Installation Instructions

HiTemp Compression Splice for ACSS and ACSS/TW Conductors

1. Mark the conductor a distance of ½ the length of the aluminum sleeve (***Figure 1***).

2. Prior to making connection, the outer strands of the conductor should be cleaned with a wire brush or abrasive cloth (***Figure 2***).

3. Remark each conductor half the length of the aluminum sleeve, if the mark was removed during wire brushing. Prior to any strand cutting, tape the end of each conductor to help maintain the round contour (***Figure 3***).

4. Slide the aluminum sleeve over one conductor until sufficient working length protrudes from end (***Figure 4***).

5. Cut back aluminum strands of both conductors ½ the length of the steel sleeve plus 1 ½ inch (38.1 mm). Do not nick the steel strands. File any burrs, if present (***Figure 5a***). Use of a cable trimming tool is recommended (***Figure 5b***).

6. Insert ends of steel core into steel sleeve making sure the ends butt solidly against center stop (***Figure 6***).

7. Using the proper SH die set, compress steel sleeve full length making initial compression over center of sleeve (Figure 7a), Overlap each successive compression by at least ¼ inch (6.4 mm) (***Figure 7b***). Complete die closure is required on all compressions.

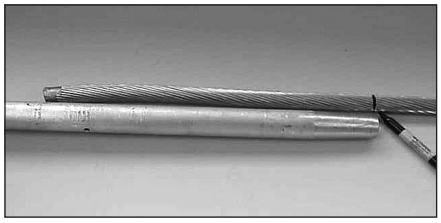


FIGURE 1: Mark the conductor and clean 1/2 the length of the sleeve.

FIGURE 2: Clean the outer strands of the conductor with a wire brush.

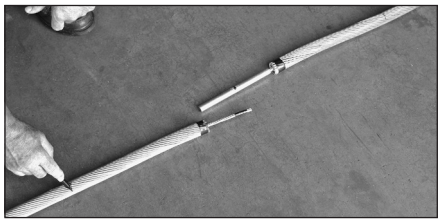


FIGURE 3: Re-mark the conductors after cleaning if needed.

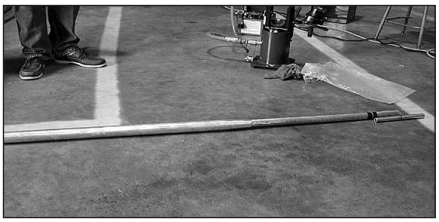
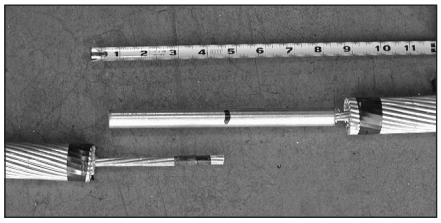


FIGURE 4: Slide sleeve over one conductor so it protrudes out the end.



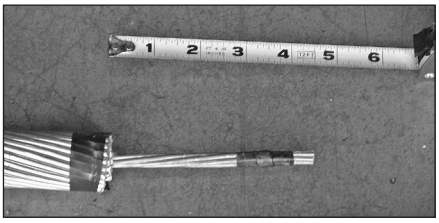


FIGURE 5a: Cut back the Aluminum strands on both conductors 1/2 the length of the Steel sleeve plus 1 1/2 inch (38.1 mm).

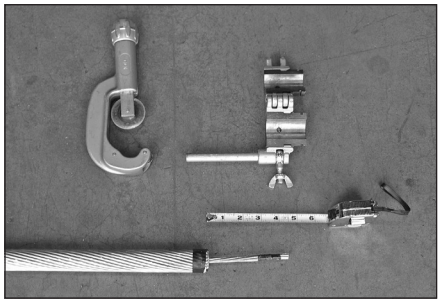


FIGURE 5b: Use of a cable trimming tool is recommended.

FIGURE 6: Slide sleeve over one conductor so it protrudes out the end.

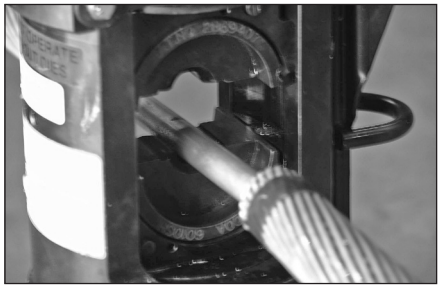


FIGURE 7a: Make the initial compression on center of Steel sleeve.

