

## Sheath Removal and Stripping of Corning Cable Systems Tight-Buffer Interconnect Cables (non-MIC® Cables)

### 1. General

**1.1** This procedure describes the sheath removal and stripping tight-buffer fiber optic interconnect cable. *This procedure does not describe Corning Cable Systems MIC cables – for information about MIC tight buffer cables refer to:*

SRP-004-024, *Sheath Removal Procedure for Corning Cable Systems Single Layer MIC Cables*

SRP-004-030, *Sheath Removal Procedure for Corning Cable Systems Unitized MIC Cables*

**1.2** Corning Cable Systems tight-buffer interconnect cable is a lightweight, flame retardant cable designed for high performance transmission of digital and analog signals in process control, computer and video applications (Figure 1). This cable series is available with fibers having 50, 62.5, 85, and 100  $\mu\text{m}$  cores for use with a wide variety of optical sources and detectors.

**1.3** The term “tight-buffer” refers to the way the optical fiber is held by its applied coating. Rather than allowing the fiber to “float” inside a stiff buffer tube, as in Corning Cable Systems loose-tube designs, the fiber is “held” inside a tightly extruded, flexible buffer compound.

**1.4** This issue includes updated corporate information.

### 2. Precautions

#### 2.1 General Precautions



##### Safety Glasses

**WARNING:** The wearing of safety glasses to protect the eyes from accidental injury is strongly recommended when handling chemicals and cutting fiber. Pieces of glass fiber are very sharp and can damage the cornea of the eye easily.

#### 2.2 Chemical Precautions



##### Isopropyl Alcohol

**WARNING:** Flammable. Flashpoint 59° F. Can cause irritation to eyes on contact. In case of eye contact, flush eyes with water for at least 15 minutes. Inhaling fumes may induce mild narcosis. In case of ingestion, consult a physician. Use with adequate ventilation.

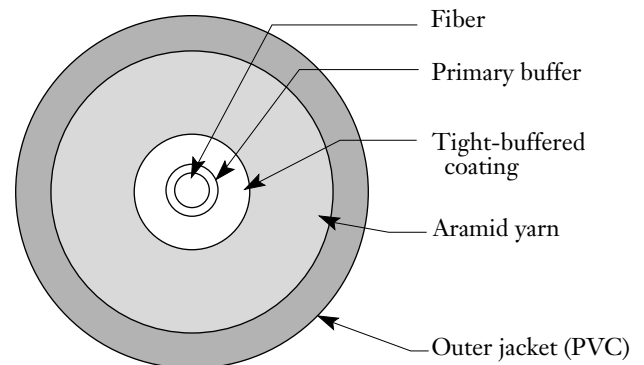


Figure 1

#### 2.3 Cable Handling Precautions



**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 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.

#### 2.4 Laser Handling Precautions



**WARNING:** Laser light can damage your eyes. Laser light is invisible. 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. Never look into the end of a fiber which may have a laser coupled to it. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.

### 3. Tools and Materials

**3.1** The following tools are required to strip tight-buffered interconnect cable:

- Stripping tool for buffers (p/n 3206001-01)
- 203  $\mu\text{m}$  No-Nik® tool (p/n 3205007-01)
- Scissors
- Alcohol
- Lint-free tissues
- Permanent ink marker
- Rule or tape measure

## 4. Outer Jacket Removal

**4.1** Determine the cable strip lengths (i.e., the lengths of jacket to *remove* and aramid yarn to *leave*) from the instructions provided with the connector, mechanical splice, or other fiber optic device you are installing on the cable. Mark this distance on the outer jacket of the cable with a permanent marker (Figure 2).

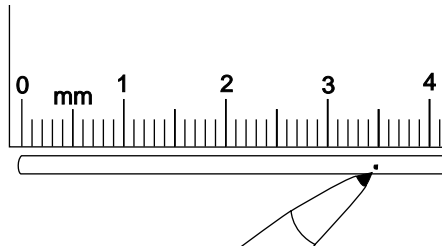


Figure 2

**4.2** Using the buffer stripping tool, remove the marked length of jacket (Figure 3). For consistent results, hold the stripping tool perpendicular to the cable, and make sure that the cable is in the correct notch of the tool (for more details on the use of this tool, see SRP-005-005, *Corning Cable Systems Stripping Tool for Buffers*).

