



Innovative Homac[™] Flood-Seal Radiating Rib[™] splice kit

saves time and money
for large electric utility.

Case study

Homac™ Flood-Seal Radiating Rib™ splice kit (RRK)

A large electric utility in the Southeast was under pressure to reduce costs wherever possible — without compromising safety or service reliability. One area offering significant opportunity for time and cost savings was splicing of underground cables damaged by dig-ins or failures.

Since underground distribution became highly popular in the 1960s, this utility had buried thousands of miles of aluminum URD secondary and service cables. The issue was how to splice those cables in a hurry and how to restore their waterproof integrity — without resorting to time-consuming tape or heat-shrink insulation.

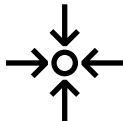
1990s

In the early 1990s, Homac engineers developed the Flood-Seal RRK aluminum compression splice kit — a product that would solve the utility's URD splicing problems.

1 All Flood-Seal RRK splice connectors up to 4/0 AWG can be crimped with just a small one-handed tool in 10" of space.

2 The Flood-Seal RRK splice kit includes everything needed to repair a URD cable.

3 Installation of the Flood-Seal RRK splice is quick and easy.



The utility needed a splice that could be crimped with a small hand tool in a confined ditch with little room to maneuver. Traditionally, a one-handed compression tool could only be used to splice connectors up to 1/0 AWG in size, because larger cable sizes required larger connectors to avoid overheating, and larger connectors required larger, bulkier compression tools. **The Homac RRK splice connector features an innovative Radiating Rib design that helps to dissipate heat, allowing a smaller connector to operate as cool as a larger one.**



The kit contains a color-coded splice connector and a one-piece Flood-Seal EPDM rubber sleeve, supplied in a plastic bag. The Flood-Seal rubber sleeve has a corresponding recess to accommodate the raised rib on the splice, positively positioning the splice in its watertight cover.



The pre-greased Flood-Seal rubber sleeve slides easily back onto the cable. After the cable is prepared, the conductor splice is crimped. Then the sleeve slides back over the splice until the sleeve is positively centered when it mates with the connector rib. **The crimping takes the same amount of time as usual, but with the addition of the Flood-Seal rubber sleeve, the connector is waterproofed in seconds — as compared to the time required to insulate the same splice connection with tape or heat-/cold-shrink material.**

Connections 1,000,000

Since adopting the Homac Flood-Seal RRK aluminum compression splice kit, this utility has used it to connect more than a million URD cables.

Homac engineers subsequently added reducing splice kits to the RRK line, enabling the utility to use the RRK to splice 1/0 to 4/0 AWG cables. The utility now stocks three Flood-Seal RRK splice kits to handle most of its requirements: 1/0 AWG, 4/0 AWG and 4/0 to 1/0 AWG.

Homac Flood-Seal RRK aluminum compression splice kits exceed ANSI C119.4 requirements, are RUS accepted and come in sizes from #4 AWG to 500 kcmil, including both standard and reducing splices. Contact your local ABB representative for more information.

“We appreciate innovation and encourage all our manufacturers to develop products that can save us money and allow us to service our customers quickly and keep us competitive,” said a utility spokesperson.



The Flood-Seal™ rubber sleeve has its own rib to interlock with the aluminum splice connector inside, helping to ensure a waterproof connection.

The Radiating Rib™ design of the RRK aluminum splice helps to dissipate heat to allow connectors to be smaller. Up to 4/0 AWG size can be installed with a small, one-handed tool.



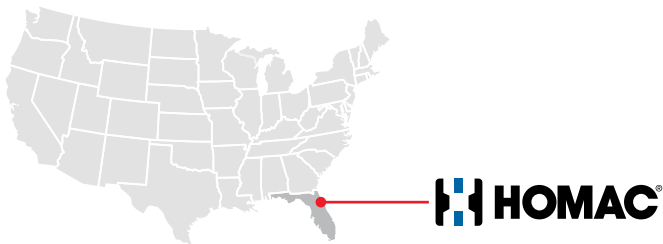
UT 3 M
Installation tool



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Homac™ Flood-Seal Radiating Rib™
splice kits – Ormond Beach, Florida.

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