

**WAC 296-870-70085 Suspension wire ropes and rope connections.**

(1) You must make sure each specific installation uses suspension wire ropes and connections or combination cable and connections meeting the specifications recommended by the hoisting machine manufacturer.

(2) You must make sure connections are capable of developing at least eighty percent of the rated breaking strength of the wire rope.

(3) You must make sure each suspension rope has a design factor of at least ten.

(4) You must make sure the minimum grade of suspension wire rope used is improved plow steel or equivalent.

(5) You must make sure suspension wire ropes are sized to conform with the required design factor, but never less than 5/16 inch (7.94 mm) in diameter.

(6) You must make sure there is not more than one reverse bend in six wire rope lays.

(7) You must make sure a suspension wire rope that is to be used at a specific location, and will remain at that location, has a corrosion-resistant tag that:

(a) Is securely attached to one of the wire rope fastenings; and

(b) Bears the following wire rope information:

(i) Diameter in inches or millimeters (mm);

(ii) Construction classification;

(iii) Whether nonpreformed or preformed;

(iv) Grade of material;

(v) Manufacturer's rated strength;

(vi) Manufacturer's name;

(vii) Month and year the ropes were installed;

(viii) Name of the person or company which installed the ropes.

(8) You must make sure a new tag is installed at each wire rope renewal.

(9) You must make sure when resocketing the wire rope either:

(a) The original tag is stamped with the date of resocketing; or

(b) The original tag is retained and a supplemental tag added that shows:

(i) The date of resocketing; and

(ii) The name of the person or company that resocketed the rope.

(10) You must make sure winding drum type hoists contain at least three wraps of the suspension wire rope on the drum when the suspended unit has reached the lowest possible point of its vertical travel.

(11) You must make sure traction drum and sheave type hoists use wire rope long enough to reach the lowest possible point of vertical travel of the suspended unit, and an additional length of the wire rope of at least four feet (1.2 m).

(12) You must make sure suspension wire rope is never lengthened or repaired.

(13) You must make sure babbitted fastenings are never used with suspension wire rope.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050. WSR 15-23-086, § 296-870-70085, filed 11/17/15, effective 12/18/15. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 47.17.060. WSR 06-19-075, § 296-870-70085, filed 9/19/06, effective 1/1/07.]