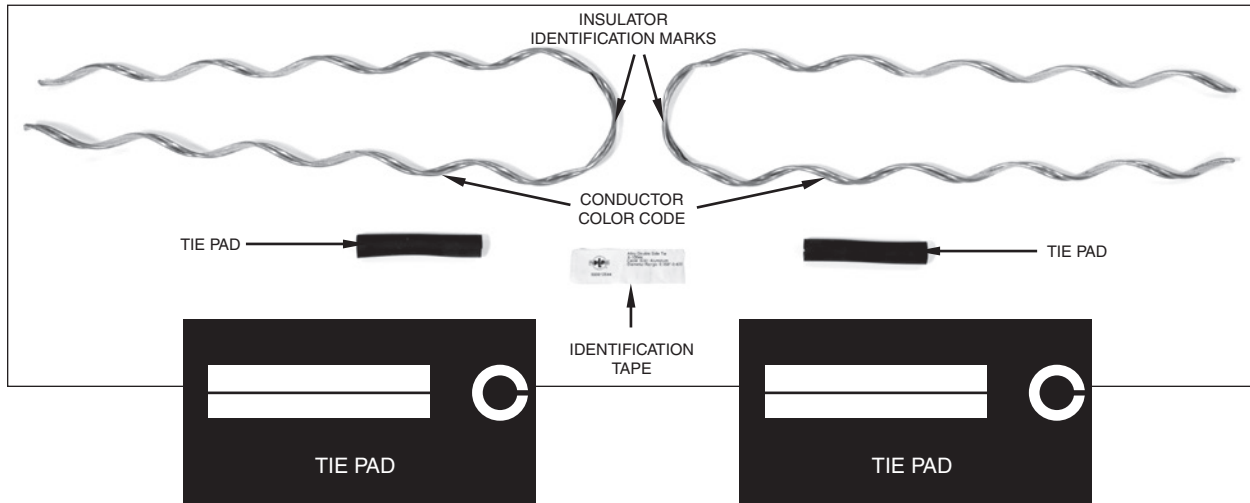




Alloy Double Side Tie

NOMENCLATURE



Tie Assembly: An Alloy Double Side Tie assembly consists of two aluminum tie components plus two tie tubes.

Tie Tube: Each Double Side Tie assembly is supplied with two elastomeric tie tubes, designed for conductor/insulator abrasion protection.

Conductor Color Code/Cross-Over Marks: Identifies proper conductor size; corresponding to tabular information appearing in this section, and designates leg cross-over location.

Insulator Identification Mark: Identifies the correct insulator headstyle by colors corresponding to information on catalog pages.

Applied Length: Describes the length of each tie component after installation, plus assists in product identification.

Identification Tape: Shows catalog number and nominal conductor sizes.

GENERAL RECOMMENDATIONS

Intended Use: Alloy Double Side Tie, manufactured of aluminum alloy wire, is designed for corrosive environments to secure conductors on double-arm construction in the side groove of interchangeable headstyle insulators. They are intended for larger line angles than top groove style ties, such as, Double-Support Ties.

LINE ANGLES GENERAL GUIDELINES: On vertically mounted insulators at double crossarms or brackets, the Alloy Double Side Tie can normally accommodate line angles of between 0° and 80°, with no more than a 40° angle at each insulator. When insulators are mounted at various degrees of cant from the vertical, various line angles may be accommodated, depending upon the actual cant of the insulators. A technical report (TM-197E) is available which describes these permissible line angles for Double Side Ties as a function of the insulator's cant.

In all cases, the conductor should rest in the preferred insulator groove, independently of the tie, so the tie is not required to force the conductor to remain in that groove. The largest practical angle a tie can accommodate depends upon limiting factors such as conductor size, tension, span lengths, sag angles, insulator style and orientation, etc. Consult PLP® for further guidance on line angle issues not covered in the above test report.

