

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G32.138.2
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AT&TCo Standard

DROP AND BLOCK WIRING

MULTIPLE DROP WIRE

PLACING

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1. GENERAL

1.01 This section replaces Issue 1. It covers methods for placing Multiple Drop Wire in spans and on building walls.

2. PLANNING MULTIPLE DROP WIRE RUNS

2.01 In planning multiple drop wire Runs on building walls observe the following suggestions.

- (a) Select a location for the first attachment which will keep the drop wire clear of trees. In some cases an adjacent building may be used for the first attachment as a means of avoiding trees.
- (b) Locate ring runs with a view to permanency and accessibility. Avoid runs requiring the use of long ladders.
- (c) Make all runs horizontal or vertical in so far as practicable. Horizontal runs should be placed out of reach of the public, particularly children.

- (d) Locate wire runs with a minimum of obstructions.
- (e) Where necessary to cross or parallel electric wiring, rain spouts or other obstructions, the minimum separations covered in Section G10.295.1 for drop wiring should be observed.

2.02 Multiple Drop Wire is supplied on large reels. It will be necessary to make a preliminary survey of a proposed installation to determine the length of wire required so as to avoid excess wire loss. Cut required length of wire from reel in garage or storeroom and if not over 250 feet, it can be coiled on the drop wire reel. If length is over 250 feet, coil the wire in a hand coil of convenient size. Should a number of installations be at close locations, it may be desirable to take the reel of wire to the job and distribute as required.

3. MULTIPLE DROP WIRE RUNS ON BUILDINGS

3.01 **First Building Attachment:** Use a drop wire hook as the first building attachment for multiple drop wire in pole-to-house spans. Attach hook to masonry walls with 5/16-inch x 1-3/4-inch hammer drive anchor, and to wood, stucco on wood and metal on wood walls with No. 18 RH galvanized wood screw 2-1/2 inches or longer. The screw should penetrate the house studding at least 1-1/4 inch. Only one multiple drop wire should be supported on a drop wire hook.

3.02 **Second Building Attachment:** Clamp the cable to the wall close to the drop wire hook attachment with a No. 9 cable clamp. Attach clamp to walls as follows:

Wood walls—1-1/2-inch No. 14 Galvanized RH Wood Screws.

Masonry walls—1/4-inch x 1-inch Hammer Drive Anchor.

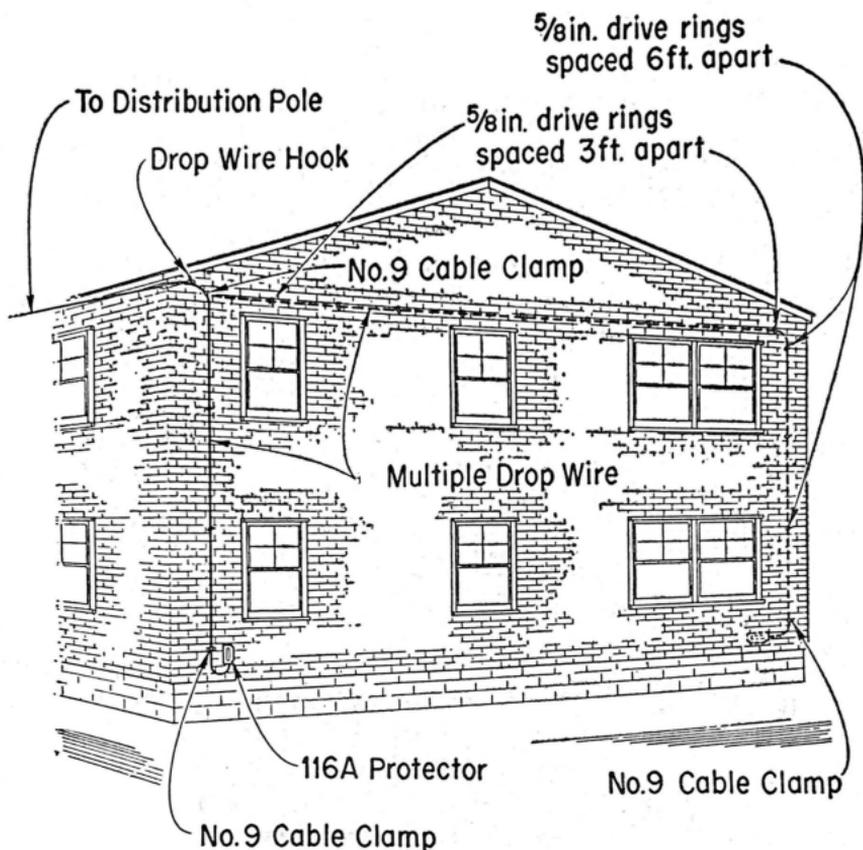
Stucco on wood Metal on wood Rigid composition	}	2-inch No. 14 Galvanized RH Wood Screw.
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3.03 **Intermediate Building Attachments:** Use 5/8-inch drive rings spaced about 3 feet apart as intermediate attachments. It will be necessary to spread the opening in the rings slightly in order to insert the multiple drop wire.

