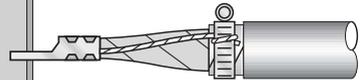
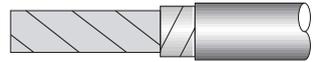
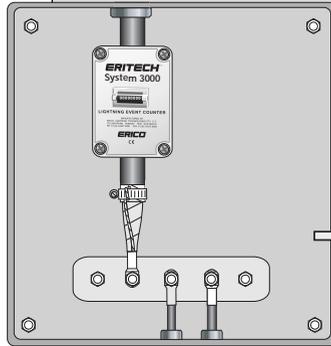
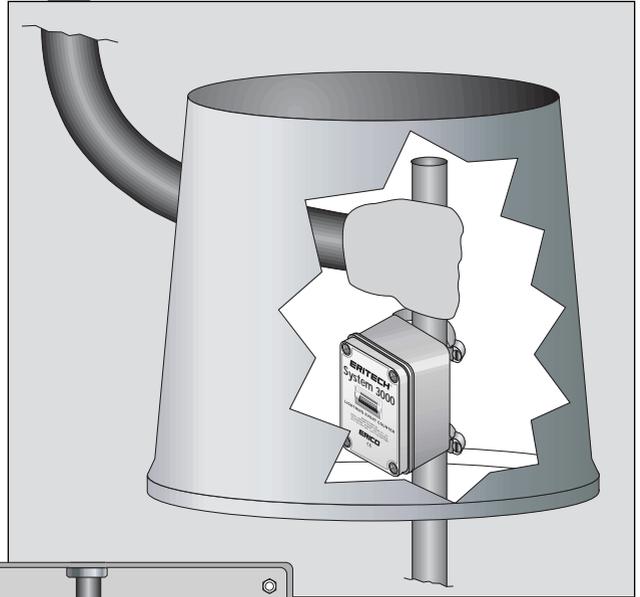


Lower Termination Instructions



Terminating the ERICORE Lower End

Instructions for ERICORE Downconductor



*The downconductor has been specifically designed to cope with extremely high impulse voltages and currents. Due to the nature of the downconductor construction, and its working environment, it is **Very Important** that each step be followed and carried out exactly as per the following instructions.*

The downconductor can be lugged (as detailed overleaf) and then connected to the

ground rod using the ground rod clamp, or alternatively, it can simply be connected to the ground rod using only the ground rod clamp.

Refer to Figure 1 for the following instructions (1 to 10).

1. With the hacksaw (or appropriate cutters), cut the downconductor cable to length, leaving enough cable to be able to easily and directly route it to the ground termination.

Tools required for Terminating Lower End of ERICORE

1. Sharp Knife
2. Tape Measure
3. Flat Blade Screwdriver
4. Hacksaw
5. 150mm (6in.) Adjustable Spanner/Wrench
6. Roll Spring - (supplied with Upper Termination Kit)
7. Insulation Cutting Tool - (supplied with Upper Termination Kit)
8. Crimper (90mm²) (only required if the cable lug is to be used)

The Lower Termination Kit Consists of:

- 1 x Hose Clamp
- 1 x 90mm² Lug
- 1 x 2.5mm² x 105mm (12AWG x 4¹/₈ in.) Bare Copper Wire
- 1 x 'U' Bolt type Ground Rod Clamp (13-15mm, 1/2 - 5/8 in. Rod Diameter.)
- 1 x Water Proofing Mastic
- 1 x Vital Warning Label
- 2 x Rubber Gloves
- 1 x Instructions



2. At a distance of 100mm (4 in.) from the end of the cable, carefully cut a shallow notch into the black outer insulation, no deeper than 1mm, ($\frac{3}{64}$ in.). Using the insulation cutting tool, cut around the circumference of the black outer insulation until the copper screen underneath is exposed.



Important! *The insulation cutting tool uses friction to cut into the sheath and is less likely to damage the layers underneath than using a knife.*

3. Use a knife to carefully cut along the 100mm (4 in.) length of black outer insulation to a depth of no more than 1mm. ($\frac{3}{64}$ in.). Be careful not to cut too deeply so that the copper layer underneath is not exposed or damaged. Starting from the end of the cable, carefully remove the outer insulation and discard.

