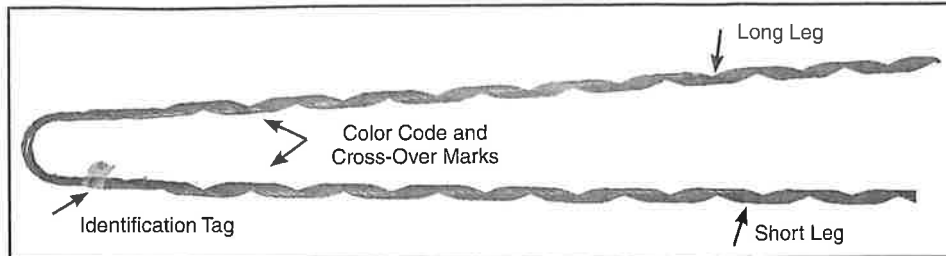




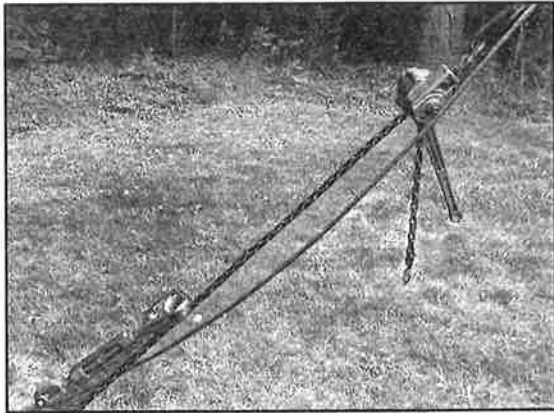
## BIG-GRIP Dead-end

Be sure to read and completely understand this procedure before applying product.  
Be sure to select the proper size PREFORMED™ product before application.



### Nomenclature

**Step #1** Pretension the guy.

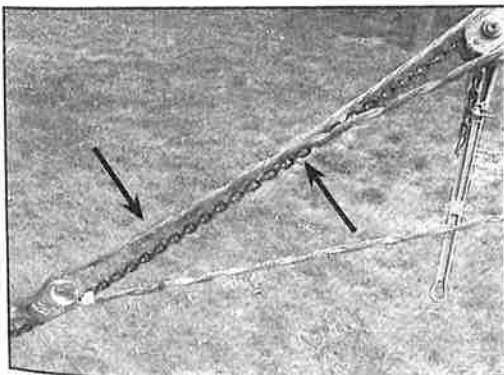


**Step #3** After 2-3 pitches are installed, the legs can be split to ease the installation.

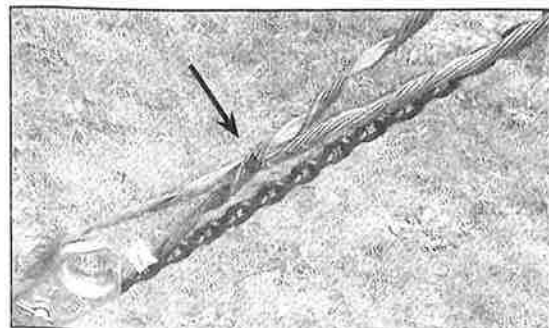


**Step #2** Insert the dead-end through the fitting and wrap the first leg on at least 2-3 pitches.

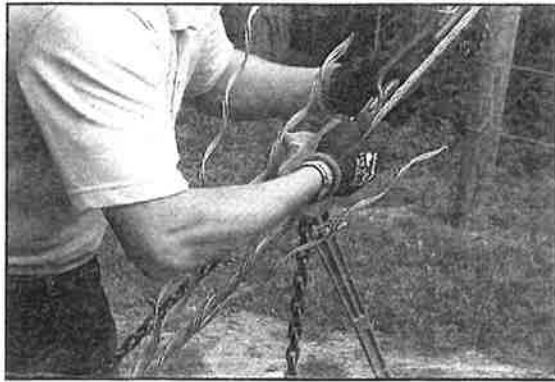
**NOTE:** For 7/8" and larger Big-Grips, the legs can be split to the cross-over mark to ease installation.



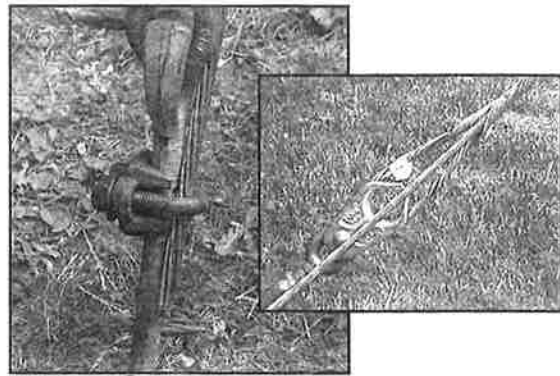
**Step #4** Align the cross-over marks and install the second leg until 2-3 pitches are installed. Then split the legs to ease the installation.



