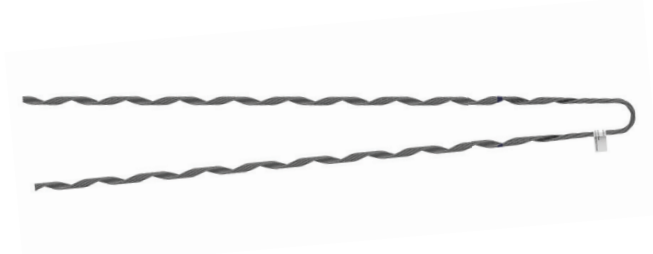




BIG-GRIP DEAD-END

INSTALLATION INSTRUCTIONS

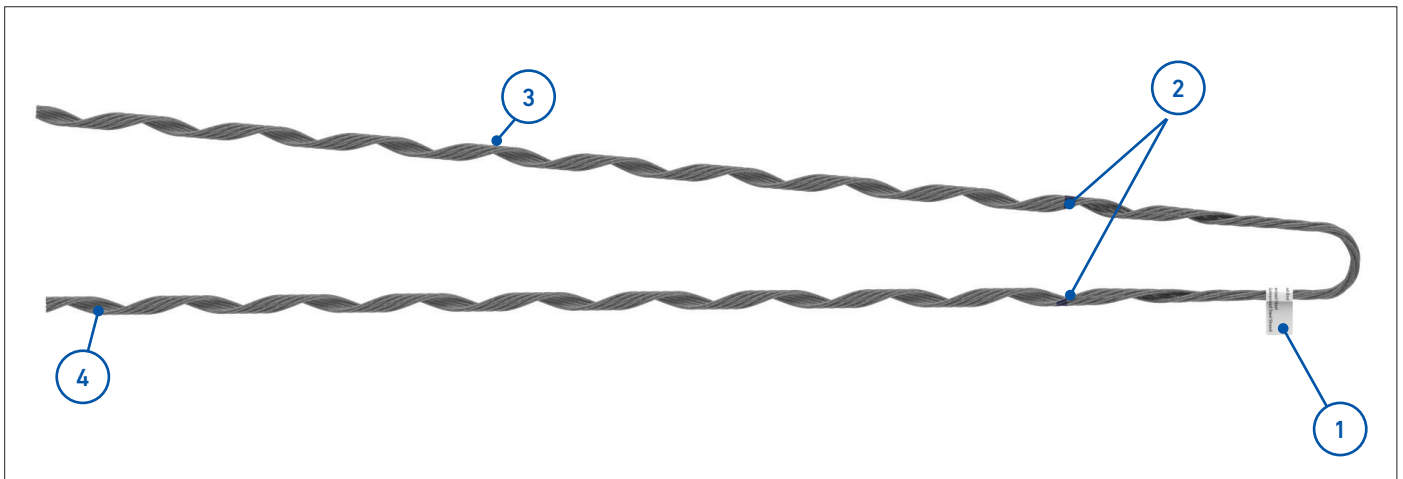


IMPORTANT SAFETY INFORMATION

READ AND COMPLETELY UNDERSTAND ALL INSTRUCTIONS BEFORE INSTALLING PRODUCT. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN PERSONAL INJURY OR DEATH.

This product is intended for use by trained technicians only. This product should not be used by anyone who is not familiar with and not trained to use it. When working in the area of energized lines, extra care should be taken to prevent accidental electrical contact. Be sure to wear proper safety equipment per your company protocol. These instructions are not intended to supersede any company construction or safety standards. These instructions are offered only to illustrate safe installation for the individual. PLP products are intended for the specified application only. Do not modify this product under any circumstances. Do not reuse or reinstall any PLP product unless that capability is expressly indicated in the product's Installation Instructions. For proper performance and personal safety, be sure to select the proper PLP product before installation. PLP products are precision devices. To ensure proper performance, they should be stored in cartons under cover and handled carefully.

