

RECOMMENDED Procedure

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SP-F01-013 FTTP Buried Drop Cable Midspan Access, Issue 3

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1.0 General

For some applications, being able to access a fiber from the middle of a cable without disturbing the other fibers is necessary. This technique is called Mid-San access. This procedure describes the steps in performing a Mid-Span access in FTTP Buried Drop Cables.

Sumitomo's buried drop cables intended for buried drops to customer premises contain up to 12 optical fibers and are 100% all dielectric for low cost installation not requiring bonding and grounding. The color-coded fibers are housed in a plastic buffer tube with dielectric strength members. The cable sheath is composed of a flame retardant PVC jacket to meet NESC requirements for cable attachments to residential homes. This cable meets all the requirements of an indoor/outdoor cable and can enter the customer premise eliminating the need for additional splice points.

2.0 Safety Precautions

The use of safety equipment is strongly recommended during the cable preparation procedure. This includes the use of protective clothing and eyewear.

3.0 Reference Documents

SP-F01-011 FTTH™ *Buried Drop Cable Prep Guidelines*

4.0 Tools Required

The following tools and materials are required to complete this procedure.

1. Sheath Knife
2. Dry Rag
3. Shears
4. Buffer Tube Remover (Blue Coax Cutter)
5. Cotton Gauze Pads
6. Isopropyl Alcohol
7. Gloves
8. Safety Glasses

5.0 Cable Preparation

5.1 Measure and mark the appropriate length of the window to be opened in the cable for the particular application.

5.2 Remove the outer jacket material by using the sheath knife and shaving the jacket along the strength members. Trim back jacket material and remove. Leave enough strength member for securing per the recommendations of the closure manufacturer.



Figure 1

5.3 After shaving the outer jacket along both strength members remove the remaining outer jacket to expose the buffer tube.



Figure 2

6.0 Buffer Tube Entry

6.1 For accessing individual fibers in a buffer tube without cutting other fibers in that tube, a tube mid-span entry needs to be performed. Otherwise, cut the buffer tube and fibers with the electricians' scissors and use the standard procedure to remove the buffer tube from either end with the buffer tube removers.

6.2 To enter the buffer tube without cutting the fibers, a special tool for slitting the tube is necessary. Sumitomo recommends the use of a Pocket Tube Shaver. Measure the buffer tube diameter to determine which size tool to use. For general reference, the table below can be used.

Sumitomo Cable Fiber Count	Pocket Tube Shaver
1-12	3.0 mm

Table 1.

6.3 Following procedures from the tool manufacturer provided with the tool, open an access window in the side of the buffer tube. Make a window only as large as necessary for routing the fibers in the splice tray. Leave some buffer tube on the fibers for routing to purposes within the closure

NOTE: A Pocket Tube Shaver uses a blade to take a slice out of the side of the buffer tube, exposing the uncut fibers.

HELPFUL HINTS: Sumitomo recommends keeping the buffer tube as straight as possible when using the shaver. Proper adjustment of the shaver's blade depth with the provided gauge tool is essential for a successful tube mid-span access.

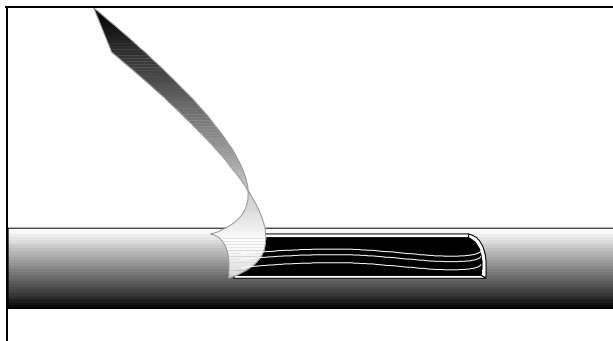


Figure 3

6.4 Using a thin spatula, pull the fibers out of the shaved buffer tube. Locate the fiber(s) of interest and cut if necessary.

NOTE: At this time, the shaved portion of the buffer tube can be cut away exposing all of the fibers or can be left to house the un-cut fibers.

6.5 The Mid-Span access procedure is complete. Follow closure assembly procedures or other procedures to finish installing the cable. Lay un-cut fiber in a splice tray and route the un-cut buffer tubes within the closure.