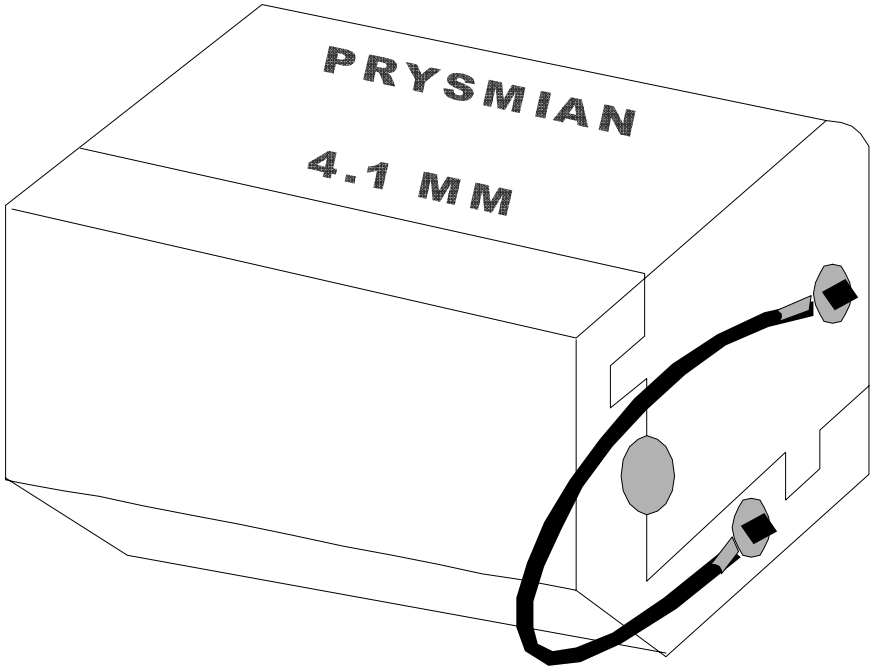
# Procedure For Using Prysmian Buffer Tube Slitters

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The practices contained herein are designed as a guide. Since there are numerous practices that may be utilized, Prysmian has tested and determined that the practices described herein are effective and efficient. The recommended practices are based on average conditions. In addition, the materials and hardware referenced herein appear as examples, but in no way reflect the only tools and materials available to perform these evaluations. Prysmian Communications Cables & Systems USA makes no representation of nor assumes any responsibility for its accuracy or completeness. Local, State, Federal and Industry Codes and Regulations, as well as manufacturers' requirements, must be consulted before proceeding with any project. Prysmian Communications Cables & Systems USA disclaims any liability arising from any information contained herein or for the absence of same. For further information or assistance, contact:


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## 1.0 General

This procedure provides information on the use of Prysmian Buffer Tube Slitters for gaining access to optical fibers in Prysmian cable buffer tubes. This procedure is only applicable to the Prysmian Buffer Tube Slitter and should not be used as guidance for any other tool that may be used for accessing optical fiber in buffer tubes. Local company practices and/or vendor specifications may be in place concerning fiber access for specific products or applications, and should be followed so long as they do not exceed the cable's optical or mechanical performance specifications.

This procedure is intended for use with Reverse Oscillating Lay (ROL) Loose Tube cables or Central Loose Tube (CLT) cables, containing either loose fiber, bundled fiber, or ribbonized fiber.

### 2.0 Tools and Materials

The Prysmian Buffer Tube Slitter consists of two mated aluminum halves. When fitted together, these halves form a channel specifically sized to accommodate one of Prysmian's buffer tubes. The channel holds two precision-mounted blades that are designed to slit the buffer tube approximately 90° apart. Typically, the slits will alternately penetrate or nearly penetrate the tube wall. A slight twist of the tube should 'pop' open a slit not quite fully penetrating the tube wall.

