

SUSPENSION STRAND

SELECTION - GENERAL

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1. GENERAL

1.01 This section discusses the various types and sizes of suspension strand available for supporting aerial cables and the field of use of each.

1.02 The size of suspension strand required for a particular installation will, in general, be specified in the detail plans. If it is not specified, the proper size may be selected if the following are known:

(a) Cable weight (pounds per foot).

(b) Type of cable sheath and conductors (aluminum-aluminum, lead-copper, etc.).

(c) Length of longest span to be placed.

(d) Storm loading area (heavy, medium, light).

1.03 Unless otherwise specified in the detail plans or other local instruction, Class A galvanized strand shall be used.

2. TYPES OF SUSPENSION STRAND

- 2.01 The standard strand contains six steel wires stranded about a seventh as a core wire.

Note: Joints in individual wires are made by electrical butt welding, and are marked with black paint at each joint.

- 2.02 There are three types of suspension strand available.

(a) Class A Galvanized - This type of strand has a galvanized coating of sufficient thickness to provide protection under all normal field conditions.

(b) Class C Galvanized - This type of strand has a heavier galvanized coating than Class A strand and is intended for use in corrosion areas, such as coastal or industrial sections.

Note: Class C galvanizing can be identified by orange stripes on inside of coils and on outside layer on reels.

(c) Corrosion Resistant (CR) - This type alloy steel strand is intended for use in areas where corrosion conditions are severe.

Note: Detailed information relating to the use of corrosion resistant strand is covered in another section of the practices.

3. SIZES OF SUSPENSION STRAND

- 3.01 Four sizes of suspension strand are available for supporting aerial cables on pole lines; 6,000 pound (6M), 10,000 pound (10M), 16,000 pound (16M) and 25,000 pound (25M) suspensior strand.

- 3.02 The size designations give an indication of the approximate breaking strength of the strand in pounds.

- 3.03 The following table lists the approximate diameters of the various sizes of strand.

Strand Size (Pounds)	Diameter (Inches)	
	Galvanized	Corrosion Resistant
6,000	5/16	5/16
10,000	3/8	3/8
16,000	7/16	-
25,000	1/2	-

4. STORM LOADING AREAS

4.01 For the purpose of this practice the following definitions of loading areas shall apply in the State of California:

(a) Heavy loading shall apply where the elevation above sea level exceeds 3,000 feet except as indicated in (b) below.

(b) Medium loading shall apply to the following locations, which will generally be specified on the detail plans:

(1) Certain specified locations in San Diego County where the elevation above sea level is greater than 3,000 feet but not greater than 4,500 feet.

(2) That portion of the Palmdale Exchange where the elevation above sea level is not greater than 3,000 feet, and also certain specified locations where the elevation above sea level is greater than 3,000 feet but not greater than 4,000 feet.

(c) Light loading shall apply where the elevation above sea level is less than 3,000 feet except as indicated in (b) above.