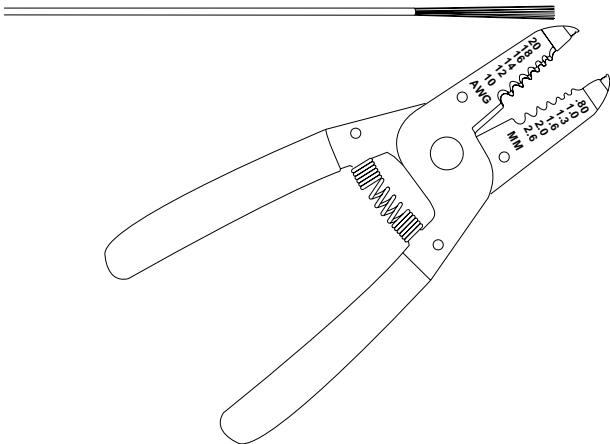


Figure 3

**4.3** Cut the aramid yarn to length with scissors (Figure 4).

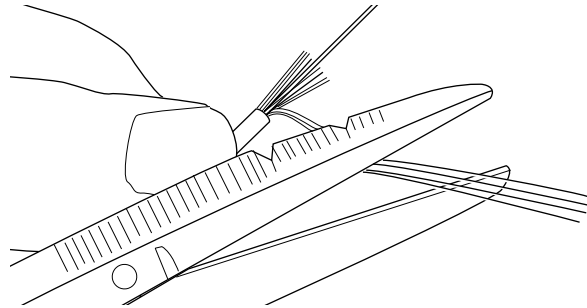


Figure 4

## 5. Fiber Stripping

**5.1** Measure and mark the length of tight-buffered fiber coating which must be removed.

**5.2** Use the 203 $\mu$ m No-Nik stripping tool to remove the tight-buffered coating in 6-8 mm (1/4 to 5/16-inch) increments to the desired length (Figure 5). Pull the coating off with a straight, smooth motion. Note the arrow on the tool indicating the stripping direction. *Clean the coating from the tool after each pass.*

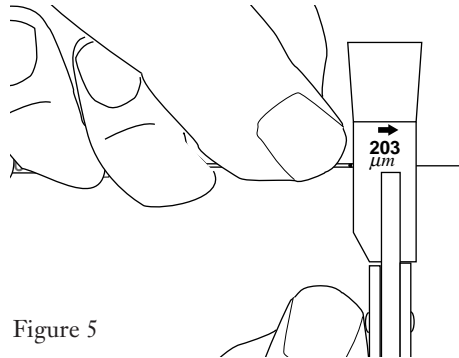


Figure 5

For more information about using the No-Nik tool, refer to SRP-004-036, *Stripping Fiber Coating with a 203 $\mu$ m No-Nik Tool*.

**5.3** Clean the fiber using a tissue moistened in alcohol. Fold the tissue over the fiber and gently squeeze the fiber as you pull it through the tissue.

*Special Note:  
Fiber Optic  
Training  
Program*



*Corning Cable Systems offers comprehensive, integrated training programs. Courses are structured for: telephony, CATV, LAN, Intelligent Transportation Systems and Power Utilities.*

*For information on Engineering Services Training call: 800-743-2671.*

Corning Cable Systems reserves the right to improve, enhance, and modify the features and specifications of Corning Cable Systems' products without prior notification.

Corning is a registered trademark of Corning Incorporated. All other trademarks are the property of their respective holders.

Corning Cable Systems is ISO 9001 certified.  
© 2000 Corning Cable Systems. All rights reserved.

Printed in U.S.A.

Corning Cable Systems  
PO Box 489  
Hickory, NC 28603-0489 USA  
For US and Canada 1-800-743-2673  
International 828-327-5000  
FAX: 828-327-5973  
<http://www.corning.com/cable systems>