THERMOLIGN® Splice

Be sure to read and completely understand this procedure before applying product. Be sure to select the proper PREFORMED™ product before application.

**NOMENCLATURE**
1. Inner Rods (multiple subsets)
2. Outer Rods (multiple subsets)
3. Center Mark & Color Code

**General Description**

THERMOLIGN Splices consist of two layers of gridded conductive aluminum alloy rod sets which in combination are designed to hold 95% of the conductor rated strength (RBS) without separately splicing the conductor core. The two layer design provides sufficient aluminum cross-section and surface area to dissipate the heat of a conductor operating at a continuous temperature of up to 250°C.

THERMOLIGN Splices are intended for use on ACSS/AW and ACCR conductors only. For ACSS/TW, THERMOLIGN Splices are approved for use on General Cable and *Southwire®* conductors only. For 3M ACCR/TW and Southwire C7/TW conductors, please contact PLP for details.

THERMOLIGN Splices are not approved for use on conductors other than those noted above.

**Conductor Preparation**

**Step #1**
Apply one layer of vinyl tape to the ends of the conductor to prevent the ends from flaring.

**Step #2**
The conductors to be spliced should be thoroughly wire brushed until bright and clean for a distance equal to 1/2 the total length of the inner rods (both conductors).

**Step #3**
Apply a quality inhibitor to the brushed area of both conductors coating the entire outer surface.

*Southwire® is a registered trademark of Southwire Company, LLC.*
Apply Inner Rods

Step #4  With the conductor ends held within 1/8" from each other, position one of the inner rod subsets (with the greatest number of rods) with the center mark over the conductor ends.

NOTE: The maximum gap between the ends of the conductor can be no greater than 2" upon installation of the THERMOLIGN Splice.

Step #5  Wrap on the first subset, starting from the center and working in both directions.

Step #6  Position the second subset of inner rods tightly against the first set and wrap on the right side, so it applies into the subset already in place. Apply this side completely.

Step #7  On the other side of the splice, apply only 1 or 2 wraps (pitches) of the second subset or only enough to secure the subset from moving excessively.

You will note that this side of the subset is applying away from the first subset already applied. This could create an excessive gap at the leg ends if it is fully applied at this time. DO NOT fully apply it yet.

Step #8  Repeat Steps #6-7 until you come to the last subset. Center the last subset and apply the right side leg completely as before. The entire right side of the shunt should be complete.

Step #9  Completely apply the last subset applied in Step #8 on the left side. Note this subset now applies into the first subset originally applied, as shown by the arrow.

Step #10  Determine which of the remaining unapplied subsets will apply into the last one applied. Wrap this subset completely.

Use this procedure to wrap all the remaining subsets, one by one. Note: you are applying the subsets on the left side in the reverse order from the right side.

Make sure all leg ends are snapped into place.

Step #11  Repeat Steps #6-10 for the remaining subsets of the inner rods until they are all tight against the conductor and completely snapped into place.
Apply Outer Rods

Step #12 Line up the center mark of the first subset of outer rods with the center marks on the inner rods and wrap on, starting from the center and working in both directions.

Step #13 Position the second subset of outer rods tightly against the first set and repeat Steps #6-10.

Step #14 Repeat Step #13 for the remaining subsets of the outer rods until they are all tight against the conductor and completely snapped into place. This completes the installation.

General Notes

• To assure a reliable electrical connection, all conductors new or weathered must be thoroughly scratch brushed until bright and clean immediately prior to installation of the THERMOLIGN® Splice.
• A quality inhibitor must be applied to retard oxidation.
• THERMOLIGN Splices must NOT be reapplied after initial installation.
• THERMOLIGN Splices are not designed for use at support points (only within the span).
• THERMOLIGN Splices are precision devices which should be handled carefully to prevent distortion and damage.
• THERMOLIGN Splices should be stored in cartons, under a cover.
SAFETY CONSIDERATIONS

This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. **FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN PERSONAL INJURY OR DEATH.**

This product is intended for a single (one time) use and for the specified application. **Do not reuse or modify this product under any circumstances.**

This product is intended for use by trained technicians only. **This product should not be used by anyone who is not familiar with, and not trained to use it.**

When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact.

For proper performance and personal safety, be sure to select the proper size **PREFORMED™** product before application.

**PREFORMED** products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.