

### related literature |

004-117	Installation Guide for ROC™ Drop Cables
004-180	Installation Guide for Dielectric ROC™ Drop Cable with FastAccess™ Technology
004-154	ROC™ Drop, SST-Drop™, and SST-Drop™ Armored Cable Access Guide
006-372	Installation Instructions for OptiSnap™ Connectors
006-373	Critical Steps for OptiSnap™ Connectors

## 1. General

This document describes the recommended procedure for installing an OptiSnap connector onto a flat drop or ROC drop cable using a furcation kit (FAN-BT24-01-ROC). The OptiSnap connector is then installed into a Network Interface Device (NID).

## 2. Carton Contents

- (1) Furcation assembly with boot
- (1) Furcation tube (36 inches [91.44 cm])

## 3. Tools and Materials Required

### 3.1 Tools

- Flat drop cable, bare end preparation tool kit (p/n TKT-FTTX-FLATDROP)
- Stripping tool for toneable ROC drop dielectric cable with FastAccess Technology
- 216B tool (can wrench) or hex wrench, as appropriate for the NID
- Scissors

### 3.2 Materials

- 250 micron OptiSnap connector
- Lint-free tissues or clean cloths
- Gel Solvent wipes (for flat drop cable only)

## 4. Prepare the NID

**Step 1:** Open the NID and access the inner compartment.

**IMPORTANT:** NID configurations vary, so use the method most appropriate for the type of NID you are using. The Corning NID (p/n FNI-NGI-U1010) is shown as an example (Figure 8).

**Step 2:** Cut a slit in the entry grommet in the NID. Push the drop cable through the opening in the grommet (Figure 1).

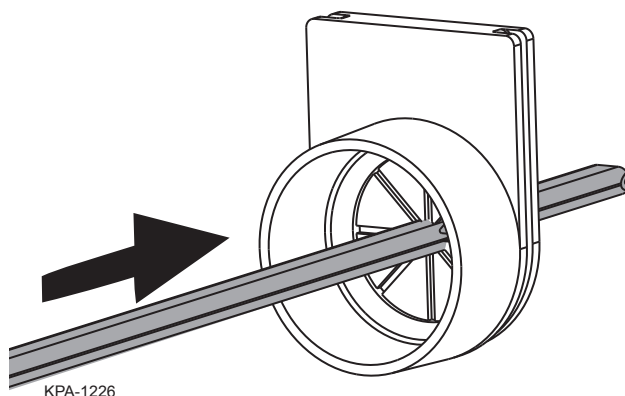


Figure 1 — Feed Drop Cable Through Grommet

## 5. Prepare the Cable

This furcation kit can be used on ROC™ drop cable or flat drop cable.

- Toneable ROC drop cable preparation: Proceed to Section 5.1.
- Dielectric ROC drop cable with FastAccess™ technology: Proceed to Section 5.2.
- Flat drop cable preparation: Skip to Section 5.3.



**CAUTION:** The wearing of cut-resistant safety gloves to protect your hands from accidental injury when using sharp-bladed tools and armored cable is strongly recommended. Use extreme care when working with severed armor. There will be a sharp edge where armor is cut. To minimize the chance of injury from the cut armor, cover the exposed edge with a wrap of electrical tape. To minimize the chance of injury from sharp-bladed tools, always cut away from yourself and others. Dispose of used blades and armor scrap properly.



**CAUTION:** Fiber optic cable is sensitive to excessive pulling, bending and crushing forces. Consult the cable specification sheet for the cable you are installing. Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink. Doing so may cause damage that can alter the transmission characteristics of the cable; the cable may have to be replaced.

