BELL SYSTEM PRACTICES
Outside Plant Construction and Maintenance

SECTION G53.120.1
Issue 1, May, 1952
AT&T Co Standard

BLOCK AND HOUSE CABLE

PLACING STRAND SUPPORTED CABLE ON MASONRY WALLS AND CEILINGS INSIDE OF BUILDINGS

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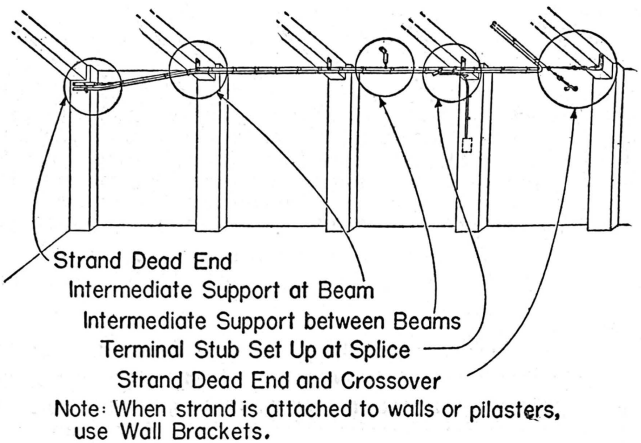
1. GENERAL

1.01 This section covers the use of suspension strand in connection with cable runs in buildings.

1.02 Strand can be used to advantage, (a) to reduce the number of attachments, (b) where pipes, conduits and ducts interfere with attaching cables directly to walls or ceilings, (c) where pilasters or similar wall projections would materially lengthen the cable runs if attached directly to wall and (d) where the property owner objects to direct attachment of cable to building surfaces.

