

**BELL SYSTEM PRACTICES**  
**Outside Plant Construction**  
**and Maintenance**

**SECTION G63.120.5**  
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**AT&T Co Standard**

# **ELECTROLYSIS DRAINAGE WIRE CONSTRUCTION INSTALLATION OF PROTECTIVE EQUIPMENT**

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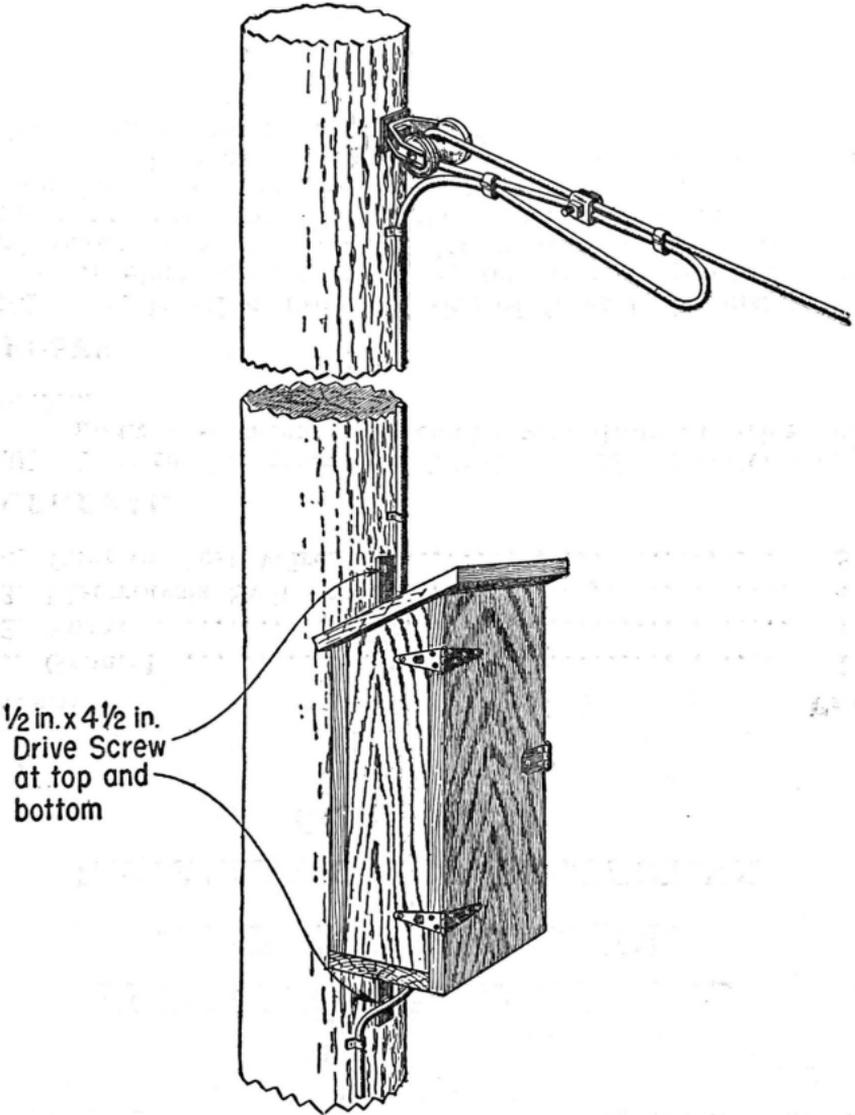
## **1. GENERAL**

1.01 This section covers the installation of protective equipment associated with electrolysis drainage wire construction.

## **2. FUSES**

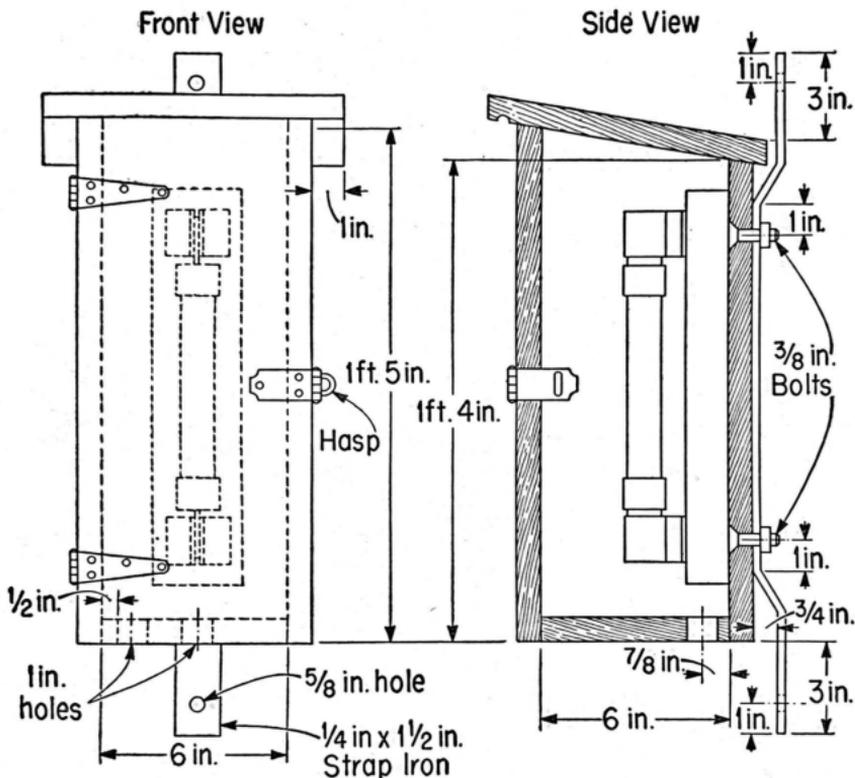
2.01 The location, type and size of fuses to be installed in an electrolysis drainage system will be specified in the detail plans. It is preferable to locate fuses on poles or other suitable support near the manhole rather than in manholes. Non-arcing, non-indicating enclosed type fuses of suitable capacity shall be used. In general, fuses shall be placed in all drainage wires connected or exposed to foreign wires.

