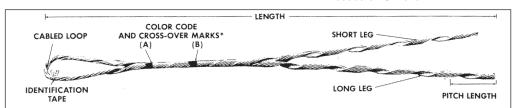
## GUY-GRIP® Dead-end

#### NOMENCLATURE

Please visit our web site at www.preformed.com for additional literature.GUY-GRIP® Dead-end Application Procedure - SP2045



#### **Cross-over Marks:**

- (A) Indicate starting point for application on smaller diameter fittings.
- (B) Indicates alternate starting point for application on larger diameter fittings.

Cabled Loop: Furnished as standard, all sizes.

Pitch Length: One complete wrap.

**Color Code and Length:** Assists in identifying the strand size, corresponding to tabular information appearing on catalog pages.

Identification Tape: Shows catalog number, nominal sizes.

**Short Leg-Long Leg:** Identifies rods belonging to each leg, after application. During application, the short leg should be applied first.

#### GENERAL INFORMATION

GUY-GRIP Dead-ends are intended for use on single wood poles associated with distribution construction.

GUY-GRIP Dead-ends were not designed or tested for use on overhead shield wires and not intended for that application.

Refer to Big-Grip Dead-end, an alternate product recommended for guying transmission construction, or tower and antenna applications.

Refer to the Installation Tools section for the PREFORMED™ Pulling Eye, designed to assist application at the anchor.

**RATED HOLDING STRENGTH:** GUY-GRIP Dead-ends are rated at 100% of the strand's published rated breaking strength.

MATERIAL SELECTION: GUY-GRIP Dead-ends are made of the same basic material as the strand to which they are applied. This pertains to galvanized, \*Bezinal®, \*\*Copperweld®, Aluminum clad steel, stainless Type 302, and stainless Type 316. Any of these materials can be selected from the catalog tables. The recommended types of strand are also indicated.

**TAPPING:** GUY-GRIP Dead-ends are mechanical devices not designed as current transfer connectors. Consequently,

tapping is not recommended over or through the GUY-GRIP Dead-end.

**APPLICATION-INSPECTION:** Within the first 3 months after initial application, GUY-GRIP Dead-ends may be removed and reapplied two times after initial application for the purpose of retensioning the guy. After 3 months, a new dead-end should be used any time removal is required.

GUY-GRIP Dead-ends should be used on hardware that is held in a fixed position; the fitting should not be allowed to rotate or spin about the axis of the strand. They should not be used as tools, that is, come-alongs, pulling-in grips, etc.

Lay direction of both the GUY-GRIP Dead-ends and the strand should be the same. Most strand is left-hand lay.

**STRAND TAIL:** For appearance and safety the strand tail should be cut as close as convenient to the crossover mark and buried inside the crossover mark if possible. If desired, the strand tail can, instead, extend through the loop for grounding purposes. Any tail over 2" or 3" should be restrained and not permitted to rotate during loading of the guy.

#### SAFETY CONSIDERATIONS

- This product is intended for a single (one-time, permanent) use and for the specified application, although it may be reapplied twice for retensioning within 90 days of initial installation. CAUTION: DO NOT MODIFY OR REUSETHIS PRODUCT AFTER 90 DAYS UNDER ANY CIRCUMSTANCES.
- 2. This product **SHOULD NOT** be used as a tool; that is as a come-along, pulling in grips, temporary bracing, etc.
- This product is intended for use by trained craftspeople only. This product SHOULD NOT BE USED by anyone who is not familiar with and trained in the use of it.
- When working in the area of energized lines with this product, EXTRA CARE should be taken to prevent accidental electrical contact.
- For PROPER PERFORMANCE AND PERSONAL SAFETY be sure to select the proper size GUY-GRIP Dead-end before application.
- GUY-GRIP Dead-ends are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.

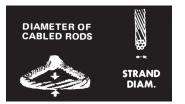
\*Bezinal is a registered trademark of the Bekaert Corporation.

<sup>\*\*</sup>Copperweld is a registered trademark of the Copperweld Co.

## GUY-GRIP® Dead-end

#### HARDWARE CONSIDERATIONS

**CABLED LOOP:** Anchor eyes and other fittings need groove diameters only slightly larger than the strand because the diameter of the cabled rods of GUY-GRIP Dead-ends approximates strand diameter. Cabled loops are designed for a variety of fittings with dimensions shown in the table below.