### 5.1 Preparing Toneable ROC Drop Cable

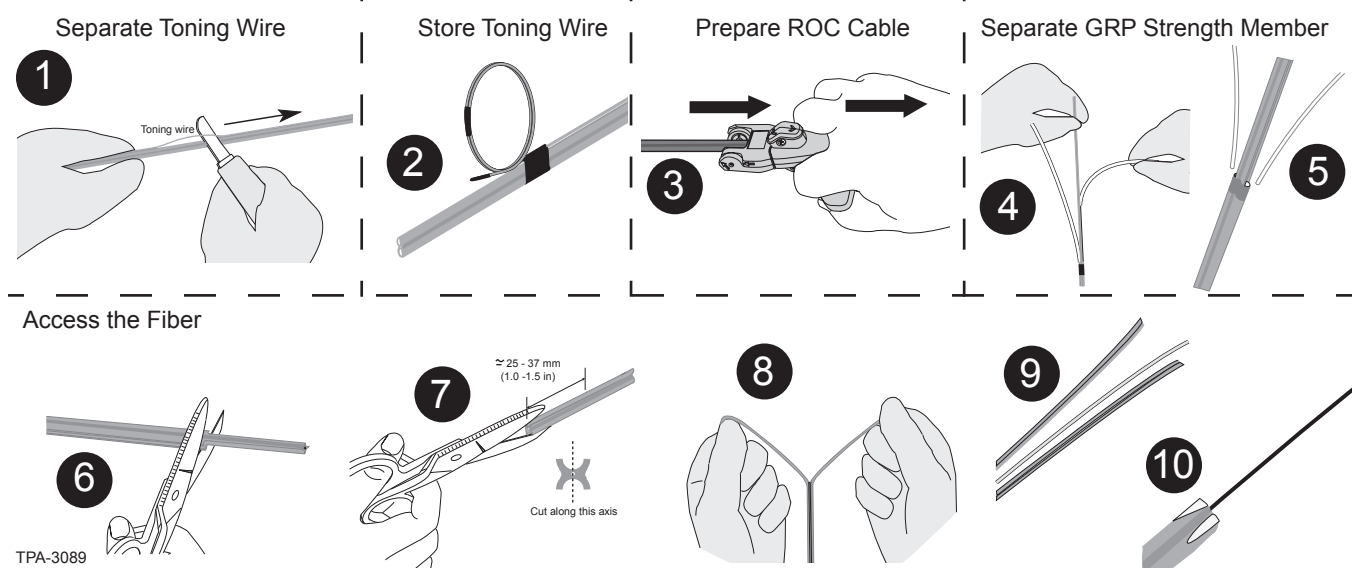


Figure 2 — Prepare Toneable ROC Cable

- Step 1:** Determine point on cable where toning wire should be separated and use a utility knife to separate it from the cable.
- Step 2:** Store toning wire with electrical tape as shown in Figure 2.
- Step 3:** Mark the cable with a wrap of tape 3.5 ft from the end of the sheath. Position stripping tool over cable in the narrow slot at the mark and pull to split the sides of the jacket as described in the instructions provided with the tool.
- Step 4:** Separate the GRP strength members from the cable back to the strip length tape wrap.
- Step 5:** Use diagonal cutters or scissors to cut the GRP strength members as close as possible to the tape wrap. The tape will prevent trimming completely flush without damaging the fiber.

- Step 6:** Use scissors to cut the cable and square just past the 3-in section of cable which had its wide sides removed previously.
- Step 7:** Use scissors to make a cut approximately 25-37 mm (1.0 - 1.5 in) long between the grooves where the strength members were previously located.
- Step 8:** Firmly hold each half of the cable jacket and pull to separate the center section of cable sheath back to the strip length tape wrap. It is best to pull each half at a slight angle relative to the cable direction as opposed to bending each half over approximately 90 degrees to the cable and then pulling.
- Step 9:** Once the sheath has been separated along the entire length, look for the colored fiber (blue is standard). It may still be attached to one half of the sheath, or it may have separated as the sheath was split. If the fiber is still attached to the sheath, look for it at the cable end, separate the fiber from the sheath, and gently pull the fiber along the length to where it leaves the cable at the end near the cut strength members.
- Step 10:** Using care not to damage or cut the fiber, cut off and discard the split center sheath segments.

The fiber is now exposed and both the cable and fiber are ready to be placed into the hardware for your specific application.