2.02 Install fuses on poles as shown in the following illustration unless otherwise specified on the detail plans. If possible, avoid poles having terminals, vertical runs, conduits and similar obstructions.

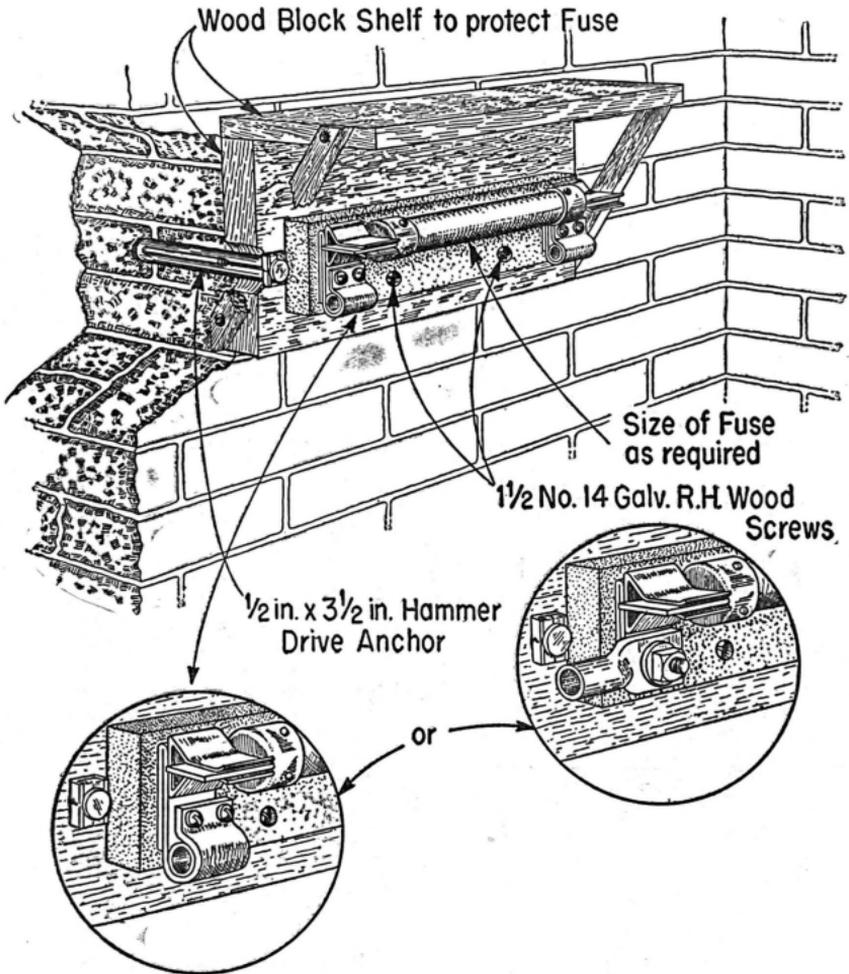


2.03 Fuses shall be mounted in a wooden box to be provided locally. The box shall be placed on the face or back of the pole with the bottom not less than 10 feet above a sidewalk or 12 feet above a driveway to a residence garage. The following illustration shows the general dimension of the fuse box.

### POLE BOX FOR ELECTROLYSIS BOND FUSES



2.04 Fuses may be placed in manholes that are known to be dry. The fuses shall be mounted on a backboard attached on the side wall or end wall, as high as practicable and in a location that will not interfere with existing or future cables as shown in the following illustration.



### 3. ELECTROLYSIS SWITCHES

3.01 The standard electrolysis switch is housed in a water-proof metal case which may be placed in manholes, damp locations, poles and buildings. They shall be installed in accordance with the practices covering placing of electrolysis switch.

3.02 When placed on poles locate the case at approximately the same height as that shown in Paragraph 2.03 for fuse boxes, unless otherwise specified on the detail plans. When necessary to step these poles, follow the practices on stepping cross-connecting terminal poles. Where a pole seat is required place it as covered in the practices on cable terminals.

3.03 Where wire larger than No. 00 A.W.G. is used for drainage wire and it is impracticable to bend the wire for terminating in a fuse or switch case, splice about 3 feet of No. 00 A.W.G. wire to the drainage wire and terminate the smaller wire in the fuse or case.

#### **4. PILOT OR TEST WIRES**

4.01 Pilot or test wires shall be installed when specified in the detail plans.

4.02 Use drop wires where pilot wires are strung aerially and for vertical runs on poles. Use the methods described in the drop wiring practices.

4.03 Use Service Cable where pilot wires terminate on drainage equipment in manholes. Place the cable in accordance with standard practices.