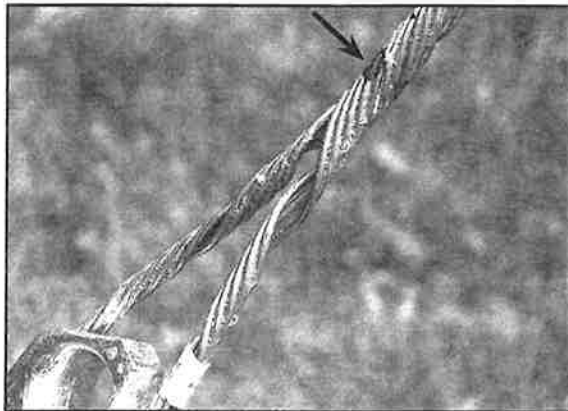
**Step #5** Now complete the application of the dead-end, one section at a time, applying the short leg first. (This method allows the ends to be snapped into place more easily.)



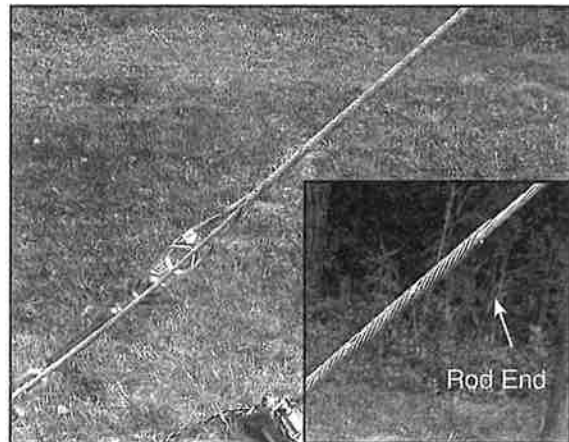
**Step #7** For grounding purposes, the strand can extend through the loop, to be bonded to the hardware or structure. **An unbonded tail could result in peel-out.**



**Step #6** PLP® recommends that the strand be cut at the cross-over mark and the end buried at this cross-over point.



**Step #8** Below is a completed application. (Be sure that all rod ends are snapped into place.)

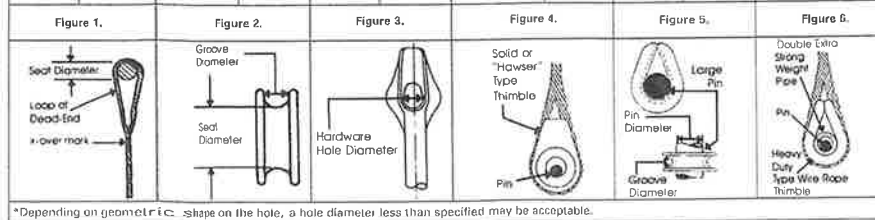


## GENERAL NOTES

1. PREFORMED Big-Grip Dead-ends are precision devices. To insure 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 direction 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 #2 inset.
9. When splitting the legs, do not make more than two subsets (split sections) from each leg.
10. CAUTION: Big-Grip Dead-ends must not be used as tools; for example, come-alongs or pulling-in grips.
11. 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.
12. 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.)
13. 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.

**HARDWARE ACCESSORIES DIMENSIONS  
TABLE 1**

Strand Diameter (Inches)	Nominal Strand (Inches)	Seat Dimensions (Inches)		Minimum Groove Diameter (Inches)	Minimum Hardware Hole Diameter (Inches)	Thimble Size (Inches)	Pin Diameters (Inches)		Double Extra Strong Weight Pipe (Inches)		
		Min.	Max.				Min.	Max.	Nominal Size	O.D.	I.D.
.174-.203	3/16	1	*(2-1/2) 1-3/4	1/4	3/8	7/16-3/8	5/8	1	3/4	1.050	.814
.204-.230	7/32	1-1/8	*(2-1/2) 1-3/4	5/16	3/8	7/16-3/8	5/8	1	3/4	1.050	.814
.231-.259	1/4	1-1/8	*(2-1/2) 1-3/4	5/16	7/16	1/2	1	1-3/8	1	1.315	.815
.280-.291	9/32	1-1/8	*(2-1/2) 1-3/4	3/8	1/2	1/2	1	1-3/8	1	1.315	.815
.292-.336	5/16	1-1/4	*(2-1/2) 1-3/4	3/8	9/16	1/2	1	1-3/8	1	1.315	.815
.337-.394	3/8	1-3/8	*(2-1/2) 1-3/4	7/16	5/8	1/2	1	1-3/8	1	1.315	.815
.395-.426	0	1-3/8	*(2-1/2) 2	1/2	11/16	1/2	1	1-3/8	1	1.315	.815
.427-.474	7/16	1-3/8	2-3/8	1/2	11/16	1/2	1	1-3/8	1	1.315	.815
.475-.515	1/2	1-3/8	2-3/8	9/16	3/4	5/8	1	1-5/8	1-1/4	1.66	.896
.516-.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	.896
.571-.635	5/8	2	2-5/8	3/4	1	3/4	1-1/2	1-7/8	1-1/4	1.66	.896
.636-.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
.773-.868	-	2-1/2	3-5/8	1	1-3/8	1	2	2-3/8	2	2.375	1.503
.869-1.024	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



