

# **UNDERGROUND CONDUIT FOR SERVICE CONNECTIONS**

## **GENERAL**

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### **1. GENERAL**

1.01 These instructions are for the guidance of contractors and of the Telephone Company's Plant Department in installing underground conduit for service connections from the Telephone Company's plant to the customer's residence or other building where proper arrangements for such connections have been made. They do not cover the installing of underground conduit where necessary to accommodate the cables used from station to station in the Telephone Company's "intercommunicating residence systems," nor installing conduit for service connections where the service will consist of more than six pairs.

1.02 Installations requiring more than six pairs of wires shall be referred to the Telephone Company.

### **2. PRECAUTIONS**

2.01 In order to avoid misunderstanding and possible loss to the customer, it is essential that prospective customers or contractors confer with the Commercial Department of the Telephone Company before completing plans for the installation of conduit for service connections.

2.02 Contractors installing conduits for telephone service connections shall give the Telephone Company 48 hours' advance notice before filling in the trench, in order that the Company may have the work inspected. The Telephone Company reserves the right to refuse permission for the termination of a conduit on any of its poles if such conduit does not conform to the requirements of these instructions.

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2.03 If conduits for service connections are to be terminated in Telephone Company manholes, the work in the manhole must be done by the Telephone Company or under the direct supervision of a representative of the Telephone Company.

### 3. DEFINITION OF "DUCT"

3.01 The term "duct" as used throughout these practices designates material as distinguished from the term "conduit," used to designate the structure. The term "duct" is therefore used to designate what many electric light contractors consider as conduit.

### 4. DUCT MATERIALS

*See add* 4.01 ~~Steel pipe or iron pipe duct, fibre duct, creosoted wood duct, and sewer tile are approved for constructing conduit for underground service connections.~~

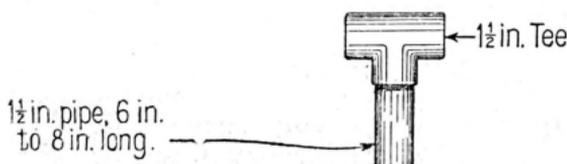
*See add* 4.02 ~~Steel pipe or iron pipe duct may be used under all conditions. Fibre duct, creosoted wood duct and sewer tile may be used under all conditions except where the fall of the run is toward the house instead of toward the pole or a conduit box. Small amounts of water and dirt are likely to enter through the joints in these types of duct and for this reason it is considered inadvisable to use them where the fall of the run is toward the house.~~

4.03 Duct of a material and size other than specified must not be used without the specific approval of the Telephone Company. The approved materials are listed in the four paragraphs following. If approved materials can not be obtained commercially, they may be obtained from the Telephone Company.

*See add* 4.04 Use either 1-1/2 inch steel pipe, plain or galvanized, or 1-1/2 inch iron pipe duct, enameled or galvanized. Threaded couplings are required in either case. The inner edges of all iron pipe or duct shall be reamed and all threaded joints shall be sealed with white lead or approved equivalent to make them water-tight. Tee and section of pipe for drainage pocket shall be used where required.

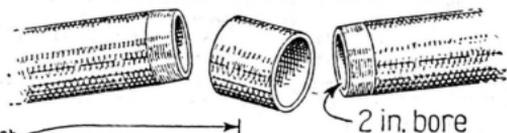
EXTRA PIPE MATERIAL WHERE DRAINAGE POCKET IS REQUIRED

(See Sect. G44.130)

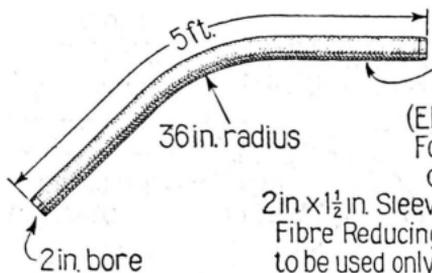


4.05 Use only types of fibre duct approved by the Telephone Company. If fibre duct is installed under a highway, it shall be encased in 3 inches of 1:4:8 concrete. Otherwise steel pipe or iron pipe duct shall be used to cross the highway.

2 IN. SLEEVE JOINT FIBRE DUCT



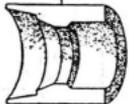
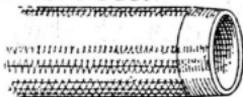
2 in. bore



2 in. 45° Sleeve Joint Fibre Duct Bend, 36 in. radius  
(Elbows or 90° bends shall not be used)  
For changes in direction of run where conduit box is not required.

2 in x 1½ in. Sleeve Joint Fibre Reducing Coupling  
to be used only at base of pole for joining the fibre duct to the steel or iron pipe running up the pole.

2 in. Fibre Duct



1½ in. Steel or Iron Pipe

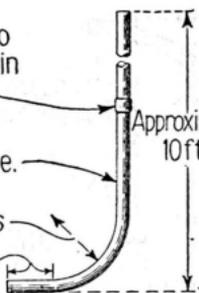


Couplings, if any, must be so located as to be at least 12 in above the ground

Steel or iron pipe.

24 in. Radius

Approximately 12 in.