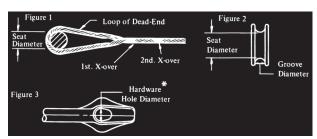


### Suggested hardware dimensions for cabled-loop GUY-GRIP Dead-ends

DEAD-END DIAMETER RANGE (INCHES)		SEA	MINIMUM GROOVE	MINIMUM HOLE				
Min.	Max.	GALVANIZED STEEL	ALUMINUM- CLAD STEEL	Min. seat diameter with dead-end at first cross-over mark.	Max. seat diameter with dead-end at first cross over mark.	Max. seat diameter with dead-end at second cross-over mark.	DIAMETER (in.) (fig. 2)	DIAMETER* (in.) (fig. 3)
.123	.143	1/8	-	3/4	1-3/4	-	3/16	1/4
.144	.173	5/32	-	3/4	1-3/4	2-1/2	1/4	5/16
.174	.203	3/16	-	1-0	1-3/4	2-1/2	1/4	3/8
.204	.230	7/32	3 #10, 4M3	1-1/8	1-3/4	2-1/2	5/16	3/8
.231	.259	1/4	7 #12, 6M	1-1/8	1-3/4	2-1/2	5/16	7/16
.260	.291	9/32	7 #11, 8M	1-1/8	1-3/4	2-1/2	3/8	1/2
.292	.336	5/16	7 #10, 10M	1-1/4	1-3/4	2-1/2	3/8	9/16
.337	.394	3/8	7 #8, 14M, 16M	1-3/8	1-3/4	2-1/2	7/16	5/8
.395	.474	7/16	7 #7, 18M, 20M	1-3/8	2-3/8	2-1/2	1/2	11/16
.475	.515	**	7 #6	1-3/8	2-3/8	-	9/16	3/4
.516	.570	**	7 #5, 25M	1-1/2	2-5/8	-	5/8	15/16

<sup>\*</sup> Depending on geometric shape of the hole, a hole diameter less than specified may be acceptable.

Guying of transmission structures and metal towers require Big-Grip Dead-ends, VARI-GRIP $^{\text{TM}}$  Dead-ends.



# ACCEPTABLE FITTINGS ANCHOR RODS THIMBLE EYE-BOLTS, -EYENUTS & EYES ANSI 54-1 54-2 54-3 54-4



#### **CAUTION:**

Hardware of this type is not normally acceptable because fatigue life of GUY-GRIP Dead-ends could be substantially reduced. Heavy-Duty-Type Cable Thimbles, if used, can collapse when guy tensions are high. If thimbles are used in the loop of the GUY-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.

<sup>\*\*</sup> Use Big-Grip Dead-ends.

# GUY-GRIP® Dead-end: Galvanized Steel

## For use on: Extra High Strength, High Strength, Siemens Martin, Utilities Grade<sup>3</sup>



B-coat									
	Strand		Units Wt./Lbs.						
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per Carton		Per Carton		Length (Inches)	Color Code
GDE-1102	3/16	7W 7W	.186 .195	100	30	20	Red		
GDE-1103	7/32	7W	.216	50	19	24	Green		
GDE-1104	1/4	3W 7W	.259 .240	50	24	25	Yellow		
GDE-1105	9/32	7W	.279	50	26	28	Blue		
GDE-1106	5/16	3W 7W 7W	.312 .312 .327	50	39	31	Black		
GDE-1107	3/8	3W 7W	.356 .360	50	51	35	Orange		
GDE-1108	7/16	7W	.435	25	40	38	Green		

	Strand			Units	Wt./Lbs.				
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per Carton		Per Carton		Length (Inches)	Color Code
GDE-2102	3/16	7W 7W	.186 .195	100	30	20	Red		
GDE-2103	7/32	7W	.216	50	19	24	Green		
GDE-2104	1/4	3W 7W	.259 .240	50	24	25	Yellow		
GDE-2105	9/32	7W	.279	50	26	28	Blue		
GDE-2106	5/16	3W 7W 7W	.312 .312 .327	50	39	31	Black		
GDE-2107	3/8	3W 7W	.356 .360	50	51	35	Orange		
GDE-2108	7/16	7W	.435	25	40	38	Green		

Left-hand lay is standard.