PACKAGE COMPONENTS



1. Identification Tag
2. Color Code and Crossover Marks
3. Long Leg
4. Short Leg

⚠ WARNING

PLP Products are not designed or tested for uses other than those set forth herein. This includes, but is not limited to, rope/challenge courses, aerial adventures, canopy tours, and zip line applications. If PLP Products are used in such applications, they may be subjected to forces and stresses for which they are not designed, and which could result in **SERIOUS INJURY OR DEATH**.

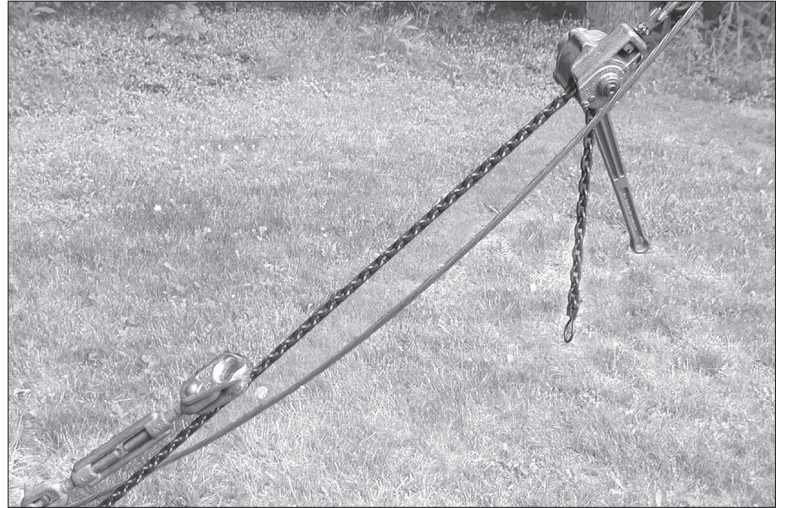
INSTALLATION GUIDELINES

CAUTION

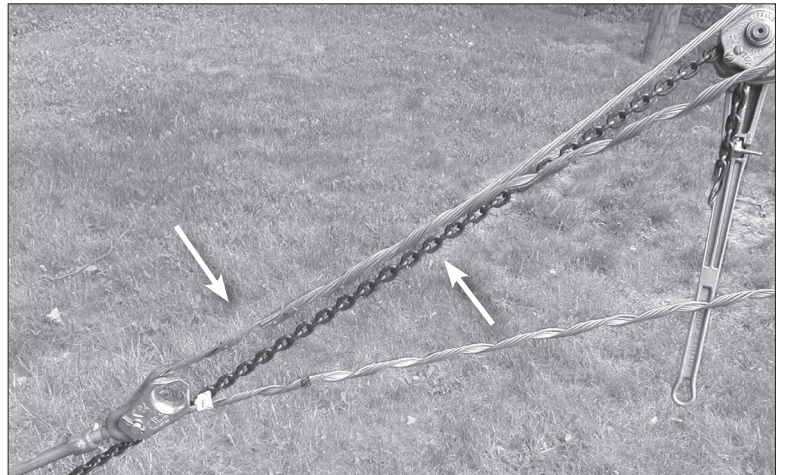
Big-Grip Dead-Ends must not be used as tools; for example, come-alongs or pulling-in grips.