INTERCHANGEABLE Headstyle INSULATORS: Alloy Double Side Ties are designed for installation on double insulator construction in the side groove of interchangeable insulators. To insure proper fit and service life, it is recommended only insulators with uniform dimensions as described by the ANSI C 29 insulator standards be used. Consult PLP for application on nonstandard insulators.

Alloy Double Side Tie

GENERAL RECOMMENDATIONS CONTD.

ALLOY DOUBLE SIDE TIE: Alloy Double Side Ties feature an elastomeric tube which surrounds the bare conductor with a resilient cushion. This tube provides superior abrasion protection for the conductor under all types of motion, including low frequency sway oscillation and high frequency aeolian vibration. As a result, Alloy Double Side Ties provide a vastly improved method of securing conductors compared to hand ties over protective rods, since they eliminate abrasion (and the need for protective rods) rather than sacrificing outside surfaces to abrasion. For applications on jacketed conductors, the tube may be discarded.

MECHANICAL STRENGTH: The Alloy Double Side Tie is designed to provide superior mechanical strength and resiliency during conductor motion and cyclic loading conditions. Longitudinal holding strengths consistently exceed the requirements of the National Electric Safety Code. TR-956-E covers the mechanical testing of the Alloy Double Side Tie and is available upon request.

RADIO INTERFERENCE: The RIV/TVI characteristics of Double Side Ties are equivalent to those of a well made hand tie, as originally installed. The pre-contoured loop and formed legs of the Alloy Double Side Tie assures continued fit, which will provide better RIV/TVI performance than a loosened hand-tie wire.

VIBRATION DAMPERS: The Alloy Double Side Tie is designed to outperform other tie devices during conductor motion activity, such as aeolian vibration and galloping. However, on some lines the use of dampers may be required to prevent damage. Utilities that have experienced conductor motion or expect to, should consider adding dampers. Consult PLP® for general guidelines and advice concerning conductor motion and dampers. Also, consult the Motion Control section.

TAPPING: Taps should not be made directly over the legs or loop of the Alloy Double Side Tie.

CONDUCTOR COMPATIBILITY: Alloy Double Side Ties should be used only on the size, type, and lay direction for which they are designed. Use the conductor diameter to select the proper tie range for the application.

During installation and at all times, care should be taken to avoid gouging or damaging the wires of the Alloy Double Side Tie or conductor.

Double Side Ties should not be used as tools, i.e., come-alongs, pulling-grips, etc.

Consult the Double Side Tie Application Procedure for additional installation information.

When in doubt about usage of Alloy Double Side Ties, consult your PREFORMED™ Sales Representative or Preformed Line products.

SAFETY CONSIDERATIONS

1. This product is intended for a single (one-time) use and for the specified application. CAUTION: DO NOT REUSE OR MODIFY THIS PRODUCT UNDER ANY CIRCUMSTANCES.
2. 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.
3. When working in the area of energized lines with this product, EXTRA CARE should be taken to prevent accidental electrical contact.
4. For PROPER PERFORMANCE AND PERSONAL SAFETY be sure to select the proper size Alloy Double Side Tie before application.
5. Alloy Double Side Ties are precision devices. To insure proper performance, they should be stored in cartons under cover and handled carefully.

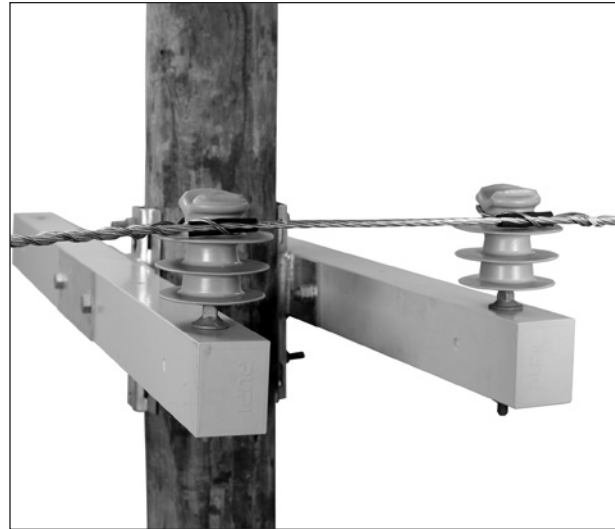


Alloy Double Side Tie

For use on:
ACSR, All-Aluminum
AWAC, Aluminum Alloy
Compacted ACSR, ACAR
C-Neck & F-Neck Interchangeable
Headstyle Insulators