3.04 **Last Building Attachment:** Place a No. 9 cable clamp on the multiple drop wire 6 inches from point of entrance to protector, wire terminal or building after pulling the wire taut in the ring run. Attach clamp to wall as indicated in Paragraph 3.02.

3.05 The multiple drop wire may be terminated in 6 pair wire terminal or 6 pair protector on the outside wall or inside the building.

3.06 Complete wire run on outside building wall is illustrated below.



4. MULTIPLE DROP WIRE RUNS ALONG A LEAD

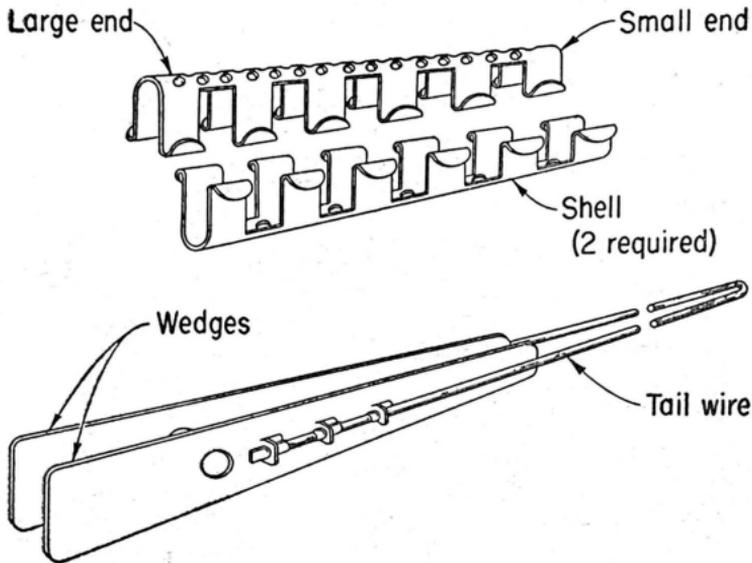
4.01 Follow the methods prescribed for individual drop wires in pole-to-pole runs.

5. DISTRIBUTING MULTIPLE DROP WIRE FROM TERMINAL POLES

5.01 Distribute multiple wire in the manner described for individual drop wires.

6. PLACING D DROP WIRE CLAMPS ON MULTIPLE DROP WIRE

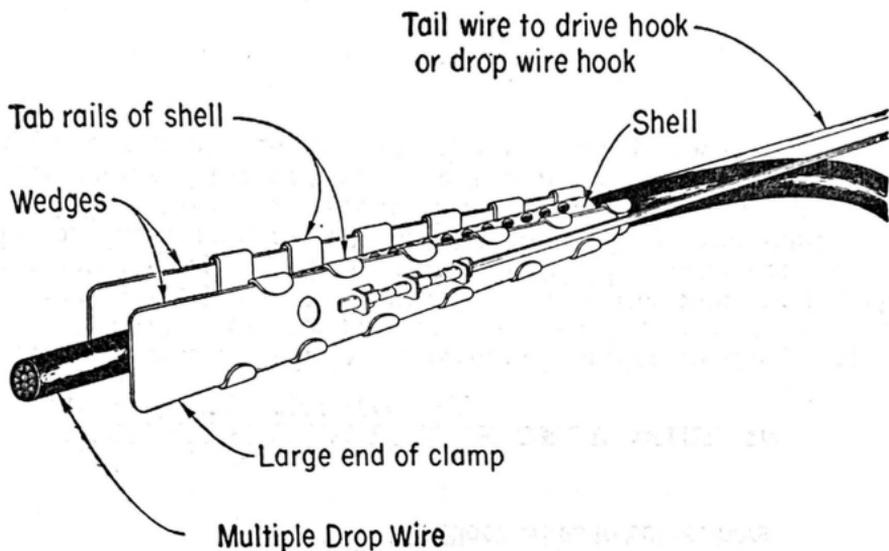
6.01 The D Clamp is designed primarily for use on Multiple Drop Wire. It consists of two identical semicircular shells and two flat wedges held together by a tail wire. The clamp is illustrated below:



Install the clamp on the wire in the following manner:

- (1) Interlock the two shells on the wire with the large ends toward the span.
- (2) Press the shells together and slide the wedges into the tab rails on the sides of the shells. Tap the wedges with pliers to seat them firmly.
- (3) Place the tail wire over the drive hook or drop wire hook.