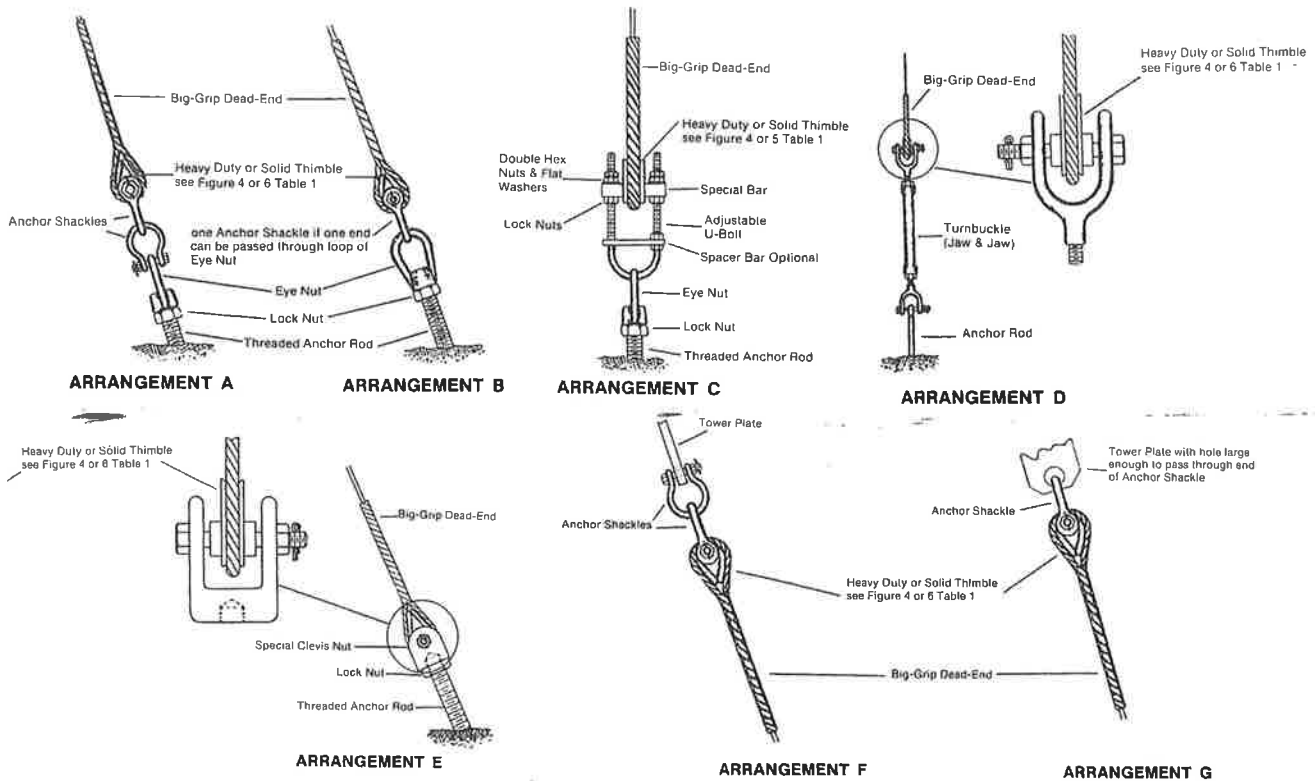
\*Depending on geometric shape on the hole, a hole diameter less than specified may be acceptable.

If thimbles are used, only Heavy-Duty-Type Cable Thimbles are recommended. (See General Note 11)  
 \*( ) Dimensions listed in parenthesis indicate Big-Grip Dead-ends that are applied at the second cross-over mark.

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 cause 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.

### ARTICULATED HARDWARE RECOMMENDED FOR USE WITH BIG-GRIP DEAD-ENDS



### SAFETY CONSIDERATIONS

This application procedure is not intended to supersede any company construction or safety standards. This procedure is offered only to illustrate safe application for the individual. **FAILURE TO FOLLOW THESE PROCEDURES MAY RESULT IN PERSONAL INJURY OR DEATH.**

This product may be removed and reinstalled during the initial installation if it is in good condition. After extended service life, it is recommended the product not be reused once removed from service.

**Do not modify this product under any circumstances.**

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.

For proper performance and personal safety, be sure to select the proper size PREFORMED™ product before application.

PREFORMED products are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.



# PREFORMED LINE PRODUCTS

P.O. Box 91129, Cleveland, Ohio 44101 • 440.461.5200 • www.preformed.com • e-mail: inquiries@preformed.com

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