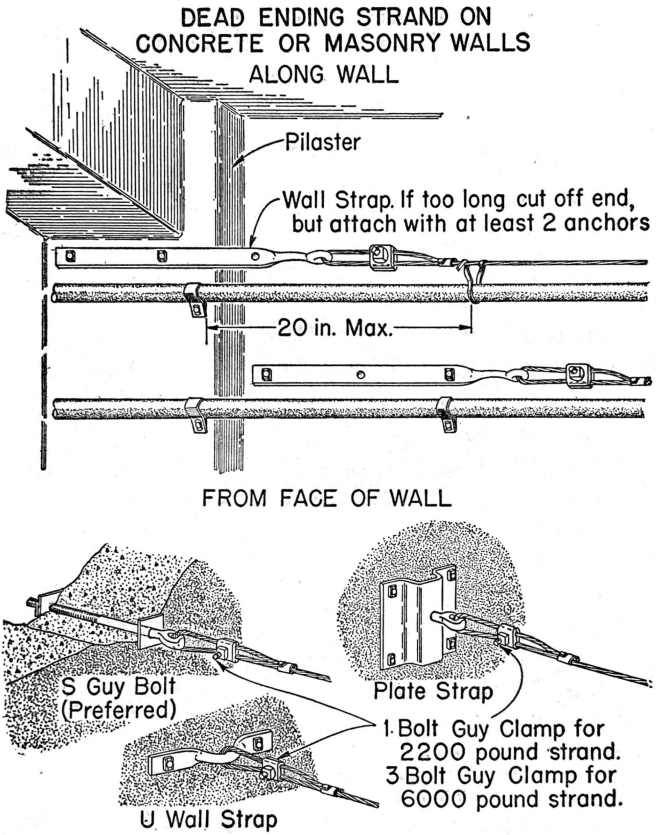
2. CABLES ATTACHED TO WALLS AND CEILINGS SUPPORTED ON STRAND

2.01 Cables to be placed on concrete or masonry structures, shall be supported as shown in the following illustrations.

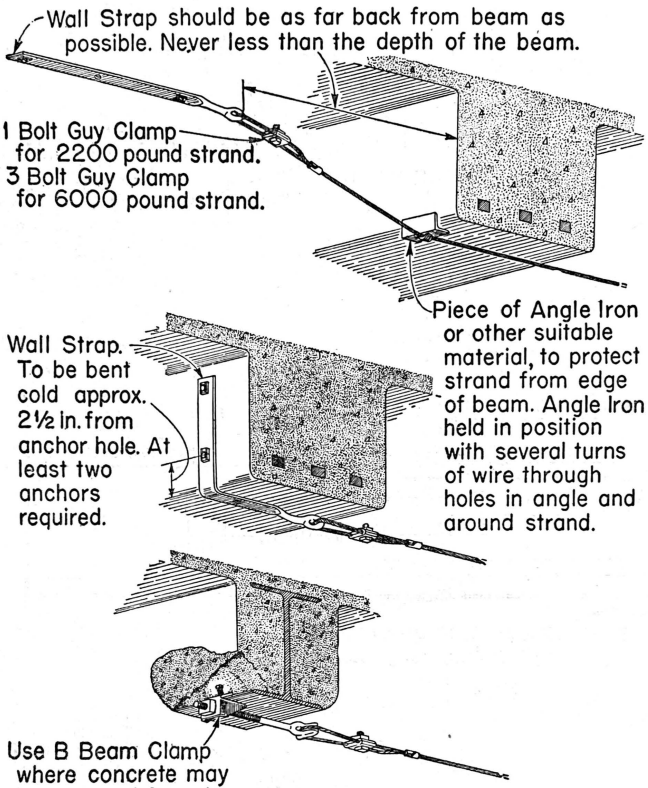


2.02 Use 2200 pound strand for cables weighing 1-1/2 pounds per foot and less and 6000 pound strand for cables weighing more than 1-1/2 pounds per foot. The 1-1/2 in. No. 22 Cable Ring for use with 2200 pound strand and the 1-1/2 in. No. 6 Cable Ring for use with 6000 pound strand, accommodate cables up to 1-3/16 in. diameter. Larger size cable rings to fit 6000 pound strand are available on special order basis.

2.03 **Strand shall be dead-ended on wall and beams** as shown in the following illustrations.

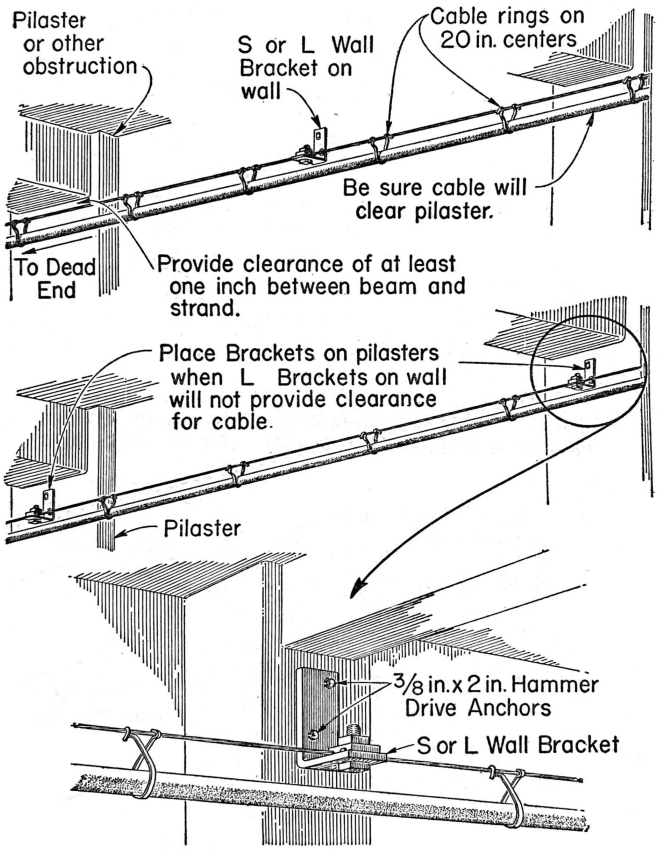


DEAD ENDING STRAND ON CEILINGS OR BEAMS

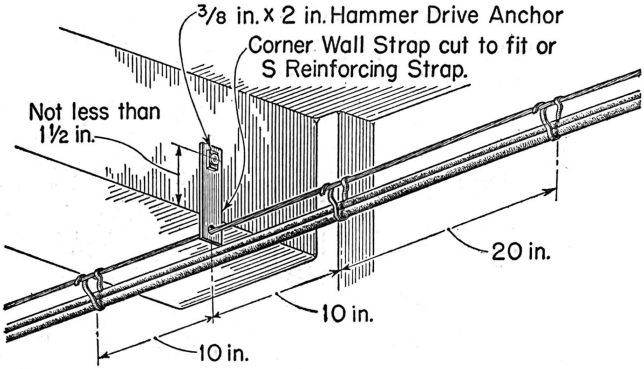


2.04 **Strand attachments at intermediate supports** shall be made as shown below. The distance between supports shall be approximately 40 feet.

STRAND ATTACHED TO CONCRETE OR MASONRY WALLS

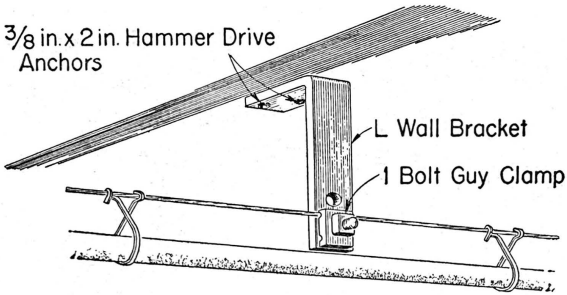


ATTACHMENTS ON BEAMS

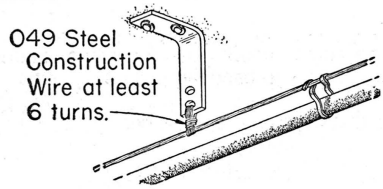


Install strap so that strand is at least 1 inch from under surface of beam. Distance between supports shall be approximately 40 ft.