(4) Complete assembly of clamp on wire illustrated below:



7. TERMINATING MULTIPLE DROP WIRE IN CABLE TERMINALS

7.01 Remove the outer jacket and glass yarn tape back to the first of the three drive or bridle rings associated with a pole or wall mounted terminal. For sheath mounted terminals, stop jacket at terminal wiring ring nearest the pole. Fan out the pairs, run them through the rings and terminate them in the terminal in the manner followed for block wire.

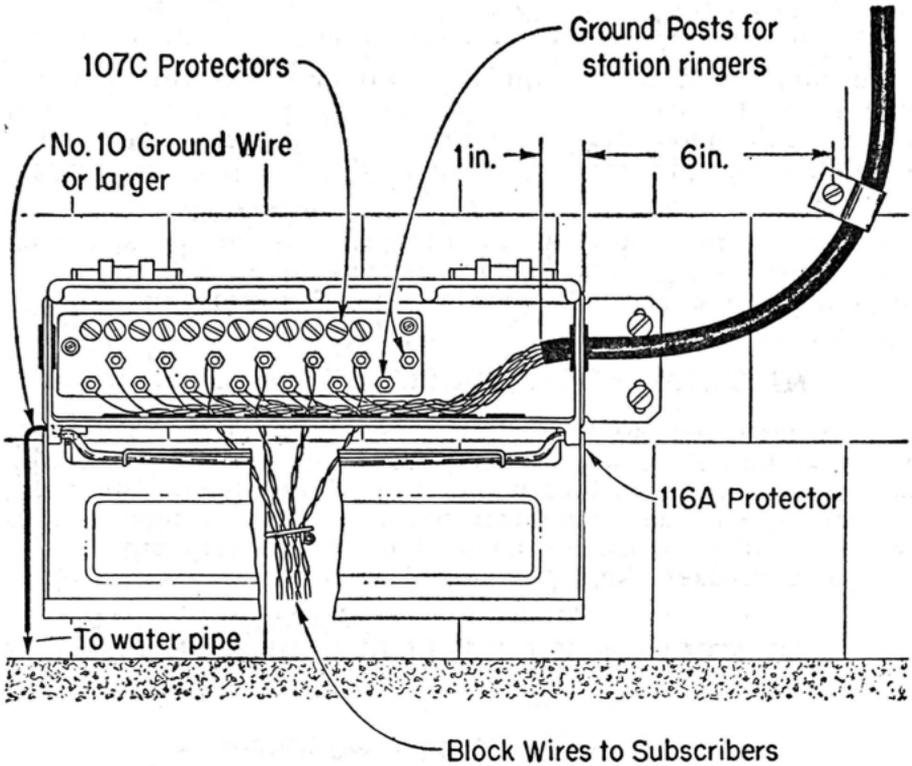
8. TERMINATING MULTIPLE DROP WIRE IN 116A PROTECTORS

8.01 The 116A Protector is equipped with a housing which is similar to that of the 10 pair N-type distribution terminals. Mount the protector on walls in manner prescribed for N-type terminals.

8.02 Insert the multiple wire into either end of the protector as desired. It will greatly facilitate conductor terminations if the end of the multiple wire is stripped of its outer jacket before inserting the wire into the protector housing.

8.03 Terminate the conductors under the bottom nut on each binding post. The individual drop or block wires entering the protector through the wire holes are terminated between top and bottom nuts on the binding posts.

8.04 Wiring of 116A Protector is illustrated below:



9. TERMINATING MULTIPLE DROP WIRE IN 104A WIRE TERMINALS

9.01 A 6 pair 104A wire terminal similar in design to the 116A Protector is used where station protectors are not required. The terminal block is similar to the block in the 116A Protector except for the omission of 107C Protectors and ground clamp. The wiring of the wire terminal will be the same as for the 116A Protector except that the ground wire connection when required for station ringers is made on one of the ground posts. Use a No. 14 ground wire for this purpose.