Standard sizes are listed below:

| Tube Size | Part Number | Tube Size | Part Number |
|---|---|---|---|
| 2.5 mm | 9000090001 | 8.4 mm | 9000090005 |
| 2.65 mm | 9000090017 | 8.7 mm | 9000090013 |
| 2.8 mm | 9000090014 | 9.9 mm | 9000090019 |
| 4.1 mm | 9000090003 | 11.0 mm | 9000090006 |
| 6.2 mm | 9000090004 | 14.3 mm | 9000090018 |
| 6.8 mm | 9000090011 | blades | 9000090015 |
| 7.9 mm | 9000090009 | Retaining Cord | 9000090008 |

Other tools or materials which may be required:

| | |
|---|---|
| Safety Glasses | d'Gel or other gel removal agent |
| Gloves | Scissors/Snips |

## 3.0 Procedures

NOTE: If subjected to excessive tensile or bending force, optical fiber may break. Optical fiber buffer tubes may kink or break if subjected to excessive bending, crushing, or tensile force. Extreme care should be taken when handling buffer tubes, ribbons, or fiber to guard against damage.

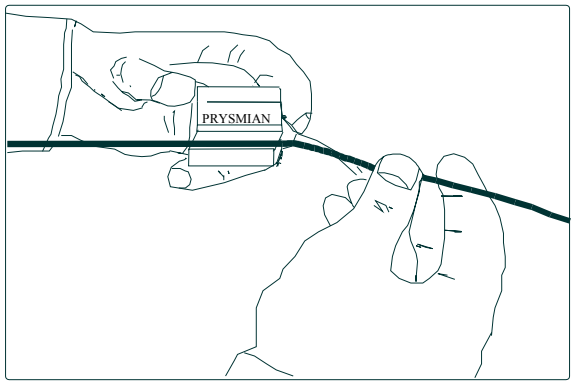
This procedure should be used in conjunction with the appropriate Prysmian Cables & Systems Methods and Procedures (M&P) for sheath removal and gaining access to the buffer tube(s). Select the tube(s) to be accessed and mark the start and stop points of access. This distance will depend upon local company practices and/or the manufacturer's recommendation for the splice closure being used. Select the appropriate Buffer Tube Slitter tool for the tube(s) to be opened. This is best accomplished by measuring the diameter of the tube(s) and referencing the tube size engraved on the side of the Slitter. Separate the two halves of the Tube Slitter. Holding the 'L' shaped (female) half in your hand, lay the tube in the channel.

Grasp the male half of the tool, align the tabs to the slots, and slide the two halves together, taking care to ensure the tube remains in the channel.

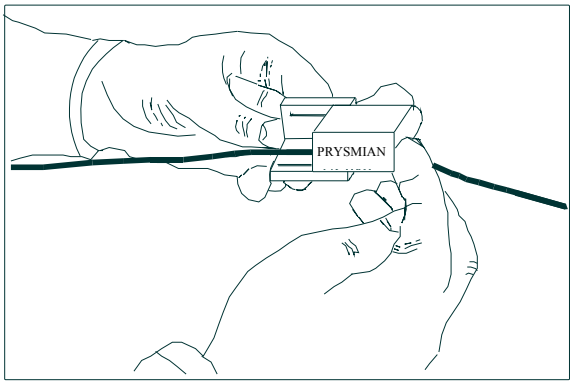
Grasping the tube in one hand and the Tube Slitter in the other, slide the Tube Slitter along the tube. After slitting about 18 inches of tube, it is advised that you stop and remove the fiber from the tube, then hold the empty tube while continuing to slit the remaining required length. This will reduce the possibility of putting excessive strain on the fiber or ribbon.

NOTE: Most sizes of Buffer Tube Slitters are designed to heavily score the tube wall or just barely cut through the wall, reducing the chance of damaging the fibers or ribbons in the tube. The scored region can best be opened by gently twisting a 2 to 4 inch piece of the tube until the scored region pops open. A pair of blunt tipped scissors can be used to carefully snip between the two scored sides of the tube and the slit region can then be pulled away from the tube.

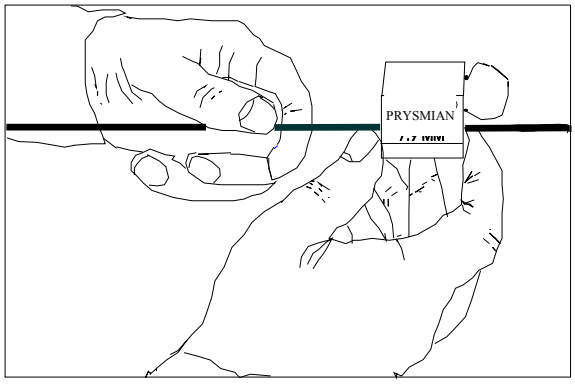
Once the required length of tube has been slit, remove the Buffer Tube Slitter from the tube as follows. First, carefully slide the L-shaped (female) out of the male half to detach the two




