Loading Splice Tray for Mechanical Splices (M68-031)

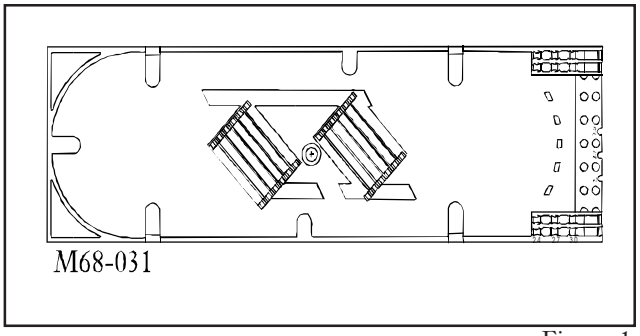


Figure 1

1. General

1.1 The M68-031 splice tray is designed to hold twelve single-fiber mechanical splices. The splices are held in two specially designed splice holders. The tray holds both multimode fibers and single mode fibers, operating up to 1550 nm wavelength (Figure 1).

1.2 The number of loose tube buffer tubes that can be strain relieved comfortably in the tray is limited to 4 in the strain relief channels. Up to 6 buffer tubes can be strain relieved in the center section. See section 6. The M68-031 splice holders accommodate up to six single fiber mechanical splice parts each (SeeSplice or GTE Elastomeric).

1.3 This document should be used, along with the sheath removal instructions, for the cable you are installing, and the splicing instructions for the mechanical splicing method you are using.

2. Precautions

See your sheath removal and splicing instructions for recommended precautions.

3. Tools and Materials

In addition to the tools and materials for sheath removal and splicing, you will need a cable tie tightening tool to install tight buffer & Maxi-Bundle® cables. This tool maybe found in the M67-003 Fusion Splicing Tool Kit.

4. Buffer Stripping

4.1 Before stripping loose tube cables, thread the buffer tubes into the mechanical strain relief channels that each will occupy, but do not press them into place.

4.2 Remove cable or buffer tube sheath as described in appropriate documents. Strip off enough material to expose 123 cm (48.5 in.) of bare fiber.

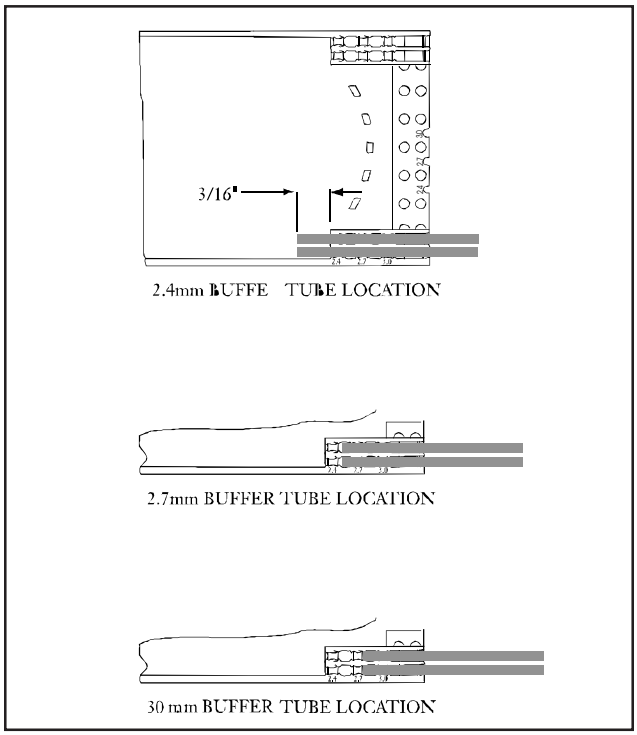


Figure 2

5. Strain Relieve Loose Tube Buffer Tubes

5.1 Measure the diameter of the buffer tube by pressing a piece of the stripped-off sheathing into one of the measuring slots at the end of the tray. The one it fits into snugly indicates its size. If the buffer you are using does not fit any of the measuring slots, strain relieve as indicated in section 6.

5.2 Press the very end of the buffer tube into the strain relief position for its size (Figure 2). Do not attempt to force the buffer tube into the smaller space ahead of the position for its size. Doing so could cause it to collapse, damaging the fibers.

5.3 To remove the buffer tube from the strain relief channel, pull it up. Do not back it out. Doing so could damage the strain relief tabs.

6. Strain Relieve Tight Buffer or MaxiBundle® Buffer Tubes

6.1 Strain relieve the tight buffered and Maxi-Bundle® buffer tubes in the center holes of the tray with cable ties (Figure 2). To facilitate tray stacking, make sure cable tie buckles are up or to the side.