1. PLP Big-Grip Dead-Ends are precision devices. To ensure a tight assembly, they should be handled carefully. To prevent distortion and damage they should be installed as illustrated.
2. Big-Grip Dead-Ends provide a mechanical termination only for the guy strand. Separate clamps and cable should be employed for grounding the strand or for any other electrical connectivity requirements.
3. Big-Grip Dead-Ends should be stored in cartons under cover until used. Shelf storage is recommended.
4. Care should be taken to avoid gouging or damaging the corrosion preventative material.
5. Big-Grip Dead-Ends should be used only on the size and type of strand for which they are designed.
6. Big-Grip Dead-Ends must have the same lay directions as the strand to which they are applied.
7. Big-Grip Dead-Ends should not be used on hardware which allows the strand to rotate or spin about its axis, such as a swivel.
8. Big-Grip Dead-Ends should not be applied with tools. They should be applied by hand. However, a screw driver may be used as an aid in splitting the legs as shown in Step 3 inset.
9. When splitting the legs, do not make more than two subsets (split sections) from each leg.
10. After original installation, Big-Grip Dead-Ends may be removed and reapplied two times, if necessary, for the purpose of retensioning guys. If removal is necessary after a Big-Grip Dead-End has been installed for a period greater than 3 months, it should be replaced with a new one.
11. Big-Grip Dead-Ends are designed to be applied over smoothly contoured hardware. The dimensions of this hardware for various sizes of Big-Grip Dead-Ends are listed in Table 1. Heavy-Duty-Type Cable Thimbles, if used can collapse when guy tensions are high. If thimbles are used in the loop of the Big-Grip Dead-End, a large pin is recommended to fill the loop of the thimble to prevent distortion. The collapsing strength of the thimble and the proper pin size should be obtained from the thimble manufacturer. (Refer to Table 1.)
12. The grip must be seated completely in the proper groove of the mating hardware to assure the wires of the loop don't lie across a ridge that may be present in the hardware. If in doubt about fittings or applications, contact your factory representative.

- 1 Pretension the guy.



- 2 Insert the dead-end through the fitting and wrap the first leg on at least 2-3 pitches.



- 3 After 2-3 pitches are installed, the legs can be split to ease installation, particularly on 7/8" and larger Big-Grip Dead-Ends.



- 4 Align the crossover marks and install the second leg until 2-3 pitches are installed. Then split the legs to ease the installation as in Step 3.



- 5 Now complete the application of the dead-end by wrapping each smaller split off subset one section at a time, making sure to install the short leg first. (This method allows the ends to be snapped into place more easily.)



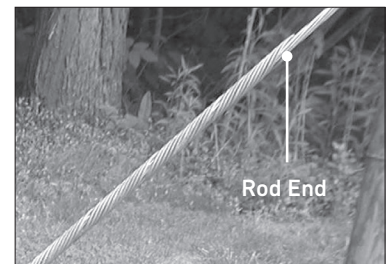
- 6 PLP recommends that the strand be cut at the crossover mark and the end buried at this crossover point.



- 7 For grounding purposes, the strand can extend through the loop to be bonded to the hardware or structure. **An unbonded tail could result in peel-out.**