*Laying the tube in the channel of the L-shaped (female) half of the slitter*



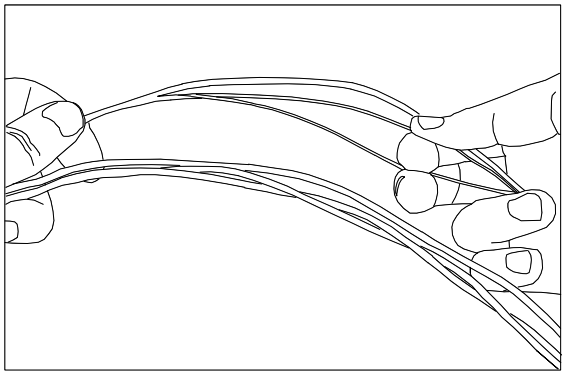

*Align and slide the two halves of the slitter together*




*Grasp slitter with one hand, tube with other hand, and slide slitter along tube to slit*

halves. Now slide the male part back along the slit tube while carefully lifting it away from the tube.

Pull the slit section of tube away from the remainder of the tube and cut it away at each end of the longitudinal slit. Remove the appropriate optical fiber(s) or ribbon(s) from the tube as required for the particular installation conditions or company practice. Wipe the gel from the fiber(s) or ribbon(s) and prepare for termination per company practice or recommended procedure.

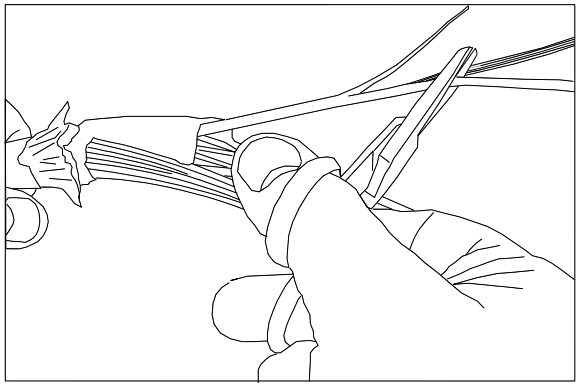


*Pull the slit quarter section of tube away from the tube*

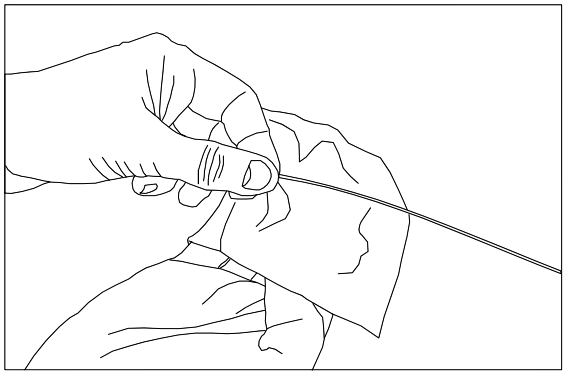
## 4.0 Maintenance and Blade Replacement

Cleanliness is extremely important when working around optical fiber, and the Buffer Tube Slitter is no exception. The slitter channel should be cleaned after each use to remove bits of tube, buffering gel, and other foreign material. A cloth or Q-Tip moistened with degreaser can be used for this purpose. DO NOT USE YOUR FINGER TO CLEAN THE CHANNEL, AS THE BLADES ARE VERY SHARP AND CAN CAUSE SERIOUS INJURY.

The blades provided in the Prysmian Buffer Tube Slitter are robust and designed for a long service life under normal use. Blade location is critical for proper functioning of the tool; thus, the tool is made with blades that cannot be adjusted. Should a blade require replacement, contact Prysmian for a proper replacement blade. The blade is secured with a flat head screw. When replacing the blade, always ensure the flat side of the blade faces up away from the channel.



*Use scissors to carefully cut slit quarter of tube at each end. Remove appropriate fiber(s) or ribbon(s) from tube as required.. Remaining body of tube may be cut out or left intact depending upon installation situation.*



*Wiping excess thixotropic gel from the fiber(s) or ribbon(s)*