4. Carefully clean up the insulation friction cut, removing any burrs for a neat finish.

5. Fit the roll spring 15mm ($\frac{5}{8}$ in.) from

the end of the outer insulation over the exposed copper tape (roll spring supplied with upper termination kit).

6. Remove the copper tape up to the roll spring (exposing black triple extrusion layers) by unrolling, then tearing the tape up and back over the edge of the roll spring at about a 45° angle. If necessary, cut about 6mm ($\frac{1}{4}$ in.) of the copper tape up against the roll spring with a knife and then tear over the spring.

7. Wrap one end of the 2.5mm² x 105mm (12AWG x 4 $\frac{1}{8}$ in.) bare copper wire (supplied with the kit) around the hose clamp, then fix the hose clamp over the exposed copper screen of the downconductor and tighten with a screwdriver.

8. At 85mm (3 $\frac{3}{8}$ in.) from the end of the cable, carefully cut around the circumference of the black triple extrusion layers with a knife, then, from the first cut, along the length of the insulation to the end of the cable. Remove the layers and discard.

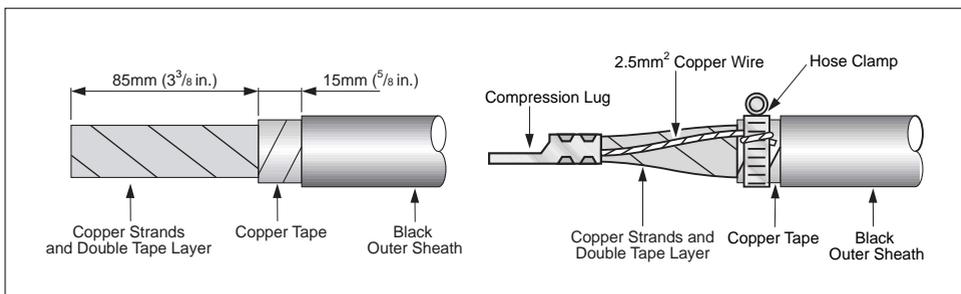


Figure1: Stripping lengths downconductor.

9. Lay back all of the copper strands and tape cut off the filler core with a hacksaw or knife as close to the strands and tape as possible without damaging them. Lay the copper strands and tape neatly and uniformly back in place.

10. If using the compression lug, combine the end of the 2.5mm² (12 AWG) bare copper wire from the hose clamp with the downconductors' copper strands and then fit ALL conductors into the 90mm² lug supplied with the kit. Make sure that it is fitted correctly before crimping with an appropriate crimper.

11. Securely connect the lugged downconductor to the grounding system.

12. If the 'U' bolt ground rod clamp (or other method) is to be used, then ensure that

the 2.5mm² (12AWG) bare copper wire from the hose clamp is bonded with the final grounding connection and all of the other downconductor copper strands and tape. Then securely tighten the whole connection.

Note: The ground rod clamp supplied in this kit must be tightened to 44Nm (32lbf.ft.).

13. Make sure the lower termination is free of moisture. Using rubber gloves, shape the waterproofing mastic (supplied) around all of the exposed areas of the lower termination.

Note: Depending on the environment of the lower termination, it may be necessary to wrap a sealing tape or mastic around the waterproofing mastic to stop it from drying out over time.

