



## SUMITOMO RECOMMENDED PROCEDURE

SRP SP-F04-013

FutureFLEX®

### RACK-MOUNT TUBE CABLE TERMINATION PANEL ASSEMBLY PROCEDURE

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## 1.0 General

1.1 This procedure describes the techniques for installing the FutureFLEX Rack-Mount Tube Cable Termination Panels (DEDTTP and DEDTTP2). This hardware is used where tube cables and individual tubes are to be terminated in a standard 19-inch rack or cabinet.

1.2 The standard capacity Panel (DEDTTP) can hold and organize up to twelve (12) 7-tube cables; 84 tube capacity. The high capacity (DEDTTP2) can hold and organize up to six (6) 19-tube cables; 114 tube capacity. All necessary mounting hardware is included.

## 2.0 Safety Precautions

2.1 The use of safety equipment is strongly recommended while cutting and stripping the tube cable ends. This includes the use of cut-resistant Kevlar protective gloves and eye wear.

## 3.0 Reference Documents

3.1 Sumitomo Recommended Procedure, *FutureFLEX Tube Cable Installation Procedures*, SRP SP-F04-008.

3.2 Sumitomo Recommended Procedure, *FutureFLEX Tube Cable Splicing Procedures*, SRP SP-F04-031.

## 4.0 Equipment / Tools Required

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

4.1 Standard capacity Rack-Mount Tube Cable Termination Panel (DEDTTP).

4.2 High capacity Rack-Mount Tube Cable Termination Panel (DEDTTP2)

4.3 Electrician's Scissors

4.4 Utility Knife with 04/10 Blade

4.5 Flat-blade Screwdriver

4.6 Phillips Screwdriver

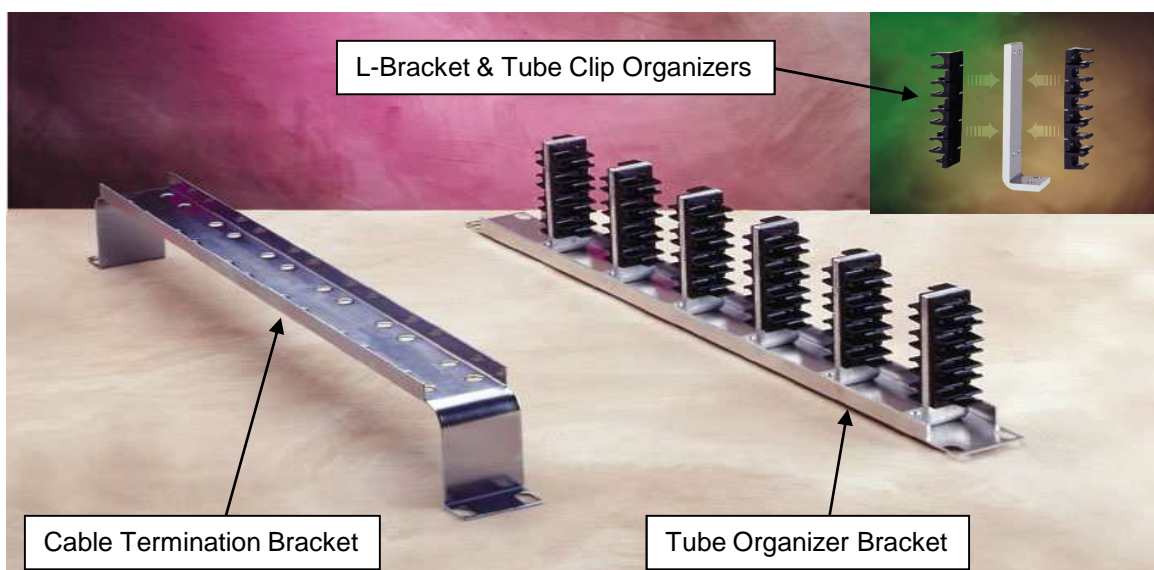
4.7 Felt Tip Pen / Marker

4.8 Tube Cable Cutter (BETL01)

4.9 Tubing Cutter (BETC001)

## 5.0 Equipment Layout

5.1 See Fig. 1 for Rack-Mount Tube Cable Termination Panel layout.



**Figure 1**  
Rack-Mount Tube Cable Termination Panel

## 6.0 Cable Termination Bracket Installation

6.1 Choose appropriate rack location for the Cable Termination Bracket (steel bracket with large holes) based on a top or bottom tube cable entry into the rack.