Spool Insulator
ANSI 55-2 PIN
ANSI 55-3 PIN
ANSI 55-4 PIN
ANSI 55-5 PIN
ANSI 57-1 POST
ANSI 57-2 POST
ANSI 57-3 POST

2-1/4" & 2-7/8"
Neck Diam.



Catalog Number	Diameter Range		Nominal Conductor Size	Units	Wt./Lbs.	Applied Length	Insulator Identification Mark	Color Code
	Min.	Max.		Per Carton				
9/16" R. GROOVE (See Note 2)								
ADBST-0100	0.245	0.277	#4, 6/1-7/1 – #4, 7W Alum. Alloy	50	21	16	Black/Yellow	Orange
ADBST-0101	0.278	0.315	#3, 7W Alum.Alloy #2, 7W All Alum.	50	21	16	Black/Yellow	Purple
ADBST-0102	0.316	0.357	#2, 6/1, 7/1 – #2, 7W Alum. Alloy – #1, 6/1	50	21	17	Black/Yellow	Red
ADBST-0103	0.358	0.405	1/0, 7W All Alum. 1/0, 6/1 1/0, 7W Alum. Alloy	50	21	16	Black/Yellow	Yellow
ADBST-0104	0.406	0.459	2/0, 7W All Alum. 2/0, 6/1 2/0, 7W Alum. Alloy	50	21	18	Black/Yellow	Blue
ADBST-0105	0.46	0.52	3/0, 7W All Alum. 3/0, 6/1 3/0, 7W Alum. Alloy	50	36	19	Black/Yellow	Orange
ADBST-0106	0.521	0.588	4/0, 7W All Alum. 4/0, 6/1 4/0, 7W Alum. Alloy	50	36	19	Black/Yellow	Red
ADBST-0107	0.589	0.665	266.8, 37W All Alum. 266.8, 18/1	50	38	20	Black/Yellow	Purple
ADBST-0108	0.666	0.755	336.4, 18/1 336.4, 19W All Alum. 397.5, 19W, All Alum.	50	39	20	Black/Yellow	Brown
ADBST-0109	0.756	0.858	477, 19W, 37W, All Alum. 477, 18/1, 24/7, 26/7	50	39	20	Black/Yellow	Red
5/8" R. GROOVE (See Note 2)								
ADBST-0110	0.859	0.968	556.5, 26/7 636, 18/1 700, 37W, 61W, All Alum.	50	42	22	Black/Yellow	Blue
11/16" R. GROOVE (See Note 2)								
ADBST-0111	0.969	1.096	795, 37W, 61W, All Alum. 715.5, 24/7 795, 54/7"	50	44	24	Black/Yellow	Green
3/4" R. GROOVE (See Note 2)								
ADBST-0112	1.097	1.24	954, 36/1, 54/7 1033.5, 37W, 61W, All Alum	50	44	24	Black/Yellow	Yellow

EXPLANATORY NOTES:

- (1) "Diameter Range" indicates the size of conductors that utilize the same tie.
- (2) For the succeeding ranges, the insulator's side groove radius should be at least as large as shown above.
- (3) The loop of the Double Side Ties on this page can accommodate either C or F neck insulators.
- (4) Nominal Conductor size indicates one of various conductors within each range. Use the conductor diameter to select the proper tie.
- (5) AWAC is a registered trademark of the Copperweld Co.

