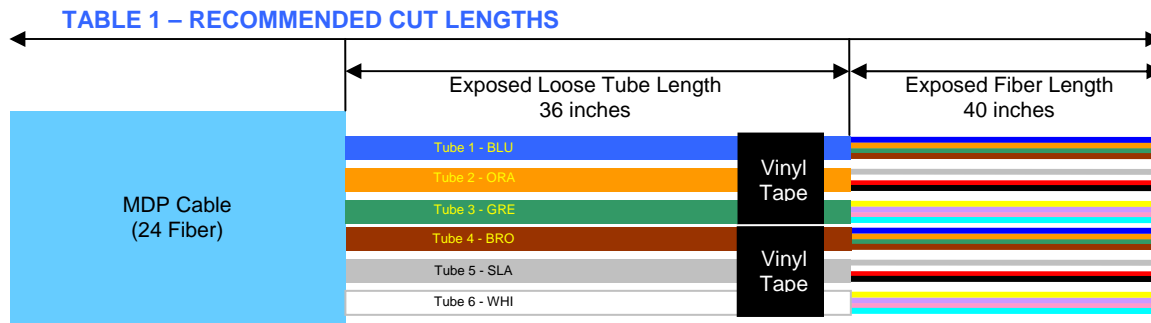
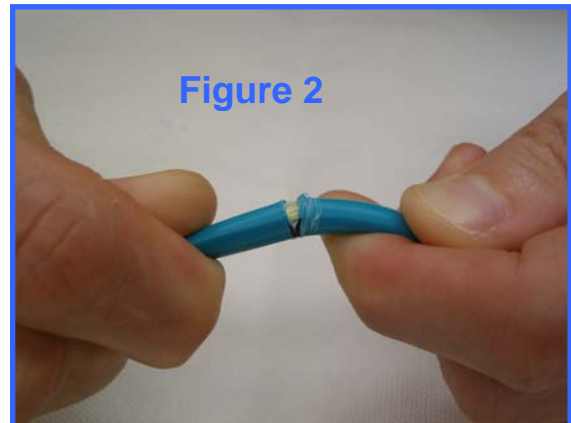
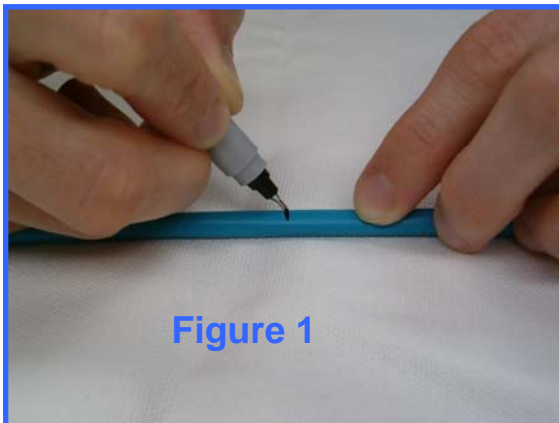


1. **INTRODUCTION.** The MDP cable is designed to deliver the highest density pre-terminated cabling solution available. Should conditions warrant field termination of one end of an MDP cable, the following procedures are recommended in order to prepare that cable end for field termination.
2. **REQUIRED MATERIALS:**
  - a. Berk-Tek 12 Fiber Buffer Tube Break-Out Kit, 36 inch length, P/N 10033625 or similar
  - b. 3M Vinyl Tape, 5/8<sup>th</sup> inch wide, or similar
  - c. Needle Nose Pliers, scissors
  - d. Wire Strippers, Vise Grip 88777 or similar. 20-22 AWG required.
  - e. Safety glasses

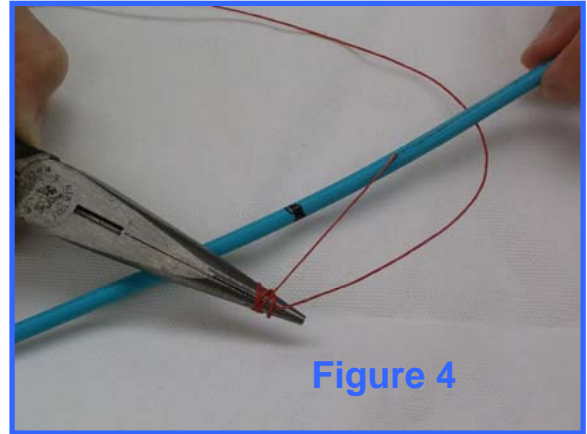
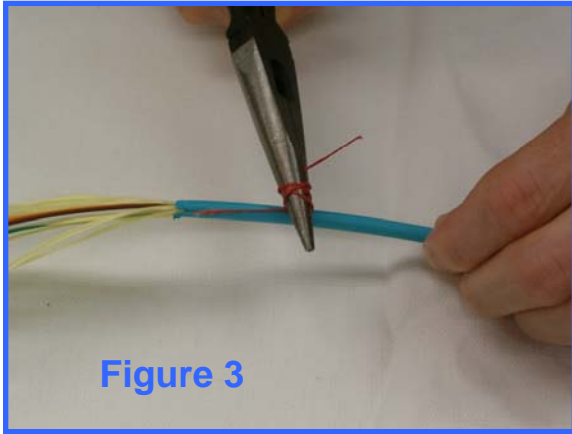