6.2 Mount the Cable Termination Bracket in rack using four (4) mounting screws provided. **See Fig. 2.**

6.3 Temporarily route tube cables into rack area and organize locations along Cable Termination Bracket.

**Note:** *Tube cable jackets must be removed at correct point in order to expose and organize individual tubes in Rack-Mount Tube Cable Termination Panel.*

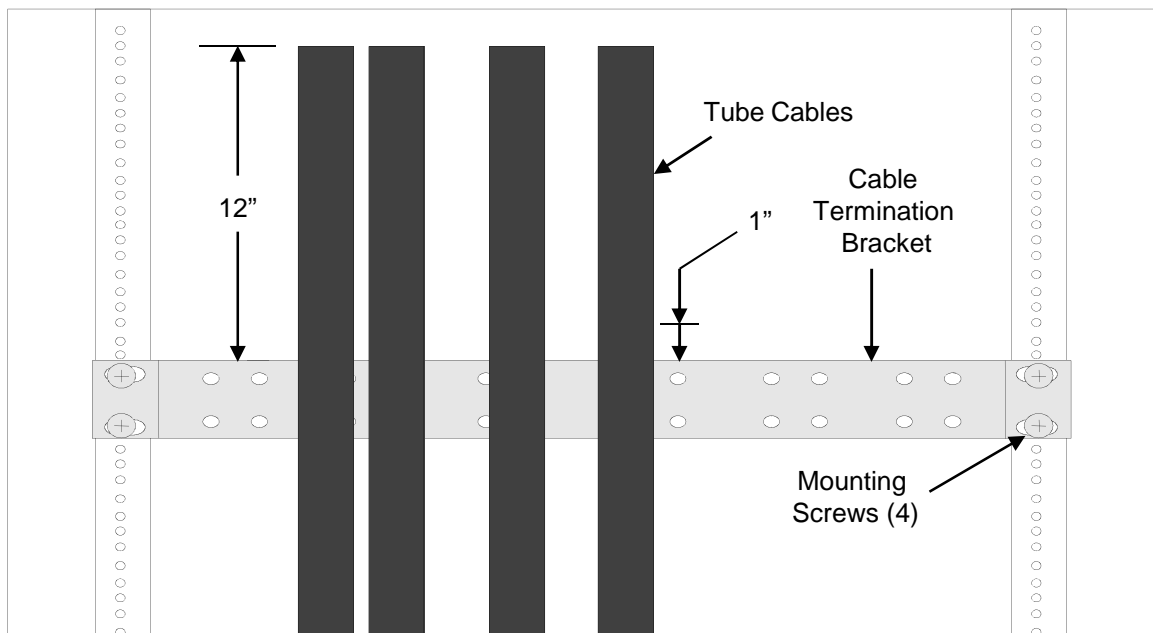
6.4 Mark tube cable jackets in two (2) places.

6.4.1 Make first mark about 12" beyond Cable Termination Bracket; tube cable length / cut point. **Refer to Fig. 2.**

6.4.2 Make second mark about 1" beyond Cable Termination Bracket; tube cable jacket strip point. **Refer to Fig. 2.**

6.5 Remove tube cables from rack area. Use Tube Cable Cutter (BETL01) to cut each tube cable at the 12" mark.

6.5 Use Hook Blade Knife to lightly score each tube cable jacket at the 1" mark. Pull ripcord and strip jackets away to expose individual tubes.