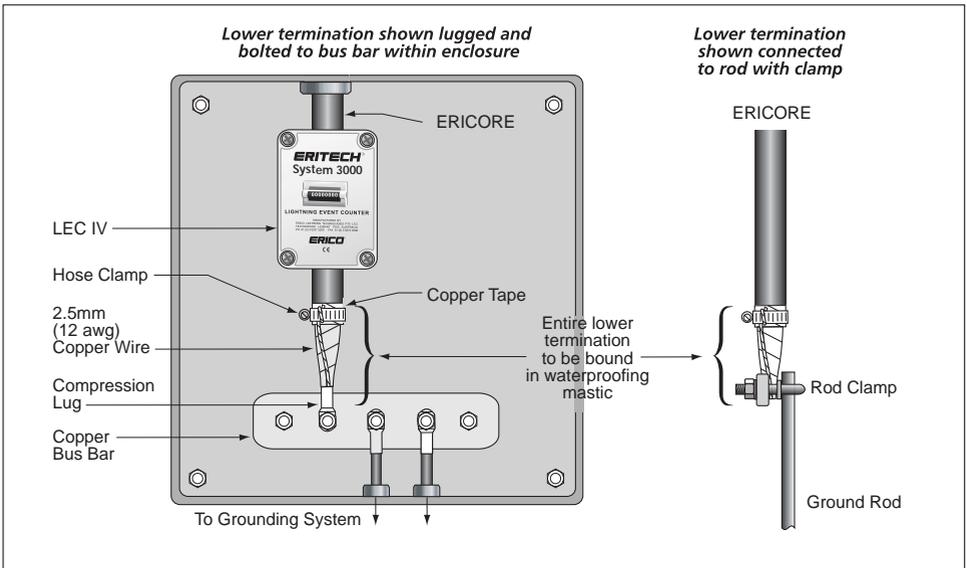


Figure 2: Termination to bus bar and ground rod.



It is important to cover all exposed metallic surfaces (copper, hose clamp, lug, ground rod clamp, etc.) To avoid the risk of corrosion.

14. Place the 'VITAL WARNING' label (supplied in the kit) in a suitable place near the downconductor.



ERICORE downconductor cable has been specifically designed to cope with extremely high impulse voltages and currents. Due to the nature of the cable construction, and its working environment, it is very important that each step is followed and carried out exactly as per the following instructions.

The special insulation cutting tools have been supplied to facilitate the cutting of the cable's insulation layers, while preventing damage to other layers, such as the copper foil.

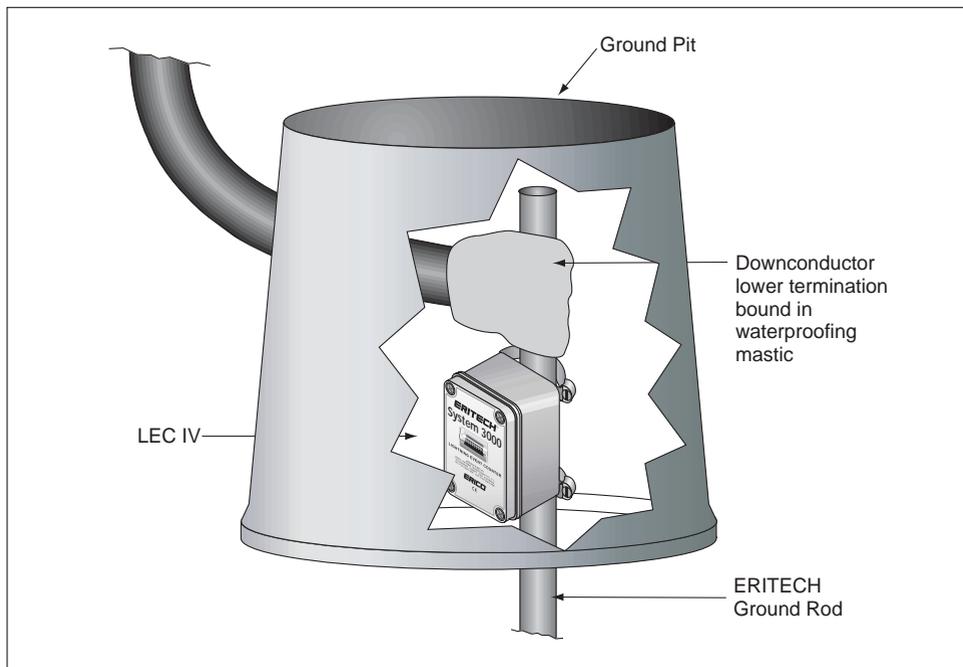


Figure 3: Completed termination for downconductor.

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