## 5.2 Preparing Dielectric ROC™ Drop Cable with FastAccess™ Technology

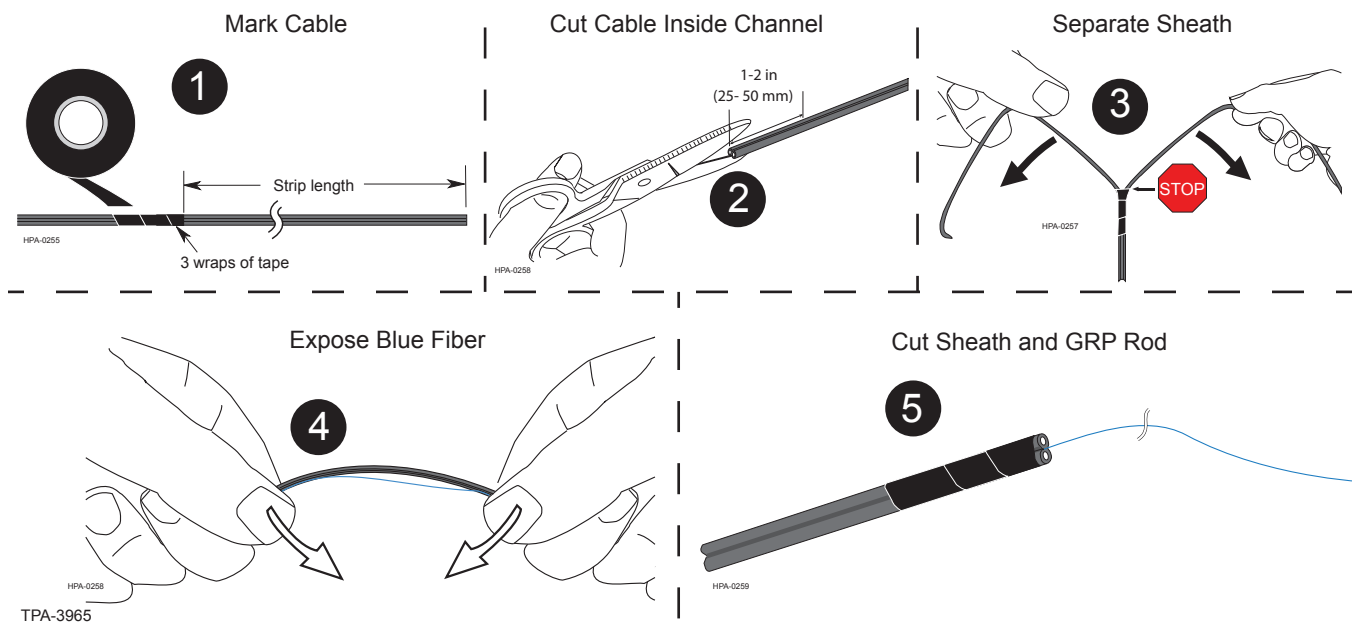


Figure 3 — Prepare ROC Cable with FastAccess Technology

- Step 1:** Mark the cable at the appropriate distance from the cable end with three full spiraling wraps of tape (Figure 3).
- Step 2:** Holding the cable in one hand, use side cutters or scissors and cut 1 to 2 in (25 - 50 mm) down the length of the cable inside the channel between the strength rods.
- Step 3:** After the snip is complete, grab each half of the cable sheath securely and pull to separate sheath along the length of the cable to the tape wrap. It is best to pull each half at a slight angle relative to the cable direction.

- Step 4:** Locate the half with the blue fiber embedded in the sheath. Place a bend at the end of the sheath with the inside holding the fiber on the inside of the bend. The fiber should pop out and can be removed the rest of the length.
- Step 5:** Using scissor or side cutters, cut the sheath and GRP strength rods flush with the tape wrap.

The fiber is now exposed.

### 5.3 Preparing Flat Drop Cable

**IMPORTANT:** Use the Flat Drop, Bare End Preparation Tool Kit (p/n TKT-FTTX-FLATDROP) for accessing drop cable. Follow the procedures in the Standard Recommended Procedure (SRP) 004-154 for accessing SST-Drop™ cable.

- Step 1:** Remove 32 in of the cable sheath and cut the strength members flush with the end of the cable sheath leaving the buffer tube intact (Figure 4).
- Step 2:** Score and remove 1.5 inches from the end of the cable sheath. Be careful not to cut through the 250 micron coated fiber. Remove gel from the fiber using solvent wipes and dry the fiber with soft tissue.