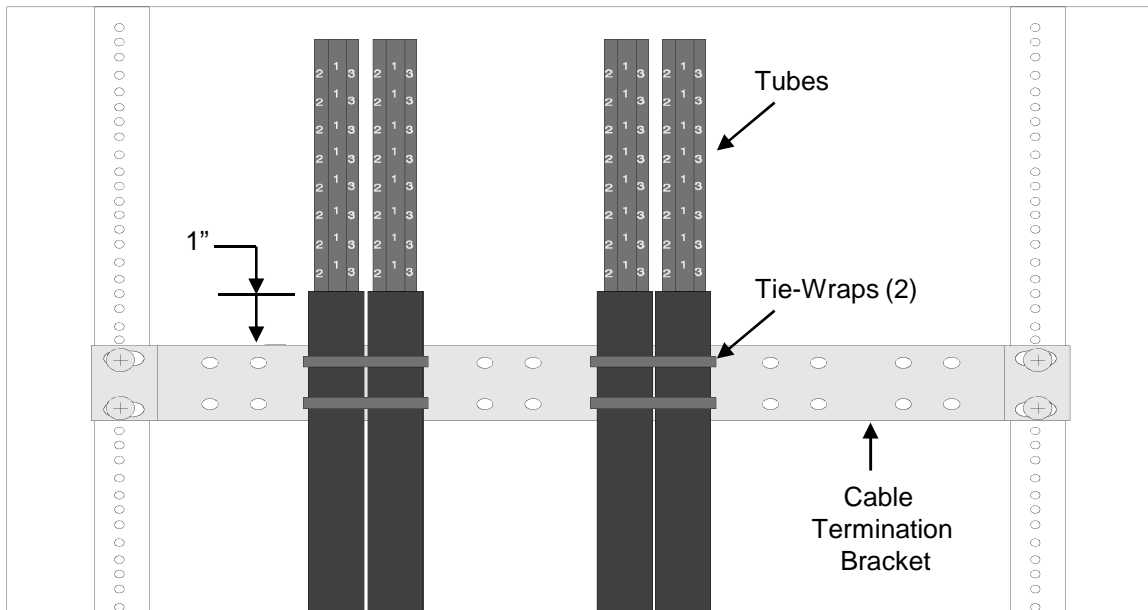


**Figure 2**  
Cable Termination Bracket Mounted  
Tube Cable Jackets Marked at 1" and 12" Points

6.6 Re-install tube cables into rack area and position so about 1" of tube cable jacket is beyond Cable Termination Bracket.

6.7 Secure tube cables with two (2) tie-wraps threaded through holes provided in Cable Termination Bracket. **See Fig. 3.**

**CAUTION:** Do not over-tighten tie-wraps. Inner tube deformation can result.



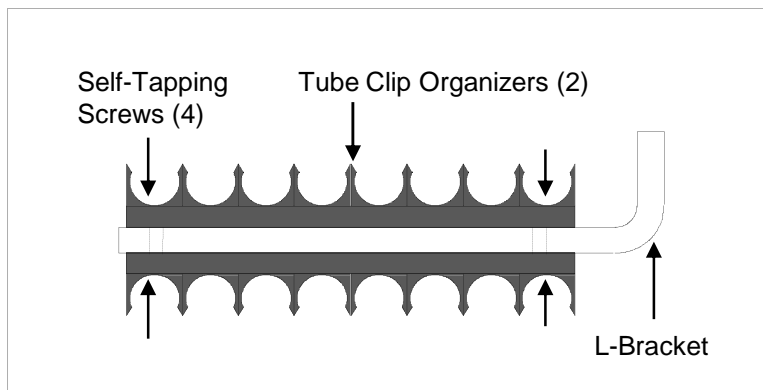
**Figure 3**

Tube Cable Jackets Stripped and Secured to Cable Termination Bracket

**7.0 Tube Organizer Bracket Installation**

**Note:** Self-tapping screws should go in firm but easily. If pre-drilled holes in L-Bracket appear to be undersized, enlarge with a 3/32" or No. 41 drill bit.