3. **Reference TABLE 1 – Recommended Cut Lengths.**

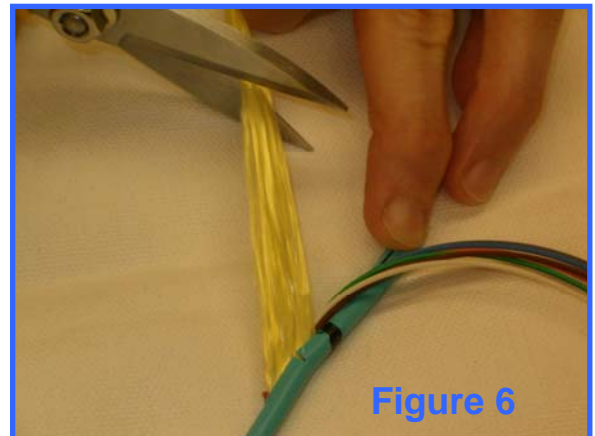
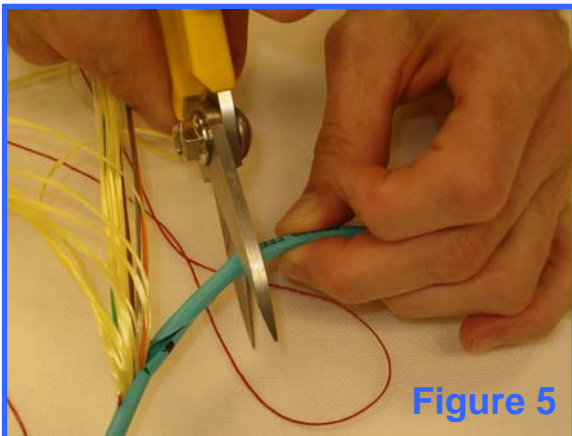
Mark the cable jacket 6 inches and 76 inches from the end to be terminated. See Figure 1. Gently score the cable jacket at the 6 inch mark from the end of the cable using the scissors. Remove this 6 inch length of jacket. Nick the cable jacket next to the red rip cord. Coil this rip cord using needle nose pliers. Grip the optical fibers/ strength yarns on one hand and pull the pliers towards the second mark (76 inches from the cable end).



**CAUTION:** Keep the cable core straight while pulling on the rip cord to the side. See Figure 3 and Figure 4. This will help to ensure the optical fibers are not kinked. Continue pulling on the rip cord until one inch past the 76" mark.



Pull the cable jacket away from the fibers (keep the fibers pulled straight) and trim the jacket about one inch from the 76 inch mark. See Figure 5. As shown in Figure 6, carefully separate the yellow strength yarns from the optical fibers. Cut off the yellow strength yarns.



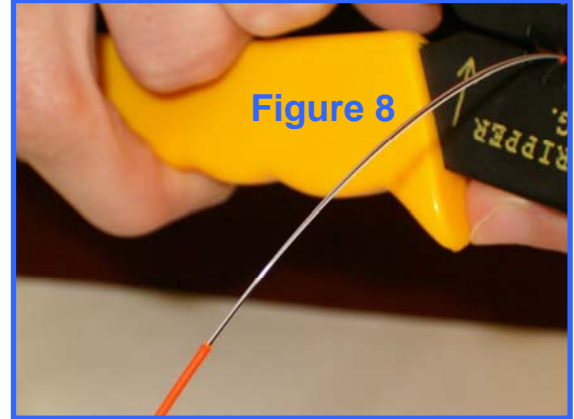
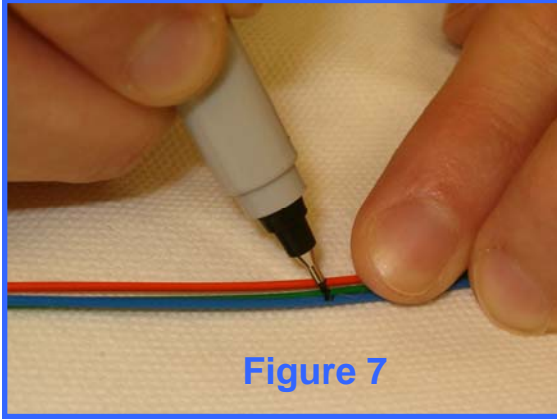
4. Reference TABLE 2 – MDP CABLE OPTICAL FIBER COLOR SEQUENCE

