BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G63.120.7
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AT&T Co Standard

ELECTROLYSIS DRAINAGE WIRE CONSTRUCTION

SPECIAL CONSTRUCTION

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1. GENERAL

1.01 This section covers the methods to be used when drainage wires are to be placed parallel with aerial cables or on building walls.

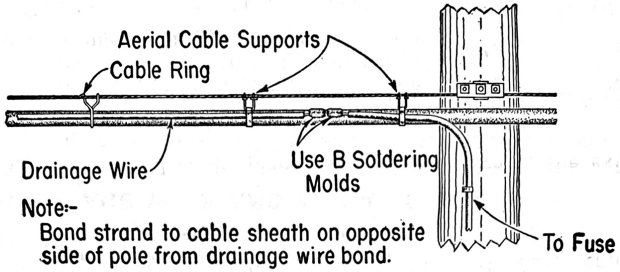
2. DRAINAGE WIRE AND AERIAL CABLE

2.01 For ringed cable, place the drainage wire in the existing rings, provided the size of strand is adequate to support the extra load.

2.02 Where the cable is lashed to the strand the drainage wire may also be lashed in accordance with the practices covering lashing two or more cables to the suspension strand.

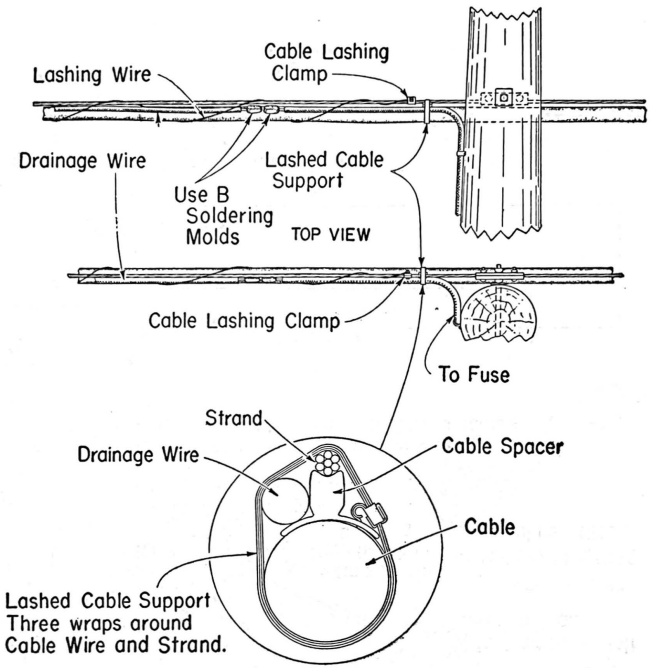
2.03 When the cable sheath is part of the drainage system, bond the cable sheath, drainage wire and suspension strand at each end of the wire run as shown in the following illustrations.

RING SUPPORTED CABLE



Note:-
Bond strand to cable sheath on opposite side of pole from drainage wire bond.