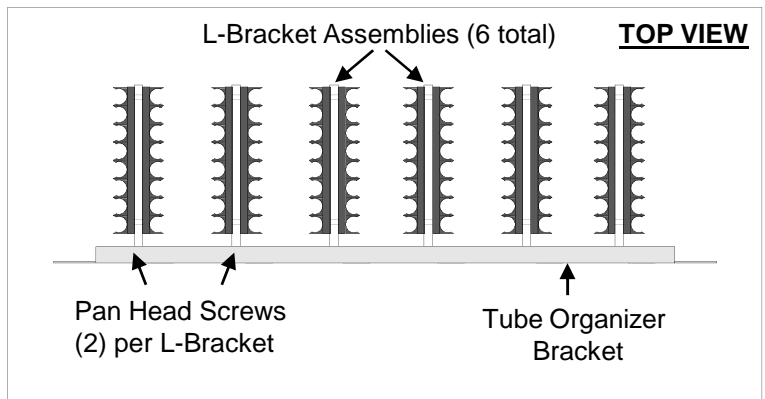
7.1 If required, assemble L-Brackets and Tube Clip Organizers using 2-56 self-tapping screws provided; four (4) per bracket. **See Fig. 4.**



**Figure 4**

Tube Clip Organizers Secured to L-Bracket

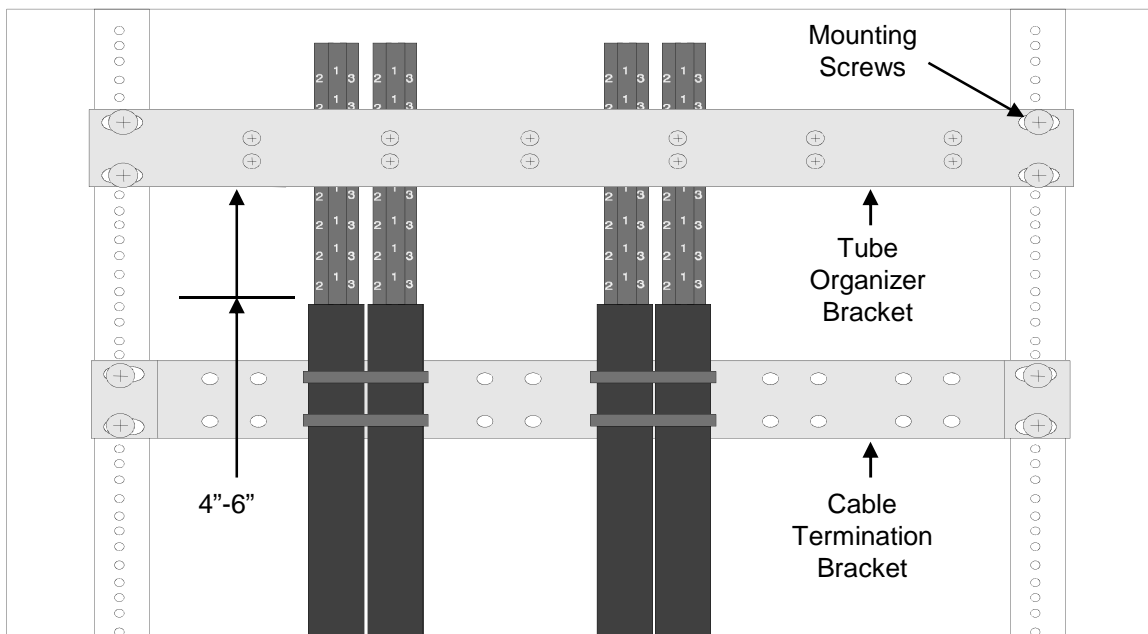
7.2 Attach assembled L-Brackets Assemblies to Tube Organizer Bracket using pan head screws provided; two (2) per bracket. **See Fig. 5.**



**Figure 5**  
 L-Bracket Assemblies Secured to Tube Organizer Bracket

7.3 Mount assembled Tube Organizer Bracket to rack using four (4) mounting screws provided. locate bracket about 4"-6" beyond the end of

tube cable jackets. This position allows enough space for the individual tubes to be routed to the Tube Clip Organizers. **See Fig. 6.**