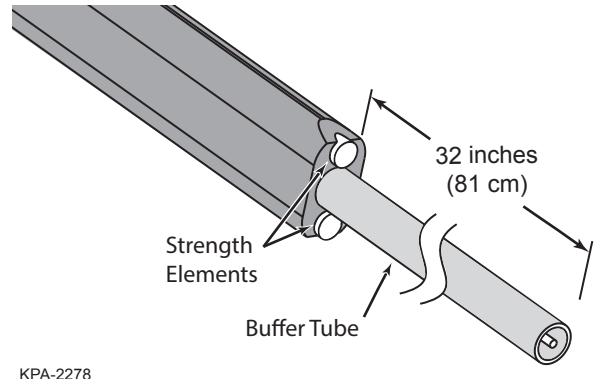


Figure 4

— Remove Cable Sheath

**IMPORTANT: Critical Step** — Completely remove gel from the fiber during this step. Failure to do so may cause difficulty in the next step when furcating the fiber.

## 6. Install Furcation Body

**NOTE:** For ROC™ Drop Dielectric Cable with FastAccess™ Technology only: Remove the tape wraps.

- Step 1:** Feed the 250 micron fiber into the furcation body until the body contacts the buffer tube.

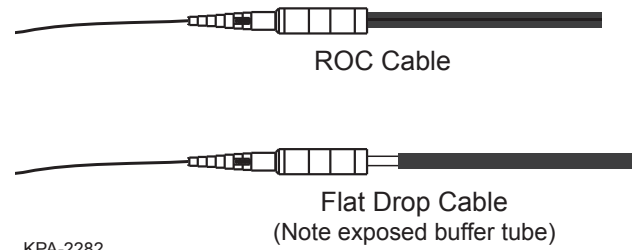


Figure 5 — Install Furcation Body

- Step 2:** Thread the body onto the buffer tube and turn clockwise five to seven turns for ROC cable or three to four turns for flat drop cable (Figure 5).

## 7. Strain-Relieve the Cable

- Follow the applicable hardware manufacturer's recommendation on cable strain-relief.
- Note that two cable ties are usually sufficient to anchor the cable to the hardware.

## 8. Install OptiSnap Connector onto Fiber

**IMPORTANT:** Use only 250 micron OptiSnap connectors (p/n OSNP-xxx-250).

- Step 1:** Temporarily route the fiber to the connector adapter to determine the appropriate length for proper storage.

- Step 2:** Unwind the fiber from the routing tray.

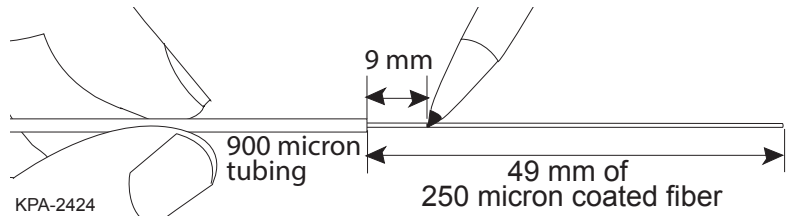


Figure 6 — Mark 250 Micron Coating

- Step 3:** Remove the 900 micron furcation tubing or trim back the fiber so that 49 mm of the 250 micron fiber protrudes from the 900 micron tubing.

- Step 4:** Measure and mark the 250 micron coated fiber 9 mm from the end of the furcation tubing (Figure 6).

- Step 5:** Measure and mark the furcation tubing (Figure 7).

- SC connectors: 5 mm back from the end of the 900 micron tubing.
- LC connectors: 4 mm back from the end of the 900 micron tubing.