LASHED CABLE

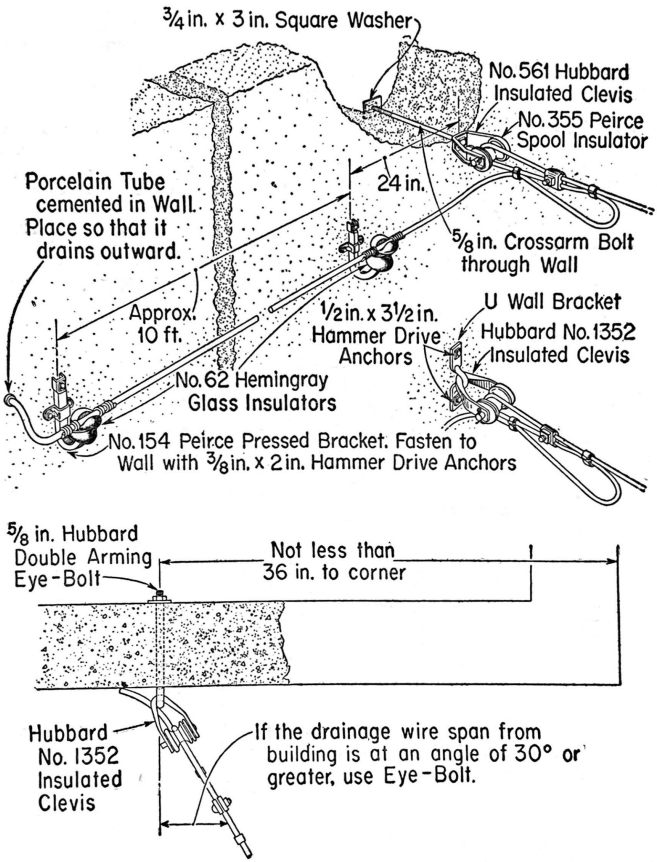


Note: On Alpeth or Stalpeth sheath cables, attach drainage wire to the lead sleeve of the splice.

2.04 Drainage wires may be supported on strand by rings or the lashing method. This type of construction is advantageous at street crossings where clearance over the highway is a factor.

3. ATTACHMENTS TO BUILDINGS

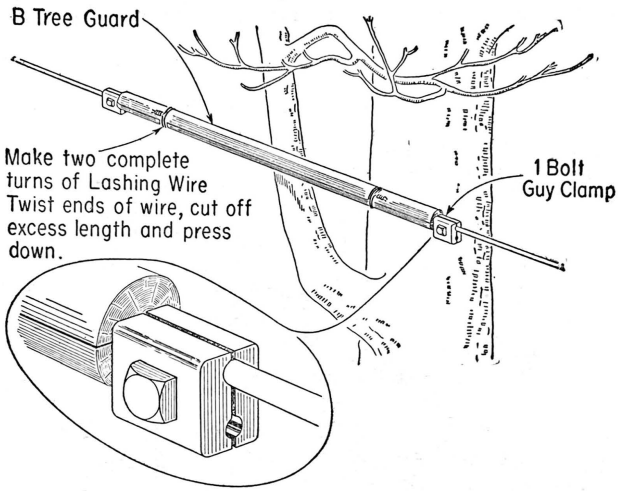
3.01 Electrolysis drainage wires may be attached to buildings as shown in the following illustration.



4. MECHANICAL PROTECTION

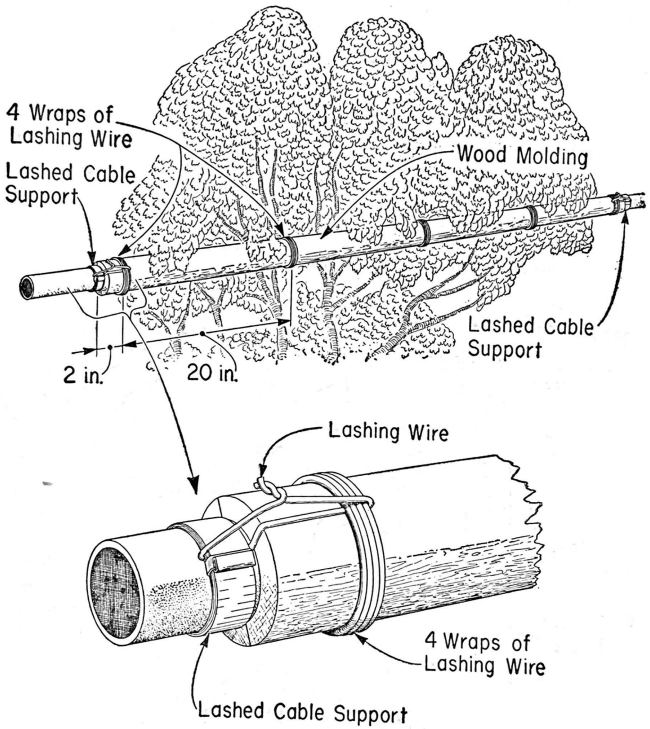
4.01 Protect drainage wires from tree limbs and similar obstructions as follows:

(a) Use B Tree Guards for insulated or bare wires 1/2 inch or less outside diameter. Do not remove insulation.

