BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G63.120.4
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AT&T Co Standard

ELECTROLYSIS DRAINAGE WIRE CONSTRUCTION
SPLICING

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1. GENERAL

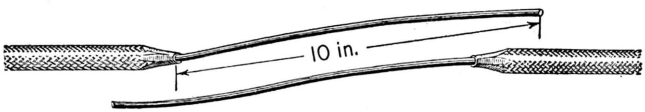
1.01 This section covers the methods to be used in splicing electrolysis drainage wires.

2. SPLICING SOLID WIRES

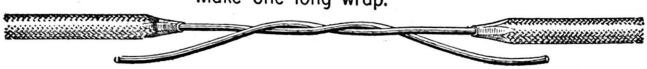
2.01 Solid electrolysis drainage wires shall be spliced as shown in the following illustrations.

(a) Through Splice

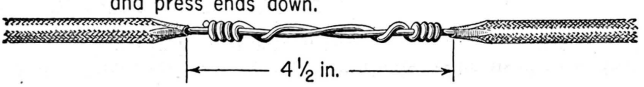
Remove insulation or covering if any, and clean wire with emery cloth.



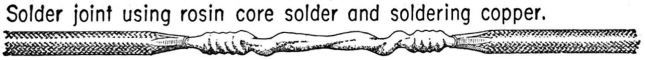
Make one long wrap.



Follow with 4 close wraps, cut off excess wire and press ends down.

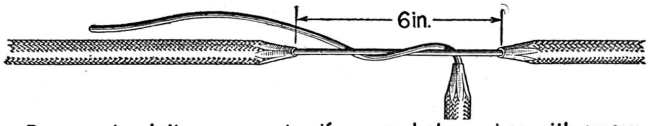


Solder joint using rosin core solder and soldering copper.

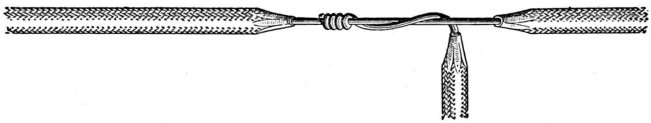


When insulated or covered wire is used, wrap for a distance of an inch over the insulation with two half lapped layers of 3/4 inch DR tape followed with 3/4 inch black friction tape.

(b) Tap Splice



Remove insulation or covering if any, and clean wires with emery cloth. Give one long wrap.



Follow with 4 close wraps, cut off excess wire and press down.

Solder joint using rosin core solder and soldering copper.

When insulated or covered wire is used wrap for a distance of an inch over insulation with two half lapped layers of 3/4 in. DR tape followed with 3/4 in. black friction tape.

3. SPLICING STRANDED WIRES

3.01 Stranded drainage wires shall be spliced as follows:

(a) Through Splice. Where there will be **no tension** in the wire, for example a vertical run on a pole or an underground conduit run, use a commercial split, tinned copper cable sleeve connector and make the splice as illustrated below.

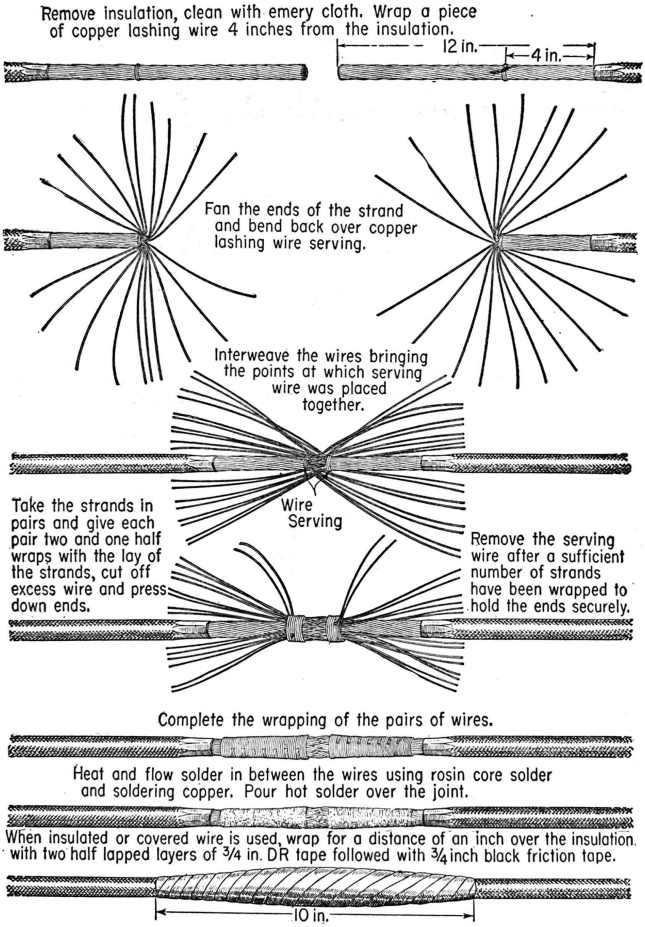
Remove insulation or covering if any, from each wire, clean the wire including the end, with emery cloth and tin the ends of the wire thoroughly.

Place ends of wire in sleeve, and then float solder in split sleeve using rosin core solder and soldering copper.

Make solder seam.

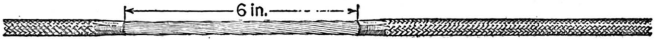
When insulated or covered wire is used wrap for a distance of an inch over insulation with two half lapped layers of 3/4 in. DR tape followed with 3/4 in. black friction tape.

(b) Where the wire will be **in tension** make the splice as shown in the following illustration.

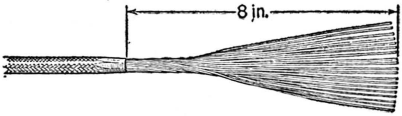


(c) Tap Splice

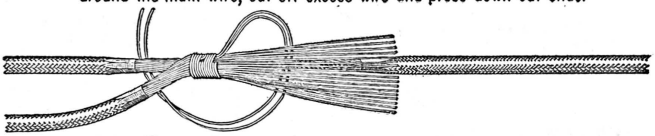
Remove the insulation or covering if any, and clean wire with emery cloth.



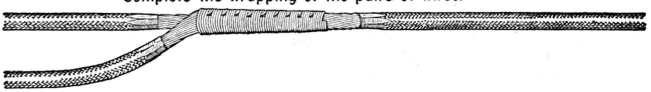
Remove the insulation from the end of the wire to be spliced, and clean each individual wire with emery cloth.



Take the wires in pairs and give each pair two and one half turns around the main wire, cut off excess wire and press down cut ends.



Complete the wrapping of the pairs of wires.



Heat and flow solder in between the wires using rosin core solder and soldering copper. Pour hot solder over the joint.

When insulated or covered wire is used, wrap for a distance of an inch over the insulation with two half lapped layers of 3/4 in. DR tape followed with 3/4 inch black friction tape.