

AERIAL CABLE  
POLE TO BUILDING SPANS

NOTES CONCERNING THIS ADDENDUM

This addendum supplements Section G52.150 and has been reissued to authorize the lashing of pole to building spans where the strand is attached to the building by means other than eye-bolts. The instructions contained in previous issues of the addendum are also included.

The cross-reference, "See Addendum," should be written in Section G52.150 at the illustrations in Subparagraphs 6.01(a), (b), and (e), 7.03(a) and (b); at Paragraphs 2.03, 6.01, 8.03, 9.03, and 10.02 which are replaced; at Paragraphs 2.04, 5.03, and Subparagraph 6.01(d) which are supplemented; following Paragraph 10.04 to indicate the addition of new information; and at Paragraph 8.04 which is deleted in its entirety.

2. METHOD OF SUPPORTING CABLE IN POLE TO BUILDING  
SPAN

2.03 Use strand of the following sizes when the length of span given below is not exceeded. Where the span length exceeds those listed, special instructions as to the construction to be used will be furnished by the engineering department.

CABLE WEIGHT (POUNDS PER FOOT)	SPAN LENGTH (FEET)	SIZE OF SUSPENSION STRAND (POUNDS)
Less than 1.0	Less than 65	2,200
1.0 - 2.0	Less than 50	2,200
Less than 1.0	65 - 100	6,000
1.0 - 2.0	50 - 100	6,000
2.0 - 5.0	Less than 75	10,000
5.0 - 8.5	Less than 50	16,000

- 2.04 Note: When 2,200 pound strand is used the stringing tension shall not exceed 300 pounds. A 300 pound tension can be approximated in a 65-foot span by placing the strand with about 3 inches of sag.

## 5. ATTACHMENTS TO BUILDING WALLS

- 5.03 Change the last item in the table to read as follows:

<u>Type of Structure</u>	<u>Type of Attachment</u>	<u>Anchoring Devices</u>
Wood and Stucco	See Note below	See Note below

Note: Wherever possible, attachments to wood or stucco buildings shall be made at the corner. However, where 2,200 pound strand is involved it may be attached to the face of a wood or stucco building by means of a "U" Wall Strap and two 3/8-inch x 4-inch Coach Screws. The "U" Wall Strap should be placed at a floor or ceiling line of the building and both Coach Screws must be placed in the frame timbers of the building. Whenever possible, the Plant Engineer shall arrange to have the "U" Wall Strap placed before building is stuccoed.

## 6. METHODS OF CONSTRUCTION - CABLE SUPPORTED ON STRAND

- 6.01 Subparagraphs 6.01(a) to (h) in Section G52.150 indicate typical construction to be used for pole-to-building spans. When a section of strand is placed between a pole and a building

use two 3-bolt guy clamps for securing 16,000 pound strand and one 3-bolt guy clamp for securing 6,000 and 10,000 pound strand and one 1-bolt clamp for securing 2,200 pound strand at each dead-end point. SPANS FROM THE FACE OF A WALL SHALL NOT BE MADE WITH STRAND LARGER THAN 6,000 POUNDS. THIS DOES NOT REFER TO STRAND FROM CORNER OF BUILDINGS.

(a) and (b) Delete the notes in the illustrations referring to the construction of the building entrance and add the following:

Note: See Part 9 for construction details of the building entrance and the sections on sealing ducts for materials and methods to be used in sealing the duct.

(d) Note: When attaching to frame or stucco, it may be desirable to ~~move~~ the wall strap to the corner of the building in order that the first attachment can be made to the corner studding.

(e) Delete the note in the illustration referring to the construction of the building entrance and add the following:

Note: See Part 9 for construction details of the building entrance and the sections on sealing ducts for materials and methods to be used in sealing the duct.

## 7. METHODS OF CONSTRUCTION - CABLE SUPPORTED ON RIGID STRUCTURE

7.03(a) The following changes should be made in the illustration following this subparagraph:

Change "1/2-inch x 6-1/2-inch Drive Screws" to read "3/8-inch x 4-inch Drive Screws."

The arrow with the notation reading: "Pipe strap or approved equivalent" now pointing to the strap over the cable on the pole should point to the strap over the pipe on the pole.

Delete the notes referring to the construction of the building entrance and add the following:

Note: See Part 9 for construction details of the building entrance and the sections on sealing ducts for materials and methods to be used in sealing the duct.

- (b) Delete the notes in the illustration referring to the construction of the building entrance and add the following:

Note: See Part 9 for construction details of the building entrance and the sections on sealing ducts for materials and methods to be used in sealing the duct.

8.03 For spans exceeding 25 feet in length, consideration should be given to lashing the cable to the strand. Where the lashing method is practicable either of the following procedures is recommended:

Procedure "A"

- (1) Place an aerial cable guide on the strand close to the building wall.
- (2) Pull the cable from the reel through the cable guide until a sufficient length of cable has been obtained to reach the terminating joint in the building.
- (3) Clamp the cable to the building wall, unless the point of entrance for the cable to the building is directly below the strand attachment on the building.
- (4) Place the cable lasher on the strand between the cable guide and the building wall and adjust the cable lifters so that the cable is properly positioned in the cable lasher.
- (5) Attach one pulling line to the cable guide and one to the cable lasher and lash the cable in accordance with the standard instructions.

Procedure "B"

- (1) Place a one sheave cable block on the strand 2 feet from the building wall and a one sheave cable block adjacent to the pole.
- (2) Thread the cable from the reel through the cable blocks until a sufficient length of cable has been obtained to reach the terminating point in the building.
- (3) Clamp or tie the cable at the building end of the span.

(4) Place the cable under approximately 50 pounds tension at the pole end to prevent excessive sag in the span.

(5) Place the cable lasher on the strand between the cable block and the building and adjust the cable lifters to obtain the required clearances.

(6) Remove the cable block at the building and attach pulling line to lasher. Lash cable in accordance with the standard instructions.

8.04 Delete this paragraph.

## 9. BUILDING ENTRANCES

9.03 Refer to the sections on sealing ducts for the methods and materials to be used in sealing the duct.

## 10. PRECAUTIONS

10.02 A ladder shall always be used when working on strand that is attached to a building. Never ride a strand, regardless of the strand size, that is attached to a building.

10.05 All strand placed between a pole and a building shall be tested by the one-man strand test, (after the clamps are tightened) and before cable is placed on the strand or a ladder is placed against the strand.

Note: The one-man strand test shall be made as near the center of the span as practicable and performed by passing a 3/8-inch handline over the strand and suspending the weight of one man or 150 pounds. The man making the test shall grasp the two ends of the handline and gradually apply his full weight to the strand by lifting himself slowly off the ground.