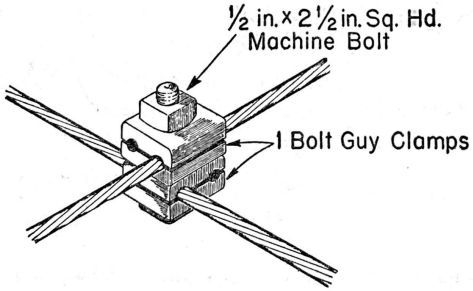
ATTACHMENTS BETWEEN BEAMS



In cases where an L Wall Bracket is not long enough to result in a level cable run, the strand may be lashed to the strap as shown below.

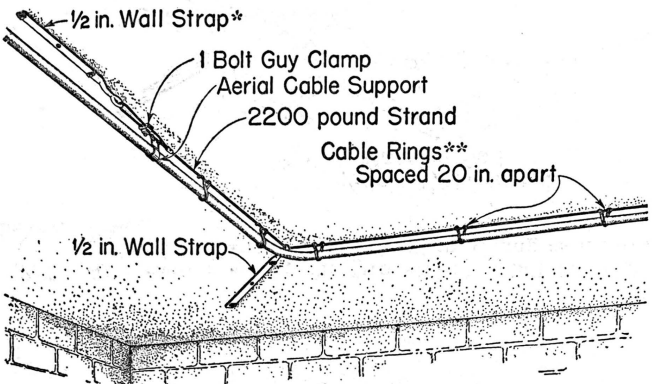


2.05 **At strand crossing** the two strands shall be held together by means of a one Bolt Guy Clamp as illustrated below.



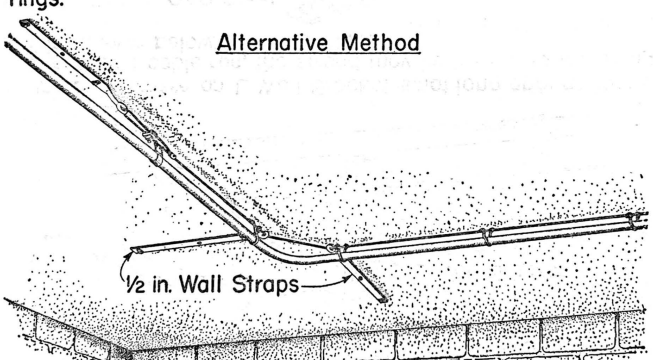
2.06 **On flat ceilings,** strand shall be attached as shown below.

FLAT CEILINGS

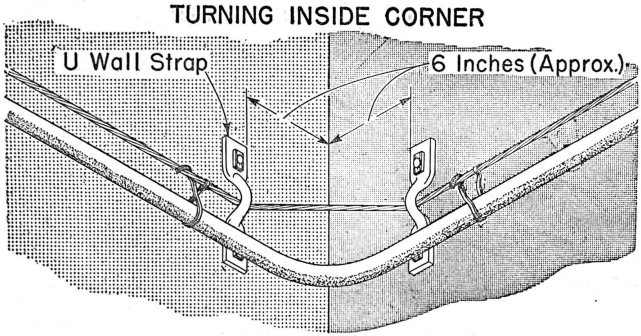


*Use 5/8 in. Wall Strap in place of ½ in. Wall Strap for 6000 pound Strand.
**If cable rings cannot be used because of lack of clearance lashed cable supports may be used spaced same as cable rings.

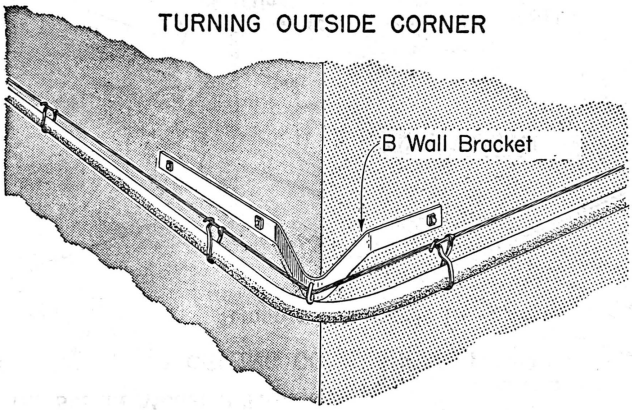
Alternative Method



2.07 **At inside corner** the strand shall be attached to the walls as follows:



2.08 **At an outside corner** the strand and cable shall be supported as shown below.



