ELECTRIC OPERATIONS ORGANIZATION

C2010

Revision #0 Page 1 of 6

Construction Standard

****This Standard Supercedes BECo CS 2.7-4.25*****

COLD SHRINK TERMINATION FOR JACKETED CONCENTRIC OR FLAT STRAP NEUTRAL CABLE, 25 KV AND BELOW

1.0 Bill of Materials

Equipment		Catalog ID
Cold Shrink Termination Kit - Quick Term III	15 kV, 1/0 str	9691*
	15 kV, #2str, #1 sol	9937*
	25 kV, 1/0sol	
	15 kV (2/0-300)	9940*
	25 kV (#2-4/0)	
	15 kV (500-1000)	13717
	25 kV (250-800)	
	25 kV (900-1750)	9948
#16 AWG Tinned Copper Wire		108
Aluminum Oxide Cloth, 150 Grit		585
Solvent Packet, Wet/Dry		5666
1" Plastic Tape		6374
2 Hole Terminal Lug		
4/0 Cu		9636
	250 Cu	1399
	500 Cu	1403
	500 AI	9726
	700 Cu	1511
	750 Cu	1528
	1000 Al	1805

^{*} Kit contains a spike terminal connector. Cat id 9940 contains a 2/0 spike connector.

2.0 Prepare Cable

2.1 Train the cable and cut it to the final installation length. Plan the final cut to allow adequate neutral wire for bonding.

ELECTRIC OPERATIONS ORGANIZATION

C2010

Revision #0 Page 2 of 6

Construction Standard

2.0 Prepare Cable - cont'd

2.2 Prepare cable per Figure 1.

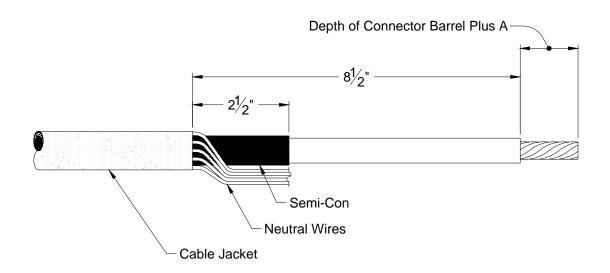


Figure 1 – Prepare Cable

Conductor	Dimension A
All Cu	1/4"
#2-350 MCM AI	1/4"
400 – 650 MCM AI	1/2"
750 -1000 MCM AI	3/4"

2.3 Apply mastic strip per Figure 2.

ELECTRIC OPERATIONS ORGANIZATION

Construction Standard

C2010

Revision #0 Page 3 of 6

2.0 Prepare Cable – cont'd

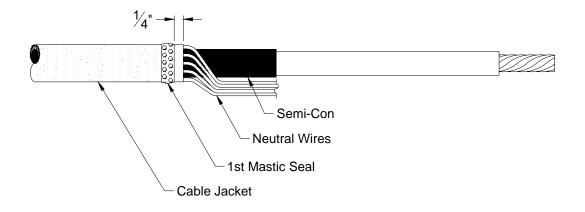


Figure 2 – Apply Mastic

- 2.4 Bend neutral wires back over jacket edge and press into mastic strip.
- 2.5 Secure the neutral wires to the cable 2" from jacket edge using plastic tape. Position tape with care, it also serves as a marker for positioning the termination.
- 2.6 Apply a second mastic strip over the neutral wires and previously applied mastic.
- 2.7 Compress neutral wires into mastic by over-wrapping seal strips with two layers of vinyl tape. **Be sure to cover all exposed mastic**. See Figure 3.

ELECTRIC OPERATIONS ORGANIZATION

Construction Standard

C2010

Revision #0 Page 4 of 6

2.0 Prepare Cable - cont'd

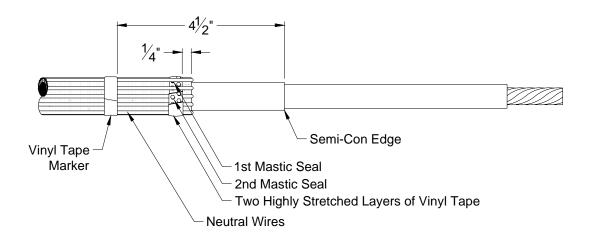


Figure 3 – Install Mastic and Marker Tape

3.0 Install Connector

- 3.1. Wire brush the exposed aluminum conductor. If the conductor is copper, brushing is not required.
- 3.2. Insert the conductor all the way into the barrel of the connector and crimp using a circumferential dies. Rotate each crimp 90°. Circumferential dies are preferred over nest/indentor dies or dieless tools.
- 3.3. Remove any excess inhibitor.
- 3.4. Using the aluminum oxide cloth and the solvent wet/dry pack(s), buff and clean the insulation. Do not wipe from the black semicon towards the insulation because the insulation will become contaminated with conductive particles.

ELECTRIC OPERATIONS ORGANIZATION

C2010

Revision #0 Page 5 of 6

Construction Standard

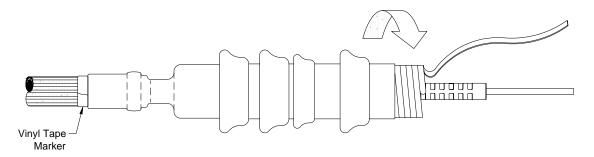
3.0 Install Connector- cont'd



Figure 4 – Install Connector (spike terminal shown)

4.0 <u>Install Termination</u>

- 4.1 Slide the termination body over the end of the spiked terminal until the base is at the edge of the marker tape, per Figure 5.
- 4.2 Remove core, pulling while unwinding counter-clockwise starting with the loose end (Figure 5). Make sure the termination body, not the core, is butted up against the edge of the marker tape.



NOTE: The material being removed at this step is polypropylene and can be recycled with other waste.

NOTE: Once the termination insulator has made contact over the mastic seal area, there is no need to continue supporting the assembly. Do not push or pull on the termination assembly while unwinding the core.

RNSTARELECTRIC OPERATIONS ORGANIZATION

C2010

Revision #0 Page 6 of 6

Construction Standard

- 4.0 <u>Install Termination</u>— cont'd
 - 4.3 Connect neutral wires to system ground.

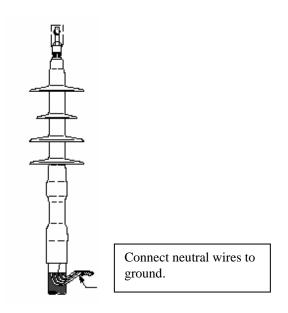


Figure 6 - Completed Assembly

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