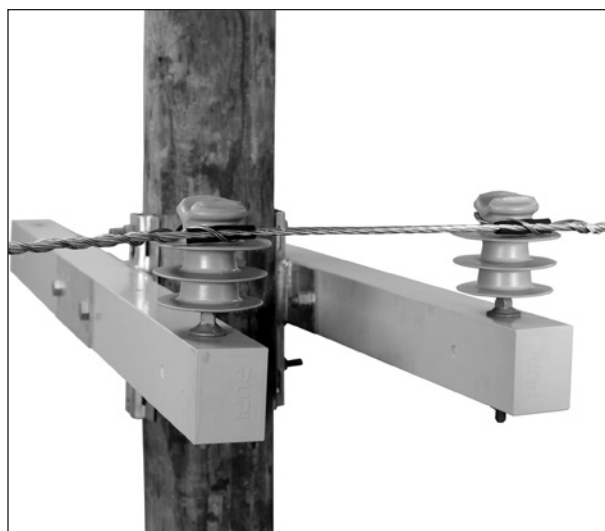
Alloy Double Side Tie

For use on:

ACSR, All-Aluminum
AWAC, Aluminum Alloy
Compacted ACSR, ACAR
J-Neck Interchangeable
Headstyle Insulators

Spool Insulator

ANSI 55-6 Single Skirt PIN **3-1/2"**
ANSI 55-7 Single Skirt PIN **Neck Diam.**
ANSI 56-1 Double Skirt PIN



Catalog Number	Diameter Range		Nominal Conductor Size	Units	Wt./Lbs.	Applied Length	Insulator Identification Mark	Color Code
	Min.	Max.		Per Carton				
9/16" R. GROOVE (See Note 2)								
ADBST-0300	0.245	0.277	#4, 6/1-7/1 – #4, 7W Alum. Alloy	50	21	19	Green	Orange
ADBST-0301	0.278	0.315	#3, 7W Alum.Alloy #2, 7W All Alum.	50	21	17	Green	Purple
ADBST-0302	0.316	0.357	#2, 6/1, 7/1 – #2, 7W Alum. Alloy – #1, 6/1	50	21	22	Green	Red
ADBST-0303	0.358	0.405	1/0, 7W All Alum. 1/0, 6/1 1/0, 7W Alum. Alloy	50	21	21	Green	Yellow
ADBST-0304	0.406	0.459	2/0, 7W All Alum. 2/0, 6/1 2/0, 7W Alum. Alloy	50	21	19	Green	Blue
ADBST-0305	0.46	0.52	3/0, 7W All Alum. 3/0, 6/1 3/0, 7W Alum. Alloy	50	36	20	Green	Orange
ADBST-0306	0.521	0.588	4/0, 7W All Alum. 4/0, 6/1 4/0, 7W Alum. Alloy	50	36	21	Green	Red
ADBST-0307	0.589	0.665	266.8, 37W All Alum. 266.8, 18/1	50	38	24	Green	Purple
ADBST-0308	0.666	0.755	336.4, 18/1 336.4, 19W All Alum. 397.5, 19W, All Alum.	50	39	25	Green	Brown
ADBST-0309	0.756	0.858	477, 19W, 37W, All Alum. 477, 18/1, 24/7, 26/7	50	39	24	Green	Red
5/8" R. GROOVE (See Note 2)								
ADBST-0310	0.859	0.968	556.5, 26/7 636, 18/1 700, 37W, 61W, All Alum.	50	42	23	Green	Blue
11/16" R. GROOVE (See Note 2)								
ADBST-0311	0.969	1.096	795, 37W, 61W, All Alum. 715.5, 24/7 795, 54/7"	50	44	23	Green	Green
3/4" R. GROOVE (See Note 2)								
ADBST-0312	1.097	1.24	954, 36/1, 54/7 1033.5, 37W, 61W, All Alum	50	44	25	Green	Yellow

EXPLANATORY NOTES:

- (1) "Diameter Range" indicates the size of conductors that utilize the same tie.
- (2) For the succeeding ranges, the insulator's side groove radius should be at least as large as shown above.
- (3) The loop of the Double Side Ties on this page can accommodate J neck insulators only. Use the conductor diameter to select the proper tie.
- (4) Nominal Conductor size indicates one of various conductors within each range.
- (5) AWAC is a registered trademark of the Copperweld Co.