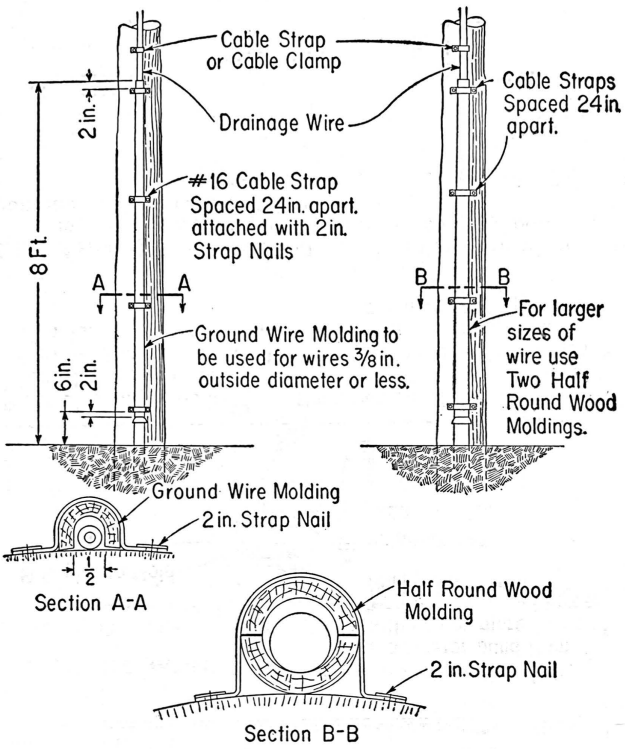


Assemble two halves of tree guard with grooves for tie wire at opposite ends.

(b) Use Half Round Molding for wires larger than 1/2 inch outside diameter.



(c) Vertical drainage wire runs on telephone poles and jointly used poles, provided the drainage wire does not pass through supply wires, shall be protected to a height of 8 feet above ground as shown in the following illustration.



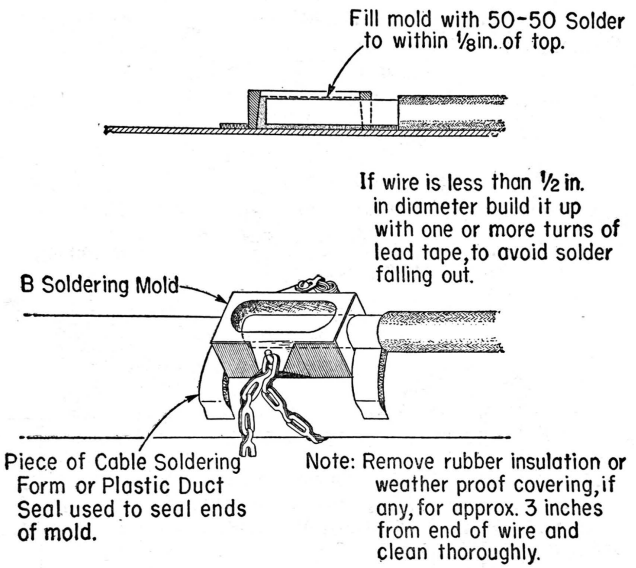
Size of Molding and Straps

Outside Diameter of Wire	Size of Molding	Size of Cable Strap
Larger than 3/8 in. to 7/16 in.	1/2 in. Half Round	No. 24
" " 7/16 in. to 7/8 in.	1 in. " "	No. 30
" " 7/8 in. to 1 1/8 in.	1 1/4 in. " "	No. 36
" " 1 1/8 in. to 1 3/8 in.	1 1/2 in. " "	No. 42

(d) On jointly used poles where the drainage wire passes through supply wires, protect the drainage wire as outlined in (c) from the ground to a point 40 inches above the supply wires.

5. CONNECTING DRAINAGE WIRES TO CABLES OR FOREIGN CONDUCTORS

5.01 Remove insulation, if any, from the drainage wire, clean it with emery cloth and tie the wire. Make the connection by means of soldering molds as shown in the following illustration. In the case of polyethylene sheath cables the connection shall be made to the lead sleeve.



5.02 Aerial cables should be bonded to the suspension strand in accordance with the practices covering bonding and grounding cable sheaths.