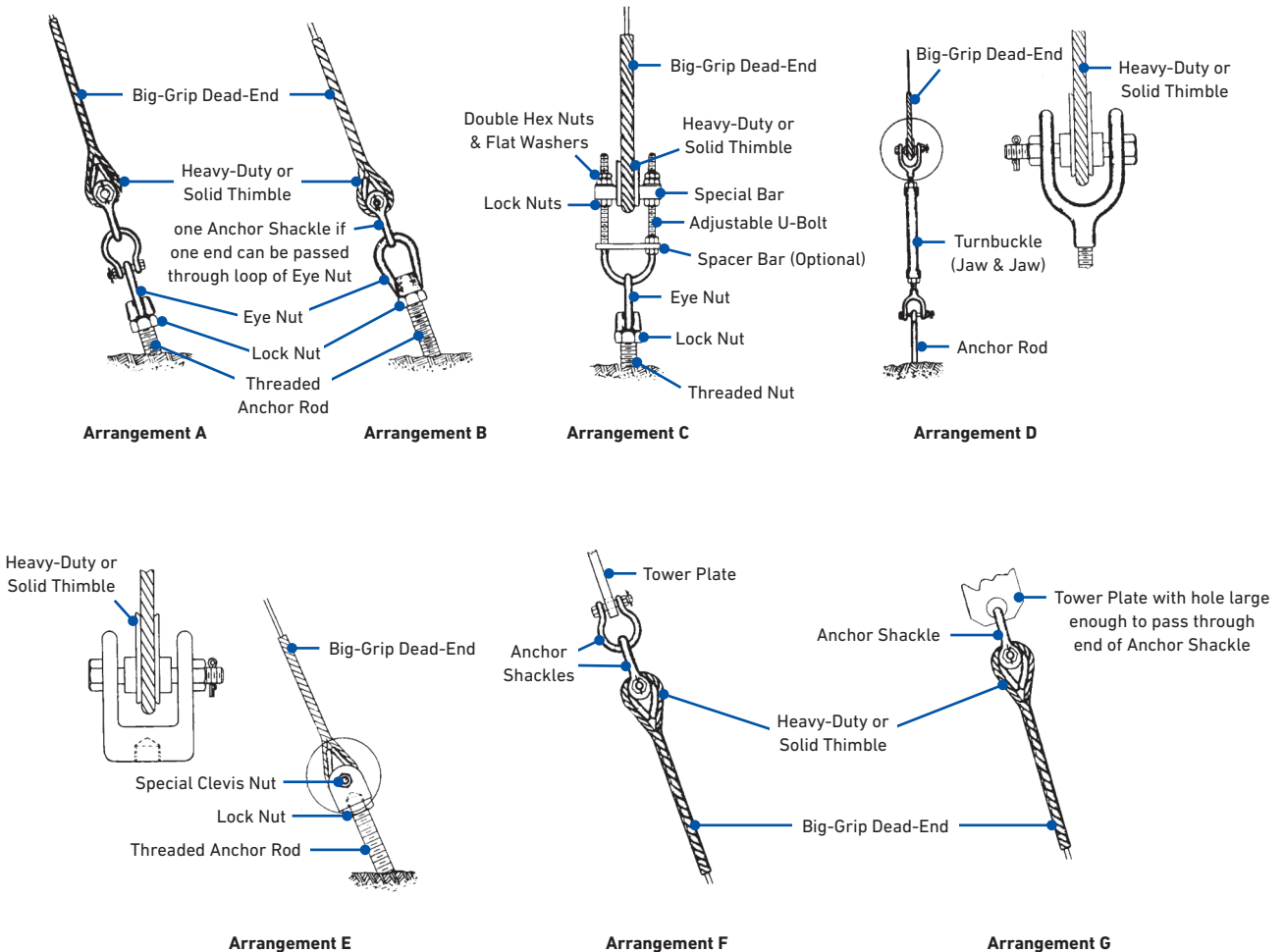


- 8 A completed application is shown to the right (Be sure that all rod ends are snapped into place).



APPENDIX: ARTICULATED HARDWARE RECOMMENDED FOR USE WITH BIG-GRIP DEAD-ENDS

Severe dead-end abrasion can result when high velocity winds load one side of a guyed structure causing the guy on the leeward side to slack off to a low tension. These winds caused a lightly loaded dead-end to cyclically load and unload against the connecting hardware and can ultimately result in damaging abrasion. In order to keep the guys from going slack during high wind loading, we recommend that guy tensions be maintained at a minimum of 10% of the strand's published rated breaking strength. Also recommended is the inclusion of articulated hardware at the Big-Grip Dead-End attachment. The articulated hardware illustrated in arrangements A, B, C, D, E, F, and G will reduce the abrasion on the dead-end hardware interface when the guy is subjected to cyclic loading conditions. The articulated hardware transfers the wear to the massive hardware which can sustain this type of cyclic motion.



