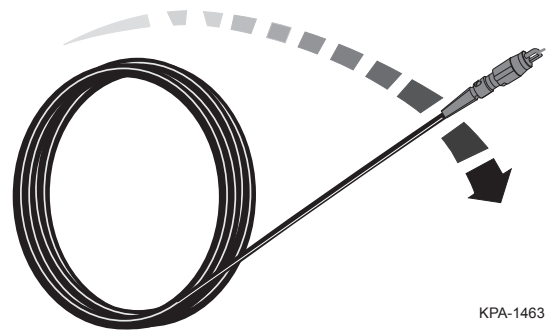


Figure 13

Step 1: Locate the FlexNAP distribution cable (Figure 13). On aerial applications, use scissors to carefully cut the cable ties which secure the tether to the cable.

Step 2: Remove the dust cap from the tether assembly by turning the cap counter-clockwise (Figure 14).

NOTE: The terminal assembly's dust cap has a tamperproof factory seal which verifies that the connector has been cleaned and tested prior to shipping. This seal will break during dust cap removal in Step 3; if the seal is already broken, visually examine the connector end-face inside to ensure that the end-face has not been exposed to dust or other contaminants. If necessary, clean the end faces with an OptiTip-MT cleaning tool (p/n TKTOTMT-CLN-002) as described in the instruction provided with the tool.

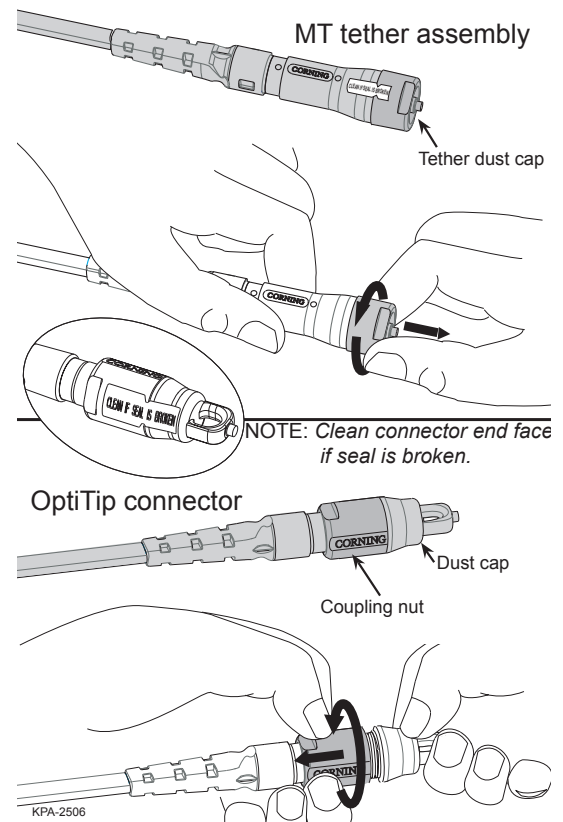


Figure 14

Step 3: To remove the terminal assembly's dust cap, hold the dust cap with one hand and back off the coupling nut as shown in Figure 15.

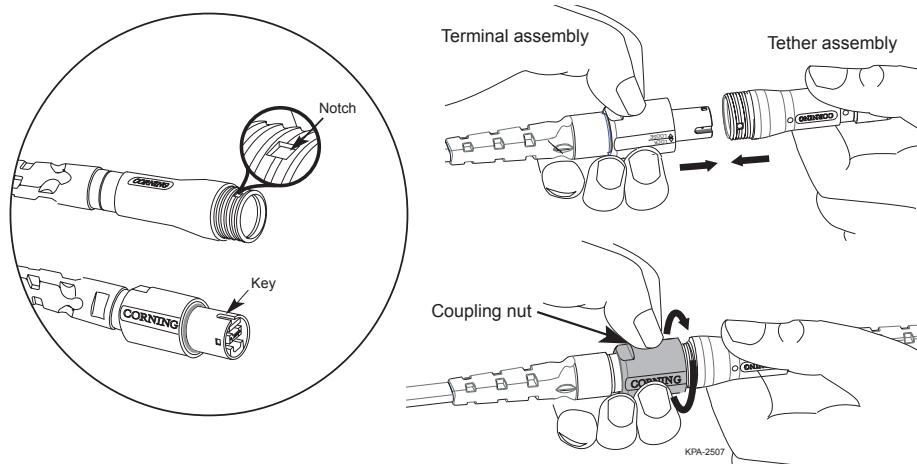


Figure 15

Step 4: Locate the reference keys on each assembly (see Figure 15 inset).

Step 5: Align the reference keys and gently turn the assembly coupling nut onto the tether assembly until the nut is hand tight (Figure 15).

Step 6: Manage any cable slack per standard local practices.

Step 7: Proceed to Section 7 to install drop cables.

7. Mating an OptiTap Connector to an OptiTap Adapter

7.1 Clean OptiTap Connector

Clean the connectors with the Optical Access Connector Cleaning Kit (p/n CLEANER-PORT-OTAP) as described in the instructions provided with the kit.