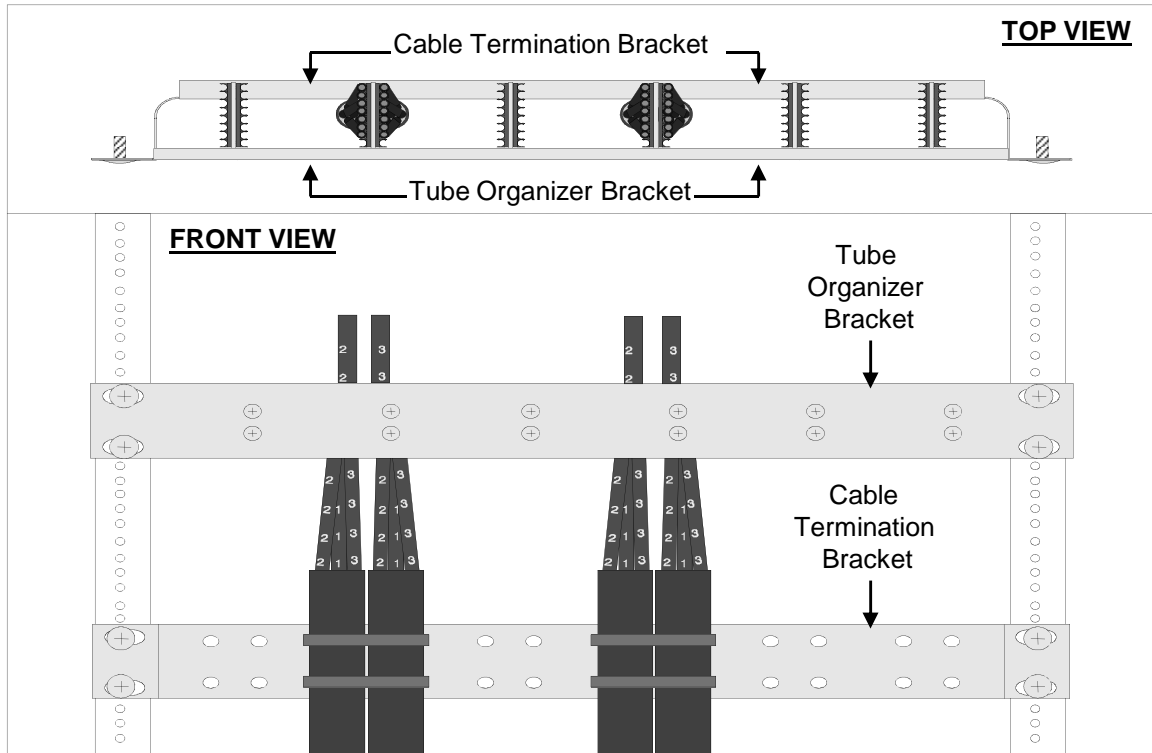
**Figure 6**  
 Tube Organizer Bracket Installed in Rack  
 4"-6" Distance From Tube Cable Jackets

**CAUTION:** Use care when handling tubes as possible damage (kinking) could result.

Bracket. Organize tubes and snap into Tube Clip Organizer positions. **See Fig. 7.**

7.4 Use a Tubing Cutter (BETC001) to cut each tube at least 1"-2" beyond Tube Organizer

7.5 This completes the assembly procedures for the Rack-Mount Tube Cable Termination Panels.



**Figure 7**  
Tubes Installed in Tube Clip Organizers

### 8.0 Alternative Ideas

8.1 Managing and organizing individual tubes is a key element in any successful ABF installation. Tube Clip Organizer L-Brackets (DETCTB) and Tube Clip Organizers (DETC008) are available separately and can be used as installation aids.

8.1.1 Tube Clip Organizer L-Bracket (DETCTB) mounts two (2) Tube Clip Organizers.

8.1.2 Tube Clip Organizer (DETC008) organizes up to eight (8) individual tubes.

8.2 Used together, an L-Bracket / Tube Clip Assembly can be mounted in various positions to help manage / organize up to sixteen (16) tubes. Tube Clip Organizer mounting hardware is provided. L-Bracket mounting hardware is to be Installer provided.



**Figure 8**  
L-Bracket / Tube Clip  
Organizer Assembly

8.3 Used separately, Tube Clip Organizers can also be mounted in various locations to help manage / organize up to eight (8) tubes. Mounting hardware is to be Installer provided. **See Fig. 9a and Fig. 9b.**



**Figure 9a**  
Tube Clip Organizer  
Mounted on Plywood Surface



**Figure 9b**  
Tubes Neatly Organized and Secure