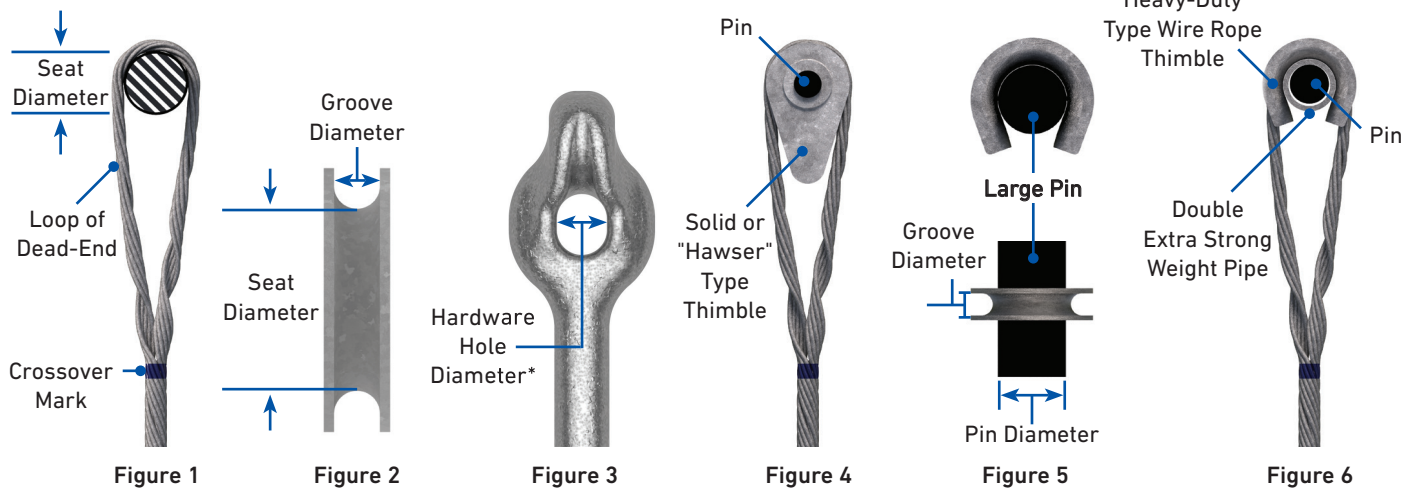
APPENDIX: BIG-GRIP DEAD-END HARDWARE ACCESSORIES DIMENSIONS

Table 1

Dead-End Diameter Range	Nominal Strand Sizes	Figure 1 & 2		Figure 2	Figure 3	Heavy-Duty Thimble Size	Figure 4 & 5		Figure 6		
		Seat Dimensions		Minimum Groove Diameter	Minimum Hardware Hole Diameter*		Pin Diameter		Double Extra-Strength Weight Pipe		
		Minimum	Maximum				Minimum	Maximum	Nominal Size	O.D.	I.D.
0.475 - 0.515	1/2	1-3/8	2-3/8	9/16	3/4	5/8	1	1-5/8	1-1/4	1.66	0.896
0.516 - 0.570	9/16	1-1/2	2-5/8	5/8	15/16	5/8	1-1/8	1-5/8	1-1/4	1.66	0.896
0.571 - 0.635	5/8	2	2-5/8	3/4	1	3/4	1-1/2	1-7/8	1-1/4	1.66	0.896
0.636 - 0.772	3/4	2-1/2	3-1/8	7/8	1-3/16	7/8	1-7/8	2-1/8	1-1/2	1.9	1.1
0.773 - 0.868		2-1/2	3-5/8	1	1-3/8	1	2	2-3/8	2	2.375	1.503
0.869 - 1.024	7/8 1	3	4-1/8	1	1-3/8	1-1/8 - 1-1/4	2-3/8	2-3/4	2	2.375	1.503
1.025 - 1.27		3-1/2	5-1/8	1-3/8	1-3/4	1-1/4 - 1-3/8	2-3/4	3-1/4	2-1/2	2.875	1.771
1.30		4	5-1/8	1-3/8	1-15/16	1-3/8 - 1-1/2	2-7/8	3-3/8	2-1/2	2.875	1.771

*Depending on geometric shape of the hole, the legs of Big-Grip Dead-Ends may insert into hole diameter less than specified.

ATTACHMENT HARDWARE







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