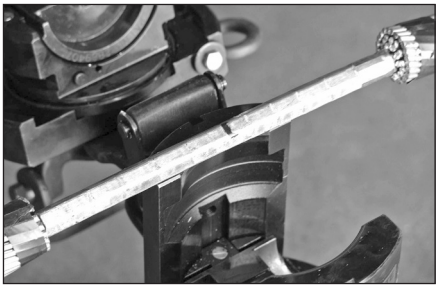


FIGURE 7b: Overlap each compression on Steel sleeve 1/4 inch (6.4 mm).

Installation Instructions (cont.)

HiTemp Compression Splice for ACSS and ACSS/TW Conductors

8. Slide the aluminum sleeve over the installed steel sleeve, centering between the two marks that were made in Step 3 (***Figure 8a & 8b***).

9. Inject AFCHT filler compound into filler hole until compound emerges from both ends of aluminum sleeve (***Figure 9***).

10. Insert and drive filler plug (cavity up) into hole and peen edge of hole over top surface of plug. Leaving the filler plug in the small plastic bag makes it easier to insert when working with gloves (***Figure 10a, 10b and 10c***).

11. Using the proper AH die set, make the initial compression at the "start" mark on one side of center (***Figure 11a***). The second compression should be made at the other "start" mark on opposite side of center. Continue making compressions to the end, overlapping each by at least ¼ inch (6.4 mm) (***Figure 11b***). Repeat this on opposite side of joint (***Figure 11c***). Complete die closure is required for each compression.

Note: A light oil coating on the die grooves and aluminum sleeve is recommended.

12. Compressed portion of splice sleeve should have a smooth uniform appearance. If die flash is present, remove with a file or emery cloth (***Figure 12***). Remove any excess filler compound which may have been forced out the ends of the splice.

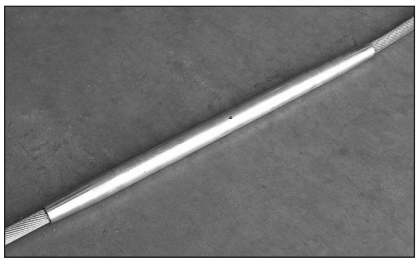


FIGURE 8a: Slide the Aluminum sleeve over the installed Steel sleeve.

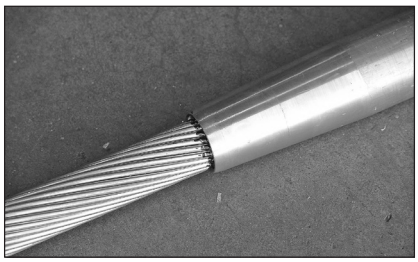


FIGURE 8b: Center the Aluminum sleeve between the marks.

FIGURE 9: Inject AFCHT Filler Compound into the filler hole.

FIGURE 10a: Peen edge of filler hole over top surface of plug.

FIGURE 10b: Filler plug left in plastic bag is easier to insert with gloves.

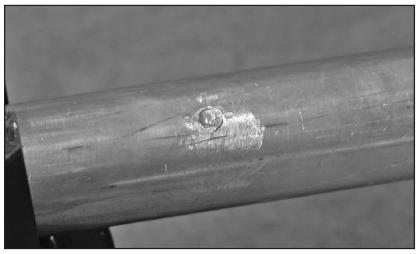


FIGURE 10c: Peen edge of filler hole over top surface of plug.

FIGURE 11a: Make the initial compression at the "start" mark.

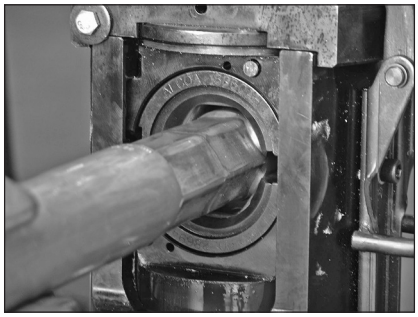


FIGURE 11b: Overlap each compression by 1/4 inch (6.4 mm).

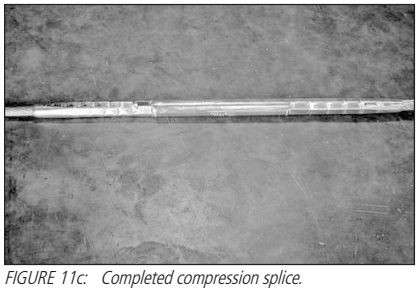


FIGURE 11c: Completed compression splice.

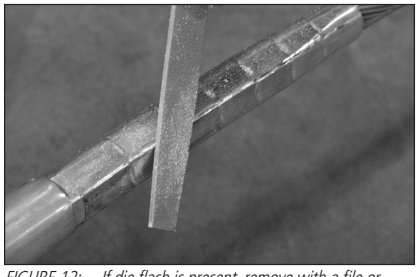


FIGURE 12: If die flash is present, remove with a file or emory cloth.