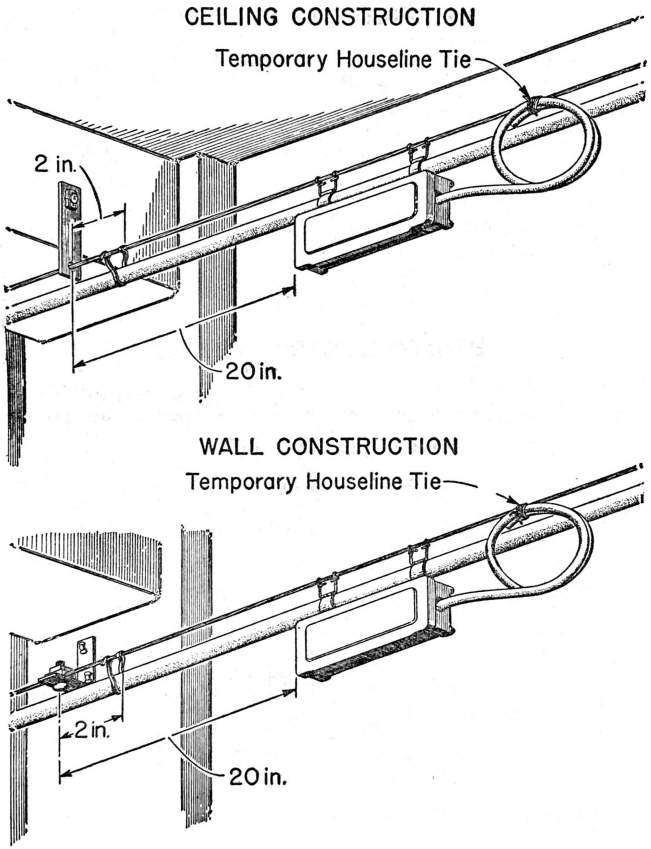
3. WALL STRAPS AND BRACKETS

3.01 The Wall Straps and Brackets specified for dead-ending and supporting strand as well as the manner of fastening them to walls of buildings, are included in sections covering the placing of cables on strand supported on Outside Building Walls.

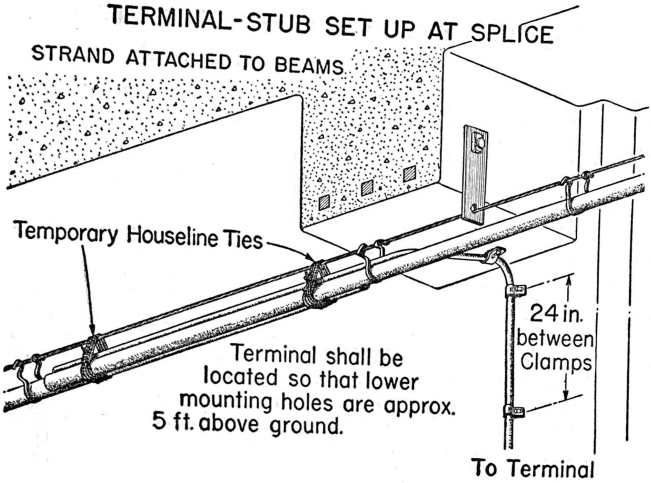
4. TERMINALS

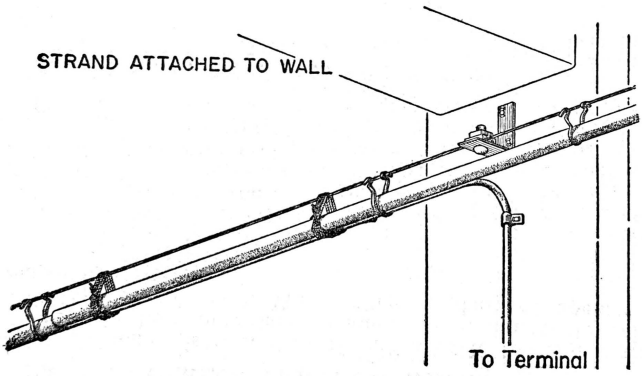
4.01 Distribution Terminals supported on strand or fastened on walls of buildings are shown in the following illustrations. The methods of mounting the terminals on walls are specified in sections covering the Installation of Distribution Terminals.

(a) **Sheath Mounted Terminals**



(b) **Wall Mounted Terminals**





4.02 The placing of other types of terminals in buildings shall be in accordance with sections covering the Installation of Terminals.

5. PASSING CABLES THROUGH WALLS

5.01 When it is necessary to run a cable through a wall, drill hole only large enough to accommodate cable. Seal around cable with Water Plug so that the opening is completely closed.