- (1) Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
- (2) Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard, all sizes.
- (3) Rated holding strength is 100% of published rating for all grades of galvanized strand.
- (4) Consult PLP for sizes and stranding not shown.

## GUY-GRIP® Dead-end: Bezinal®

## For use on: Bezinal Strand<sup>2</sup>

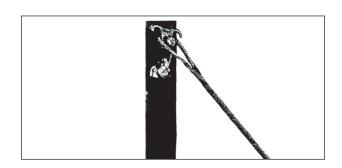
		Strand		Units	Wt./Lbs.		
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per C	arton	Length (Inches)	Color Code
BDE-9102	3/16	7W 7W	.186 .195	100	30	20	Red
BDE-9104	1/4	3W 7W	.259 .240	50	24	25	Yellow
BDE-9106	5/16	3W 7W 7W	.312 .312 .327	50	39	31	Black
BDE-9107	3/8	3W 7W	.356 .360	50	51	35	Orange
BDE-9108	7/16	7W	.435	25	41	38	Green

Left-hand lay is standard.

- (1) Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
- (2) Rating holding strength is 100% of the published rating for the strand.
- (3) Dead-ends are manufactured from Bezinal® material or common 95% ZN-5% AL-Mischmetal Alloy produced to ASTM-B750. Bezinal is a registered trademark of the Bekaert Company.

## GUY-GRIP® Dead-end: Aluminum Clad

## For use on: Aluminum Clad Steel Strand<sup>4</sup>



			Units	Wt./Lbs.		
Catalog Number	Mean Diameter (Inches)	Nominal Strand Size	Per Carton		Length (Inches)	Color Code
AWDE-4102	.174	3 # 12	100	21	18	Orange
AWDE-4108	.220 .220	4M 3 # 10	50	20	21	Green
AWDE-4110	.247 .242	3 # 9 6M	50	20	24	Yellow
AWDE-4113	.277 .272	3 # 8 8M	50	22	24	Blue
AWDE-4116	.311 .306 .306	3 # 7 10M 5/16" - 7 # 10	50	29	26	Black
AWDE-4118	.330	11.5M	50	30	26	Green
AWDE-4119	.349 .343 .343	3 # 6 12.5M 11/32" - 7 # 9	50	41	29	Yellow
AWDE-4120	.363	14M	50	53	31	Blue
AWDE-4122	.392 .385 .386	3 # 5 3/8" - 7 # 8 16M	50	55	32	Orange
AWDE-4124	.417	18M	25	37	34	Black
AWDE-4125	.433	7/16" - 7 # 7	25	40	36	Green
AWDE-4126	.444	20M	10	22	37	Yellow
AWDE-4128	.486	1/2" - 7 # 6	10	23	39	Blue
AWDE-4130	.519	25M	10	31	43	Red
AWDE-4131	.546	7 # 5	10	32	44	Yellow

Left-Hand Lay is standard.

<sup>(1)</sup> Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.

<sup>(2)</sup> Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard, all sizes.

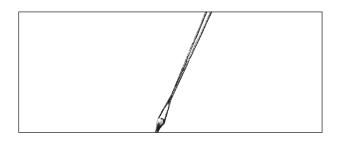
<sup>(3)</sup> Refer to General Information for material selection.

<sup>(4)</sup> Rating holding strength is 100% of the published rating for the strand.

<sup>(5)</sup> Consult PLP for sizes and stranding not shown.

# GUY-GRIP® Dead-end: Aluminized

## For use on: Aluminized Strand<sup>4</sup>



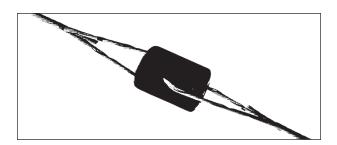
		Strand	Units	Wt./Lbs.			
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per C	arton	Length (Inches)	Color Code
AZDE-7100	3/16	7W 7W	.186 .195	100	25	18	Red
AZDE-7102	1/4	3W 7W	.259 .240	50	22	23	Yellow
AZDE-7103	9/32	7W	.279	50	27	24	Blue
AZDE-7104	5/16	3W 7W 7W	.312 .312 .327	50	37	27	Black
AZDE-7106	3/8	3W 7W	.356 .360	50	63	32	Orange
AZDE-7107	7/16	7W	.435	25	45	34	Green

Left-Hand Lay is standard.