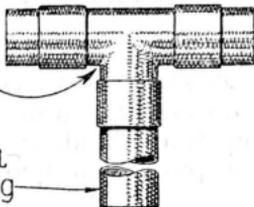
For terminating conduit on pole. 1½ in. Steel or Iron Pipe or Iron Pipe Conduit, plain, enameled or galvanized

(Lower end of pipe must be threaded if tee is to be installed for drainage at base of pole. Install tee and nipple as shown in paragraph 4.06)

EXTRA DUCT MATERIAL WHICH MAY BE USED IN INSTALLING DRAINAGE POCKET

(See Sect. G.44 130)

2 in. Fibre Duct Tee

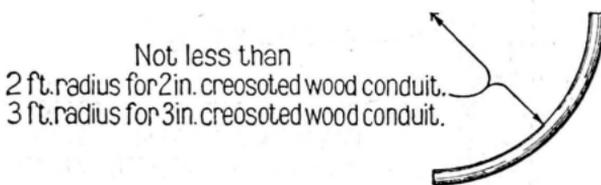


2 in. Fibre Duct  
6 in. to 8 in. long

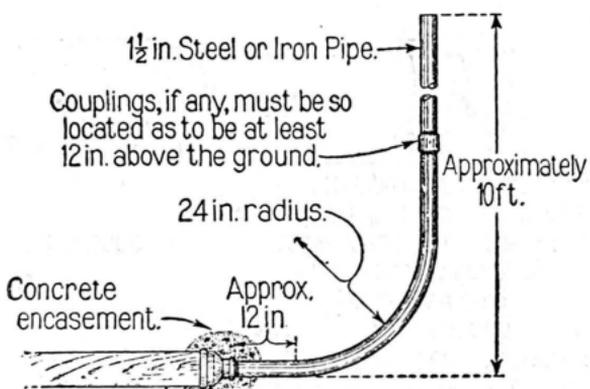
**UNDERGROUND CONDUIT FOR SERVICE CONNECTIONS**

4.06 Two or three-inch creosoted wood duct, approved by the Telephone Company, may be used for service connections. Bends in conduit runs where creosoted duct is used should be made with cast iron bends or steel pipe.

**2 IN. OR 3 IN. CREOSOTED WOOD DUCT\***



Steel or iron pipe for making bends in the run where necessary. No couplings allowed in bend.

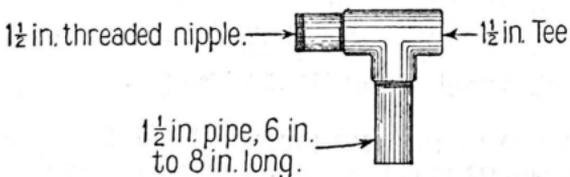


Pipe and reducing coupling for terminating the run on the pole. (Lower end of pipe must be threaded if drainage is required.)

2 in. or 3 in. Creosoted Wood Duct.  
 2 1/2 in. x 1 1/2 in. Reducing Coupling (for 2 in. duct)  
 3 1/2 in. x 1 1/2 in. Reducing Coupling (for 3 in. duct) \*

**EXTRA PIPE MATERIAL WHICH MAY BE USED IN INSTALLING DRAINAGE POCKET**

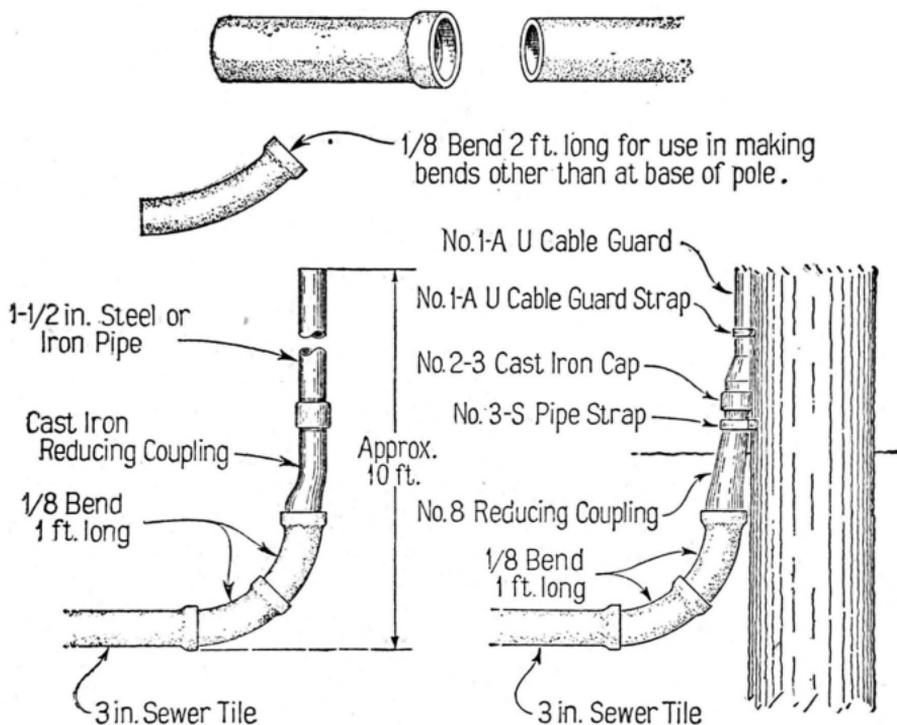
(See Sect. G 44.130)



\*Attach Reducing Coupling to tenon of Creosoted Wood Duct. (See Sect. G 44.130)

4.07 Commercial sewer tile as illustrated may be used for underground service connections. The terminating of sewer tile at the pole involves the use of material not generally available commercially. This material can, however, be obtained from the Telephone Company.

### 3 IN. SEWER TILE



Pipe and reducing coupling for terminating the run on the pole.

Where reducing coupling from sewer tile to 1 1/2 in. Steel or Iron pipe can not be obtained, use materials illustrated above. These materials may be obtained from Telephone Company

### EXTRA TILE MATERIAL WHERE DRAINAGE POCKET IS REQUIRED (See Sect. G 44.130)

