

# SUMITOMO RECOMMENDED PROCEDURE

# SRP SP-F04-045



# FP48PVS & FP72PVS FIBER BUNDLE STRIPPING PROCEDURE

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### 1.0 General

1.1 This procedure describes the standard techniques for stripping the jacketing materials from a 48 or 72 air blown fiber bundle whenever the ribbon fibers are to be spliced or terminated.

1.2 The outer jacket is a lightweight, aerodynamically designed Polyvinylidene Fluoride (PVDF) material. The 48 & 72 fiber bundles have 3.1mm and ~3.8 mm outer jacket respectively. This requires a slightly different fiber bundle stripping procedure than polyethylene foam referenced in SRP SP-F04-006.

1.3 FutureFLEX fiber bundles do not have tensile strength members (Kevlar) <u>nor</u> contain any waterproofing gels / materials typically found in many conventional fiber optic cables.

1.4 All PVDF outer jacket fiber bundles contain a ripcord for ease in stripping to the bare fiber ribbons.

### 2.0 Safety Precautions

2.1 When stripping jacketing materials from fiber bundles, use care and properly dispose of any individual fiber ends that are removed. The fiber ends are easily misplaced and can pierce the skin resulting in splinters that are not easily removed. Keep in mind that the 72 Fiber Bundle consists of 6-12 fiber pliable Ribbons.

2.1.1.See SRP SP-F04-046 for how to differentiate between the individual 12 fiber ribbons in the 48 or 72 fiber bundle. Further identification of individual fibers in each ribbon is based on the standard fiber color code from blue to aqua.

2.2 Exercise caution when using tools used to strip the jackets from fiber bundles. They may have sharp blades.

2.3 The use of safety glasses is strongly recommended during this procedure.

2.4 Make sure you have a clean work area when working with bare fibers.

#### 3.0 Reference Documents

3.1 Sumitomo Recommended Procedure, Field Termination Procedure for both SU FB72 Fiber Bundles With FT72FBK-12SU breakout Kit, SRP SP-F04-046.

3.2 Sumitomo Recommended Procedure, B72SP Fiber Bundle Procedure for Single Fiber Termination Using a FB72FBK 900µm Breakout Kit, SRP SP-F04-047

### 4.0 Equipment / Tools Required

The following equipment and tools are required to complete this procedure:

4.1 Felt tip pen / marker

4.2 Tape Measure

4.3 10-20 AWG Wire Strippers

4.4 Soft, clean cloth

4.5 Needle Nose Pliers

**Note:** This SRP will describe the detailed stripping procedures for Pliable Freeform 48 & 72 fiber ribbon bundles. This does not include PEF jacketed fiber bundles.

### 5.0 Stripping 48 & 72 Fiber Bundle

#### 5.1 Mark Outer Jacket.

Generally, at least 6" - 8" of additional fiber bundle strip length beyond the actual fiber required length should be provided. This is in case any optical fibers are damaged near the end of the bundle during stripping procedures. This point should be determined based on the actual fiber splicing or termination hardware used. (Also Consult splicing or termination hardware manufacturer's instructions for recommended strip length.)

5.2 Use a felt tip pen to mark fiber bundle outer foam jacket at appropriate location for jacket removal. **See Fig. 1.** 

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**Note:** Field Termination 48 & 72 Fiber Breakout Kits (FT72FBK) Fiber bundle strip length should be between 42"-44".



**Figure 1** Marking Fiber Bundle Outer Foam Jacket Between 42" - 44" for 72 Fiber Bundles

#### 5.3 Stripping Outer Jacket.

Use your fingers or wire strippers, break into 1-2" of outer jacketing to expose bundle ripcord. <u>A</u> wire stripper can be used at the very end of the fiber bundle in order to expose the ripcord, but will likely damage the ends of the fiber. Because of this, remember to take that into consideration and cut off damaged end before termination.... See Fig 2.



**Figure 2** Breaking into a Fiber Jacket by Hand

5.4 After breaking into the fiber jacket, pinch the fiber bundle with your fingers or clean cloth and <u>carefully</u> hold it between 30° and 35° from the jacket. Gently pull the ripcord using needle nose pliers (or wire strippers) away from the fiber bundle. The ripcord pulling allows the jacket to peel away from the fiber bundle easily. Continue to peel the PVDF jacket until you have reached the marked location.

Remove any excess jacket filaments until only the exposed ribbons remain. **See Fig 3.** 



Figure 3 Peal Fiber Bundle and Jacket Back to Marked Point