

BELL SYSTEM PRACTICES
Outside Plant Construction
and Maintenance

SECTION G51.130
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AERIAL CABLE
CABLE RINGS

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1. GENERAL

1.01 This section covers the placing of aerial cable rings for cables that are to be permanently supported in rings. The placing of temporary rings for cables that are to be lashed is covered in Section G52.124.

2. SIZES OF AERIAL CABLE RINGS

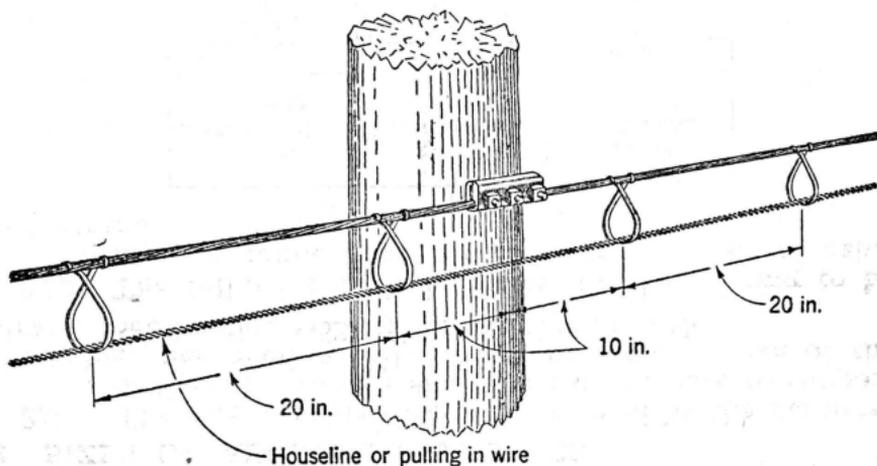
2.01 The size of cable ring is determined by the diameter of the cable and the size of the strand used to support the cable. See Section G51.115 for the required size of the strand. See Section G52.055 for the size of cable.

2.02 The following table indicates the size of ring to be used in connection with the various sizes of cable and strand.

Maximum Diameter of Cable (Inches)	Size of Suspension Strand (Pounds)	Size of Cable Rings (Inches)
$1\frac{3}{16}$	2,200	$1\frac{1}{2}$ No. 22
$1\frac{3}{16}$	6,000	$1\frac{1}{2}$ No. 6
$1\frac{3}{16}$	10,000	$1\frac{1}{2}$ No. 10
$1\frac{15}{16}$	10,000	$2\frac{1}{2}$
$1\frac{15}{16}$	16,000	$2\frac{1}{2}$ No. 16
$2\frac{5}{16}$	16,000	3
$2\frac{5}{16}$	25,000	3 No. 25
$2\frac{5}{8}$	16,000	$3\frac{1}{2}$
$2\frac{5}{8}$	25,000	$3\frac{1}{2}$ No. 25
$3\frac{1}{4}$	25,000	4

3. SPACING OF AERIAL CABLE RINGS

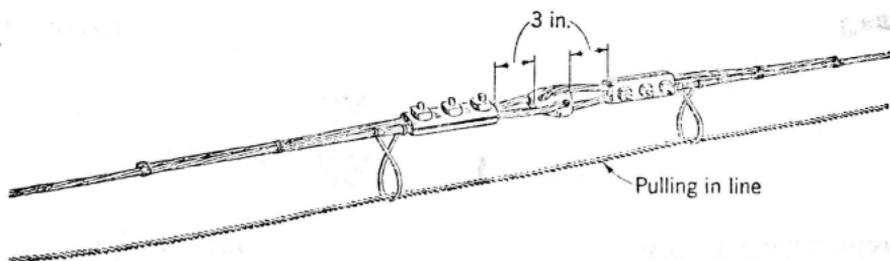
3.01 Place aerial cable rings at intervals of 20 inches as shown in the following illustration, except at railroad crossings. See Section G10.310, Aerial Railroad Crossings, for the requirements at such crossings.



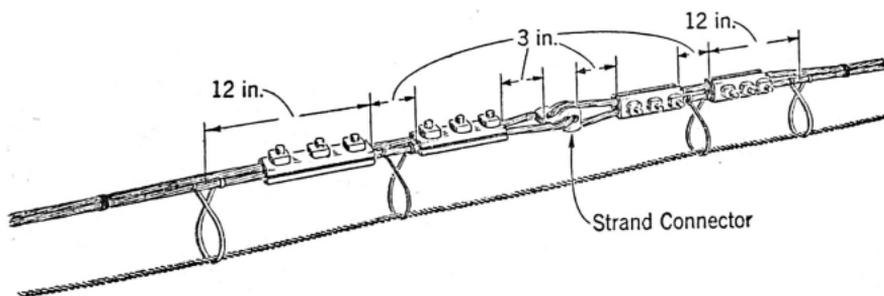
3.02 After the cable has been placed, aerial cable supports should be substituted for rings at various locations in accordance with Section G52.135, except that at splicing points the aerial cable supports should be placed by the splicer when he completes his work.

3.03 Where there is a strand connector in the strand, place the rings as shown in the following:

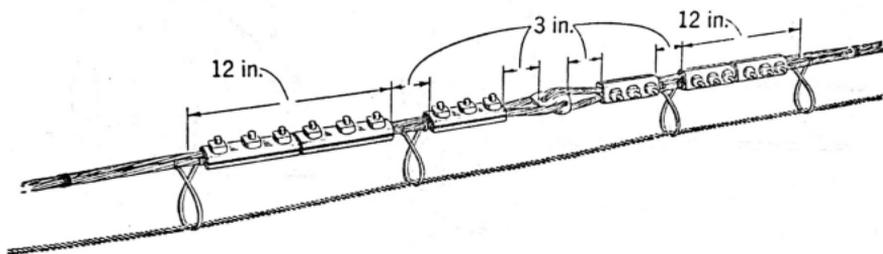
6,000 OR 10,000 POUND STRAND SPLICE



16,000 POUND STRAND SPLICE



25,000 POUND STRAND SPLICE



4. PLACING PULLING-IN LINE IN THE RINGS

4.01 If a pulling-in line was not placed at the time the strand was run out, as described in Section G51.115, a line should be placed in the rings as they are installed on the strand.

4.02 The pulling-in line may be used for pulling in the winch line in cases where the load of pulling the cable will be so great as to require the use of a winch line. For lighter loads, the cable may be pulled in by means of the pulling-in line. The following table shows various types of lines that may be employed, their approximate breaking strengths when in good condition, the recommended maximum pulling loads, and the approximate maximum dead weights of cable that can be pulled under favorable conditions, that is, in sections of line that are approximately straight and level. The weight of cable may be obtained from markings on the cable reel or by multiplying the length of cable by the weight per foot.

<u>Kind of Pulling-in Line</u>	<u>Approximate Breaking Strength (Pounds)</u>	<u>Maximum Recommended Working Load (Pounds)</u>	<u>Approximate Maximum Weight of Cable to be Pulled</u>
Houseline	185	130	400
Hambroline	450	315	1,000
109 Construction Wire	465	350	1,100
109 Steel Line Wire	790	600	1,800
134 Steel Line Wire	1,200	900	2,700
109 HS Steel Wire	1,200	900	2,700

5. PLACING AERIAL CABLE RINGS

5.01 When placing rings, carry them in a canvas bag. Attach the bag to the strand as shown in the following, or to the cable car. Place tape markers on or tie knots in the pulling-in line 20 inches apart near the end of the line, to assist in spacing the rings at the proper intervals.