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7.2 Clean OptiTap Adapters

Step 1: Remove the protective plug from the OptiTap adapter where the connector will be mated (Figure 8). Use can wrench or appropriate tool to assure proper removal.

Step 2: Insert a dry swab into the adapter and make three 360° twists with light pressure against the connector end-face. Dispose of the swab after one use.

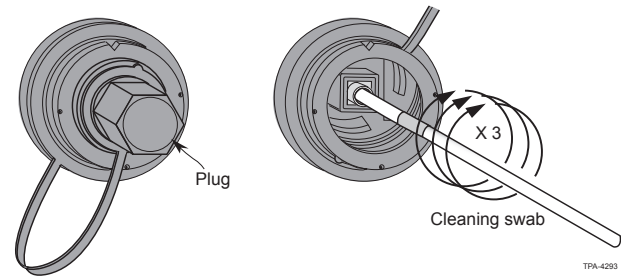


Figure 16

7.3 Mate Connectorized OptiTap Drop Cable

Step 1: Insert the connectorized drop cable into the OptiTap adapter. Orient the arrow on the connector tang with the notch in the adapter (Figure 9).

Step 2: Screw the connectorized drop cable connecting hardware into the OptiTap adapter. Connector should be installed hand tight. Do not use pliers or other tools than can overtighten connector or adapter.

Step 3: Screw the OptiTap adapter plug into the connectorized drop cable protective cap.

Step 4: Repeat Section 7.3 for all connectorized drop cables.

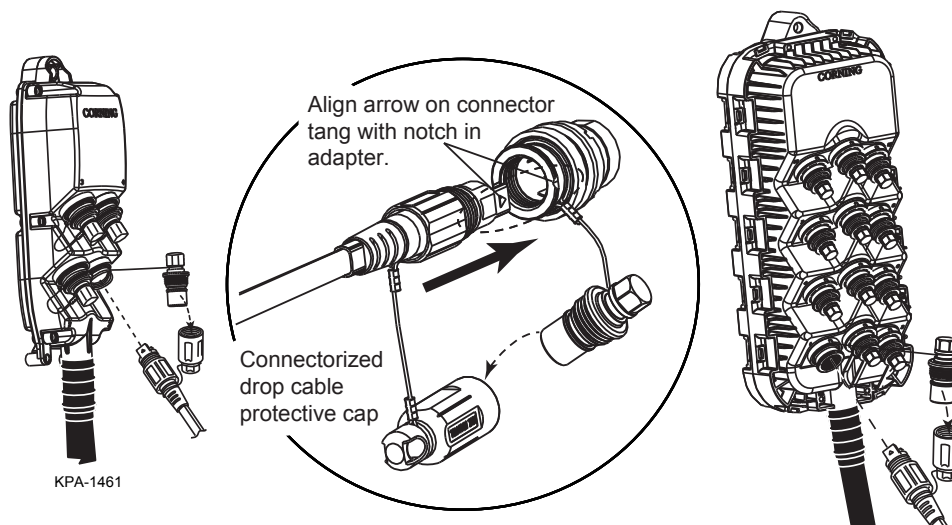


Figure 17

8. Mating Connectorized Drop Cable to the Terminal After Initial Installation

After the initial installation, the sealed terminal may become covered with mud and dirt due to normal ground water or flooding. Although these contaminants on the outside of the housing will not affect the performance of the unit, care must be taken when removing the OptiTap adapter plugs for drop cable installation to prevent loose dirt particles from entering the adapter sleeve and contaminating a connector end-face.

NOTE: *Only use clean water to wash the outer housing. Do not use any type of solvent.*

Step 1: Remove any cable ties or hardware securing the terminal and stubbed cable.

Step 2: When handling the terminal, support the terminal and its cable stub to prevent kinking the cable stub at the entrance of the terminal.

Step 3: **For light dirt and dust**, soak a rag or towel with clean water and gently clean the housing. Wipe dry with a clean, dry rag or towel.

For heavy, caked-on mud and dirt, spray the terminal with low-pressure water such as from a garden sprayer. A soft-bristled brush may also be used to lightly scrub the housing to loosen the mud and dirt. Remove any remaining dirt with a water-soaked rag or towel and wipe dry with a clean, dry rag or towel.

Step 4: Although the unit should now be generally clean, there may still be dirt particles around the OptiTap adapter plugs. Therefore, before removing a plug, first turn the terminal so that the adapters face downward and then unscrew the selected plug. In this way, any stray dirt particles will fall to the ground instead of into the adapter.

Step 5: Use the Corning Cable Systems Optical Access Connector Cleaning Kit as described in Sections 5.1 and 5.2 to clean the OptiTap drop cable assembly and adapter plugs.

Step 6: Keep the adapters facing down while inserting and tightening the drop cable assembly.

Step 7: Insert the connectorized drop cable into the OptiTap adapter. Orient the arrow on the connector tang with the notch in the adapter (Figure 8).

Step 8: Screw the connectorized drop cable connecting hardware into the OptiTap adapter.

Step 9: Screw the OptiTap adapter plug into the connectorized drop cable protective cap.

Step 10: Repeat steps 1 through 9 for all connectorized drop cables.