TABLE 2 – MDP OPTICAL FIBER COLOR SEQUENCE

FIBER #	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48		
BUFFER TUBE COLOR	Blue	Blue	Blue	Blue	Orange	Orange	Orange	Orange	Green	Green	Green	Green	Brown	Brown	Brown	Brown	Slate	Slate	Slate	Slate	White	White	White	White	Red	Red	Red	Red	Black	Black	Black	Black	Yellow	Yellow	Yellow	Yellow	Purple	Purple	Purple	Purple	Pink	Pink	Pink	Pink	Cyan	Cyan	Cyan	Cyan		
FIBER COLOR	Blue	Orange	Green	Brown	White	Red	Black	Yellow	Pink	Cyan	Blue	Green	Brown	Slate	White	Red	Black	Yellow	Pink	Cyan	Blue	Green	Brown	Slate	White	Red	Black	Yellow	Pink	Cyan	Blue	Green	Brown	Slate	White	Red	Black	Yellow	Pink	Cyan	Blue	Green	Brown	Slate	White	Red	Black	Yellow	Pink	Cyan

Each subunit within an MDP cable is color coded in compliance to TIA-598. Each subunit holds 4 loose tube fibers which comply with the color sequence displayed in Table 2. As shown, the first 12 fibers would be located in the blue, orange, and green buffer tubes (4 fibers in each buffer tube). Fibers 13-24 will be in the brown, slate, and white buffer tubes.

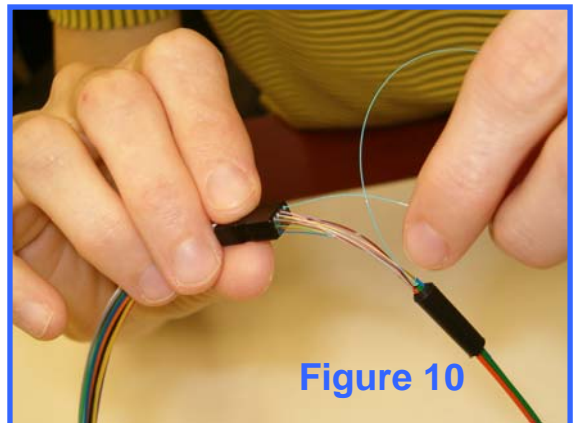
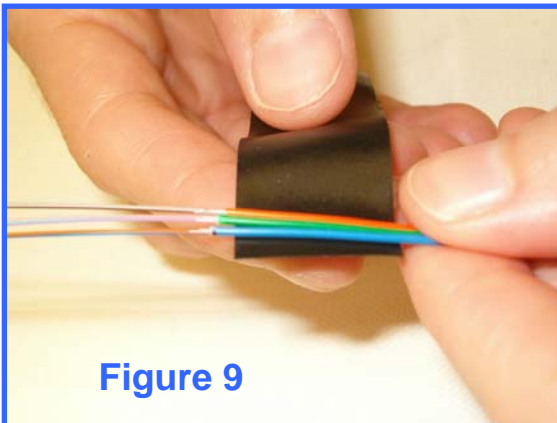
Select the buffer tubes containing the fibers that will be terminated and place a sheath mark 40 inches from the end of the cable. See Figure 7. Use the 20 AWG slot on the wire stripper to “nick” the subunit jacket. Gently remove the subunit jacket to expose the 4 fibers per subunit, see Figure 8.



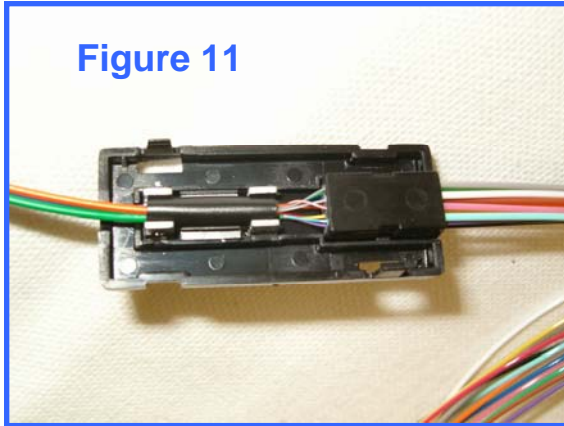
5. Cut a 1.5 inch length of electrical tape.

**NOTE:** If your electrical tape is  $\frac{3}{4}$  inch wide, trim the width to  $\frac{5}{8}$ <sup>th</sup> inches (16 mm). Carefully place this electrical tape on the aligned subunits 2 mm from the fiber and wrap snugly, see Figure 9.

Follow the Break-Out kit instructions for inserting the appropriate color fiber through the tube having the corresponding tube color, see Figure 10.



6. The completed break out kit should resemble the unit shown in Figures 11 and 12. At this point, individual optical connectors can be installed to the fibers. Follow the appropriate connector assembly procedures.



7. Visit [www.berktek.com](http://www.berktek.com). Select connectors. Here you will find a selection of LC, SC, and ST optical connectors suitable for anaerobic or heat cured assembly methods. Also available at this location are the assembly procedures for these connectors.

**NOTE:** Pre-polished connectors are not recommended for use on dry loose tube cables, such as MDP.