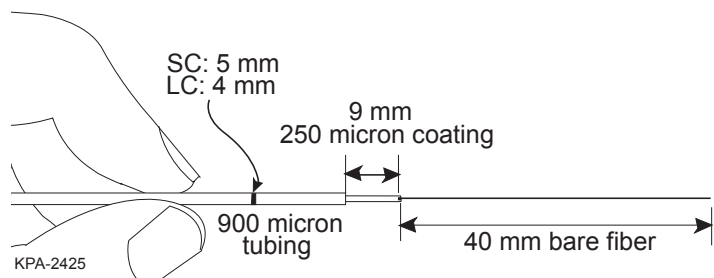


Figure 7 — Remove Cable Sheath

- Step 6:** Remove the 250 micron coating to the 9 mm mark using the small V-notch on the Dual-hole Buffer Tube Stripping Tool.

**IMPORTANT: Critical Step:** Leave 9mm of 250 micron fiber extending beyond the 900 micron tubing to allow the fibers to touch before the 900 micron tubing bottoms out inside the connector.

- Step 7:** Clean the bare fiber with two passes of a Fiber Wipe dampened with Fiber Optic Cleaning Fluid. Do not touch the bare fiber after cleaning it. Do not remove the visual mark.

- Step 8:** For each connector follow the procedures in the tabbed sections listed below from Corning Cable Systems Standard Recommended Procedure 006-372, Installation Instructions for OptiSnap Connectors:

- a. Tool & Connector Prep — Prepare the tool and connectors for termination.
- b. Fiber Cleaving — Cleave and clean each fiber.
- c. Connector Termination — Terminate each connector onto the fiber.

- Step 9:** Route the furcation tubing around the NID's fiber routing tray (Figure 8).

- Step 10:** Clean and test the connector as described in the connector installation instruction or per local practices.

- Step 11:** Mate the connector into the adapter.

- Step 12:** Close the NID cover and secure.

**IMPORTANT:** Figure 8 illustrates the Corning NID (p/n FNI-NGI-U1010), but fiber routing may differ depending on the actual NID used.

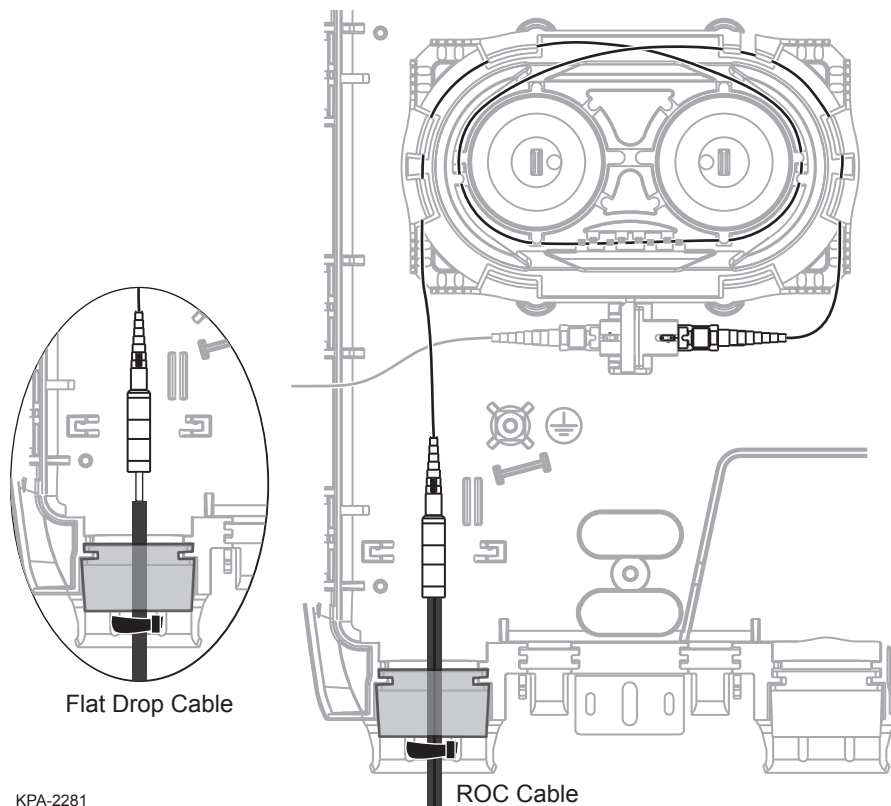


Figure 8 — Install Connector and Route to Adapter

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