- (1) Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
- (2) Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard, all sizes.
- (3) Refer to General Information for material selection.
- (4) Rating holding strength is 100% of the published rating for the strand.
- (5) Consult PLP for sizes and stranding not shown.

# GUY-GRIP® Dead-end: Copperweld®

# For use on: Copperweld Strand<sup>4</sup>



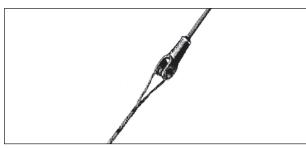
	Mean	Nominal	Units	Wt./Lbs.		
Catalog Number	Diameter (Inches)	Strand Size	Per C	arton	Length (Inches)	Color Code
CDE-8100	.164	2.2M	100	19	17	Orange
CDE-8102	.174	3 # 12	100	24	17	Red
CDE-8106	.209	4M	100	32	18	White
CDE-3101	.220	3 # 10	100	44	20	Green
CDE-3103	.247 .237	3 # 9 6M	50	24	21	Yellow
CDE-3104	.258	6M3	50	25	22	White
CDE-3106	.276 .277	8M 3 # 8	50	26	23	Blue
CDE-3109	.303 .306 .311	10M 7 # 10 - 5/16" 3 # 7"	50	34	25	Red
CDE-3112	.343 .345 .349	7 # 9 - 11/32" 12.5M 3 # 6	50	46	27	Green
CDE-3113	.360	14M	50	64	30	Blue
CDE-3115	.385 .386 .392	7 # 8 - 3/8" 16M 3 # 5	50	65	31	White
CDE-3117	.414	18M	25	46	34	Orange
CDE-3118	.438 .433	20M 7 # 7 - 7/16"	25	47	35	Yellow
CDE-3121	.486	7 # 6 - 1/2"	25	65	39	Blue
CDE-3123	.525	25M	10	37	43	Green
CDE-3124	.546	7 # 5 - 9/16"	10	38	44	Yellow

Left-Hand Lay is standard.

- (1) Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
- (2) Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard, all sizes.
- (3) Refer to General Information for material selection.
- (4) Rated holding strength is 100% of the published rating of the strand.
- (5) Consult PLP for sizes and stranding not shown.
- (6) Copperweld is a registered trademark of the Copperweld Co.

# GUY-GRIP® Dead-end: Stainless Steel

For use on: Type 302 and Type 430 Strand



	Type 302													
		Strand		Units	Wt./ Lbs.			Percent of Strands						
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per Carton		Per Carton		Per Carton		Per Carton		Length (Inches)	Color Code	Rated Breaking Strength
SDE-5101	7/32	3W 7W	.224 .216	100	30	22	Blue	100%						
SDE-5102	1/4	3W 7W	.259 .249	50	25	26	Yellow	100%						
SDE-5103	9/32	7W	.279	50	26	27	Black	90%						
SDE-5104	5/16	3W 7W	.312 .312	50	41	31	Orange	93%						
SDE-5105	3/8	3W 7W	.356 .360	50	66	37	Green	83%						

## For use on: Type 316 Strand

	Type 316							
	Strand			Units	Wt./ Lbs.			Percent of Strands
Catalog Number	Size (inches)	Construction	Mean Diameter (Inches)	Per C	Carton	Length (Inches)	Color Code	Rated Breaking Strength
SDE-6101	7/32	3W 7W	.224 .216	100	30	22	Blue	100%
SDE-6102	1/4	3W 7W	.259 .249	50	25	26	Yellow	100%
SDE-6103	9/32	7W	.279	50	26	27	Black	100%
SDE-6504*	5/16	3W 7W	.312 .312	50	41	31	Orange	100%
SDE-6105	3/8	3W 7W	.356 .360	50	66	37	Green	93%
SDE-6107	1/2	7W	.500	10	52	53	Blue	87%

<sup>\*</sup>These dead-ends utilize the open helix design.

Left-Hand Lay is standard.

- (1) Big-Grip Dead-end is recommended as an alternative product for guying multiple pole structures or metal towers associated with transmission construction.
- (2) Refer to Hardware Considerations for acceptable fittings. Cabled Loop design furnished as standard, all sizes.
- (3) Refer to General Information for material selection.
- (4) Consult PLP for sizes and stranding not shown.