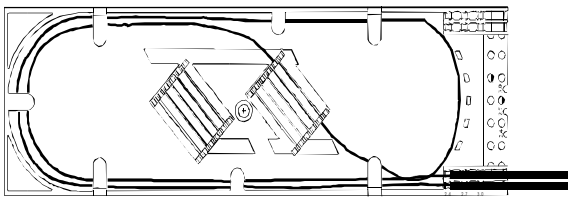
6.2 Corning Cable Systems recommends that buffer tubes be strain relieved at the lower corner of the tray (Figure 2). In some installations, using the lower corner may result in too tight a bend in the buffer tubes (see instructions for that installation). In that case, the upper corner may be used. Place the tray into the closure or shelf to make sure you are using the best location. Route the buffer tubes to the corner of the tray that requires the least bending of the buffer tubes in the closure or shelf.

7. Loading the Tray

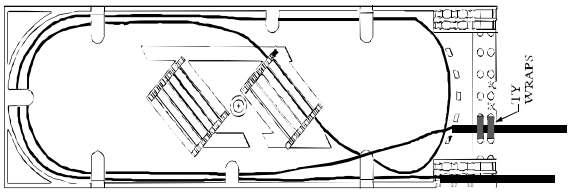
Route the fibers into the tray as illustrated in Figure 3. Loop the bare fiber into the position it will occupy after splicing. Make two loops of each fiber inside the tray to provide adequate working length for splicing. Bring the fiber to the center of the appropriate splice organizer. Add 2.5 cm (l in.) to this length and cut with scissors. This 2.5 cm will be trimmed later when the fiber is prepared for splicing.

8. Mechanical Splicing

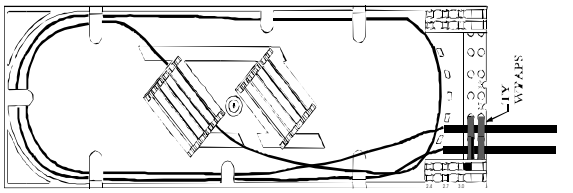
Strip and splice each pair of fibers as described in documents for the mechanical splice parts you are installing. Place the completed splice parts into the splice holders by aligning each over its holder, and pressing one end into the holder at a time (Figure 4). Check fiber bend radii inside the tray.



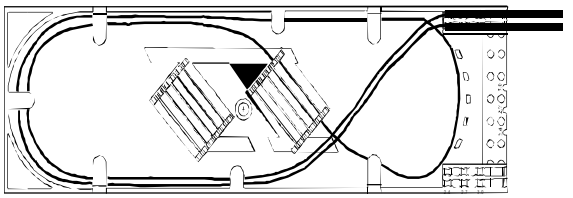
RECOMMENDED LOOSE-TUBE TO LOOSE-TUBE



LOOSE-TUBE TO TIGHT BUFFERED



TIGHT-BUFFE ED TO TIGHT-BUFFE ED OR MAXI-BUNDLE®



ALTE NATE LOOSE-TUBE TO LOOSE-TUBE

Only one loop shown for picture clarity

Figure 3

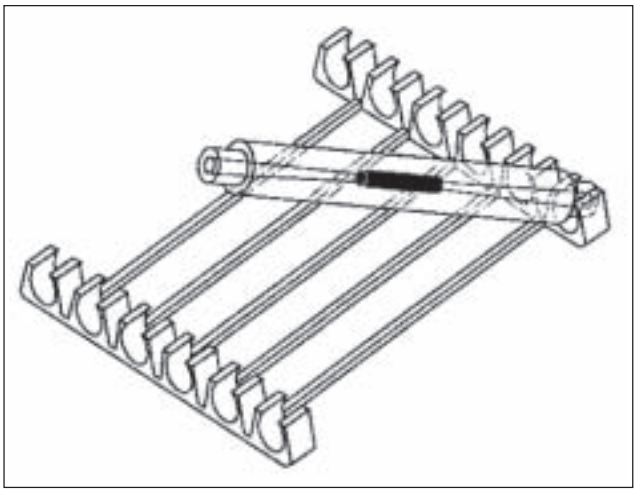


Figure 4

9. Cover Placement

Slide one side of the clear splice tray cover under the cover retaining tabs at one side of the tray. Bend the cover slightly to enable it to slide under the tabs at the other side of the tray. Make sure none of the fibers get caught between the cover and the tray. Make sure the hole in the cover lines up with the hole in the tray.

Special Note:
Fiber Optic
Training
Program

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