

WAC 296-54-55730 Wire rope—Attaching end fastenings. (1) The manufacturer's recommendations must be followed when attaching sockets and other end fastenings.

(2) Using cable clips or clamps for joining lines is prohibited, except to transfer slack lines from one place to another.

(3) When U-bolt cable clips are used to form eyes, Table 3: U-bolt Cable Clips to Form Eyes must be used to determine the number and spacing of clips.

Table 3: U-bolt Cable Clips to Form Eyes

Improved Plow Steel Diameter of Rope	Number of Clips Forged	Required Other Material	Minimum Space Between Clips
3/8 to 5/8 inch	3	4	-3/4 inch
3/4 inch	4	5	4-1/2 inch
7/8 inch	4	5	5-1/4 inch
1 inch	5	6	6 inches
1-1/8 inch	6	6	6-3/4 inch
1-1/4 inch	6	7	7-1/2 inch
1-3/8 inch	7	7	8-1/4 inch
1-1/2 inch	7	8	9 inches

(4) When U-bolt cable clips are used:

(a) For eye splices, the U-bolt wire rope clip must be attached so that the U section is in contact with the dead or short end of the rope (see Figure 3: Eyes Formed with U-bolt Cable Clips);

(b) U-bolt cable clips must be spaced at least six rope diameters apart to obtain the maximum holding power. Nuts must be tightened evenly and tightened again after application of the first sustained load. After the rope has been used and is under tension, the clips must be tightened again to take up any looseness caused by the tension reducing the rope diameter;

(c) With high strength wire rope, one more U-bolt cable clip must be added for each grade above improved plow steel; and

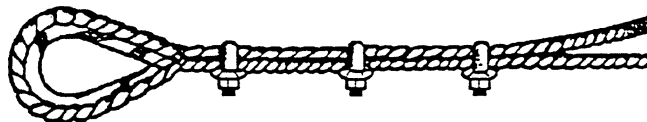
(d) Eyes formed with U-bolt cable clips are prohibited with running lines or straps.

(5) Wedge-type quick ferrules, such as "quick nub" must not be used as end fittings for guylines and skylines.

APPLICATION OF WIRE ROPE

U-BOLT CLIPS

Crosby Type



1. CORRECT METHOD—U-Bolts of clips on short end of rope. (No distortion on live end of rope)



2. WRONG METHOD—U-Bolts on live end of rope.
(This will cause mashed spots on the live end of rope)



3. WRONG METHOD—Staggered clips; two correct and one wrong. *(This will cause a mashed spot in live end of rope due to wrong position of center clip)*

4. After rope is in service, and is under tension, tighten clips to take up decrease in rope diameter.

Figure 3: Eyes Formed with U-bolt Cable Clips

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060, and chapter 49.17 RCW. WSR 17-17-131, § 296-54-55730, filed 8/22/17, effective 10/22/17. Statutory Authority: RCW 49.17.010, [49.17].040 and [49.17].050. WSR 99-17-117, § 296-54-55730, filed 8/18/99, effective 12/1/99.]