

## Side Tie

### MATERIALS

**Tie** - Manufactured from aluminized steel for use on aluminum based conductors.

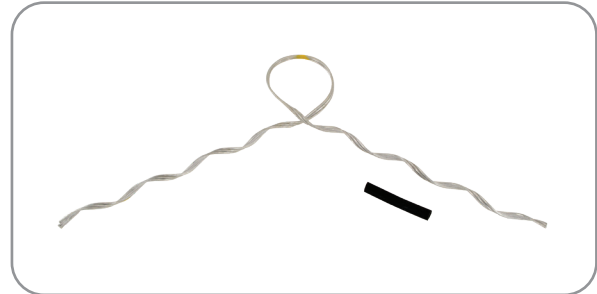
**Pad** - An elastomer tube is supplied with each Side Tie used on bare conductor. They are identified by catalog number suffix P. Side Ties without pads are used for plastic jacketed conductors. They are identified by catalog number suffix T.

**Identification tag** - Identifies catalog number, neck size, nominal conductor size, and conductor diameter range.

**Color code** - Each Side Tie has two color codes; the center code identifies the proper conductor size and the leg color code identifies the insulator neck sizes:

### Insulator identification mark (identifies insulator head size)

- Black - C Neck
- Yellow - F Neck
- Green - J Neck



### General Recommendations

To insure proper fit and service life, it is recommended that only insulators corresponding to C Neck, F Neck, or J Neck be used. The neck diameters and groove height dimensions appear in ANSI Standard for low and medium voltage pin type insulators and also at the beginning of each listing.

Side Ties are recommended as an improvement over Armor Rods secured with hand tie wire, and clamp top insulators. When installed with a pad on bare conductor, they provide superior protection against abrasion and all types of conductor motion. The pad is a resilient cushion at the point of contact between conductor and insulator.

Side Ties without pads are intended for plastic jacketed conductor but may be used to replace hand tie wire in areas where abrasion damage has not been experienced.

In the case of the smaller sizes, the completed installation should show the applied leg tucked under the corner of the Tie Pad as shown (figure 1).

On the larger size conductor, it is optional whether the legs go under or over the corner of the Tie Pad (figure 2).

Side Ties exactly match the conductor ranges of the Distribution Ties which means identical color codes.

### Maximum Size

Conductor sizes up to 1.240" O.D. can be accommodated depending on the insulator side groove radius.

### Line Angle

On horizontally mounted insulators. Side Ties are recommended for running line angles of up to 10 degrees. Larger angles can be turned when Distribution Ties are used with side ties or with pins and brackets having various degrees of cant.

### Unbalanced Loading

Under unbalanced load conditions, the Side Tie has the resiliency to permit some longitudinal displacement of the conductor over the insulator without loosening the tie or damaging the conductor.

### Radio Interference

The RIV characteristics of Side Ties are superior to those of a well made hand tie when originally installed. During service-life, the pre-contoured helix assures consistent fit which has better RIV characteristics than loosened tie wire.

### Tapping

Tapping over applied legs of the Side Tie is not recommended. Taps should be located at least 6 inches from the end of the legs.

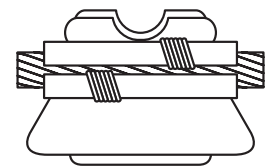


Figure 1

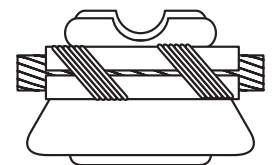


Figure 2

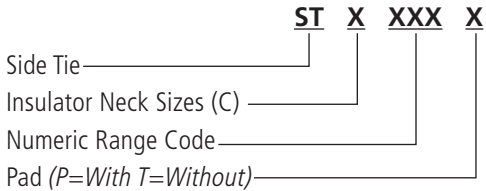
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## Side Tie

### C Neck with Pad

ACSR, All-Aluminum, Aluminum Alloy, AWAC, Compacted All-Aluminum and Compacted ACSR

#### Selection Information



2-7/4" Neck Diameter ANSI Class 55-2 and 55-3 / Groove Height Relationship 9/16" Min. 7/8" Max.

Insulator Identification Mark: Black

AFL NO.	DIA. RANGE INCHES	NOMINAL CONDUCTOR SIZE	UNITS PER CARTON	WT. PER CARTON POUNDS	APPLIED LENGTH INCHES	COLOR CODE
STC 048P	.190-.215	#6, 6/1 #4, 7W, Compacted	75	10	16	Blue
STC 055P	.216-.244	#4, 7W, All Aluminum #4, 6/1, 7/1 Compacted	75	10	17	Brown
STC 062P	.245-.277	#4, 6/1, 7/1 #4, 7W, Aluminum Alloy	75	13	19	Orange
STC 070P	.278-.315	#3, 7W, Aluminum Alloy #2, 7W, All Aluminum	75	13	21	Purple
STC 080P	.316-.357	#2, 6/1, 7/1 #2, 7W, Aluminum Alloy #1, 6/1	75	18	24	Red
STC 091P	.358-.405	1/0, 7W, All Aluminum 1/0, 6/1 1/0, 7W, Aluminum Alloy	75	18	26	Yellow
STC 103P	.406-.459	2/0, 7W, All Aluminum 2/0, 6/1 2/0, 7W, Aluminum Alloy	75	24	28	Blue
STC 117P	.460-.520	3/0, 7W, All Aluminum 3/0, 6/1 3/0, 7W, Aluminum Alloy	75	23	31	Orange
STC 132P	.521-.588	4/0, 7W, All Aluminum 4/0, 6/1 4/0, 7W, Aluminum Alloy	35	13	32	Red
STC 149P	.589-.665	266.8, 37W, All Aluminum 266.8, 18/1	35	13	23	Purple
STC 169P	.666-.755	336.4, 18/1 336.4, 37W, All Aluminum 397.5, 19W, All Aluminum 336.4, 19W, All Aluminum	35	14	25	Brown
STC 192P	.756-.855	477, 19W, 37W, All Aluminum 477, 18/1, 24/7	35	15	26	Red
STC 217P	.856-.968	556.5, 19W, All Aluminum 636, 18/1 700, 37W, 61W, All Aluminum	35	14	28	Blue
STC 246P	.969-1.096	795, 37W, 61W, All Aluminum 715.5, 24/7 795, 54/7			29	Green
STC 278P	1.097-1.240	954, 36/1, 54/7 1033.5, 37W, 61W, All Aluminum			33	Yellow

Right-Hand Lay Standard

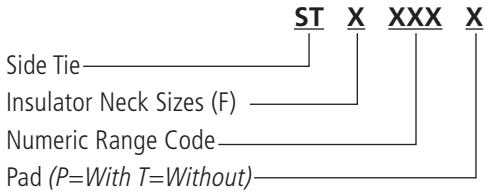
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## Side Tie

### F Neck with Pad

ACSR, All-Aluminum, Aluminum Alloy, AWAC, Compacted All-Aluminum and Compacted ACSR

### Selection Information



2-7/8" Neck Diameter ANSI Class 55-4 and 55-5 Pin Type/57-1, 57-2 and 57-3 Post Type Groove Height Relationship 9/16" Min. 7/8" Max.

Insulator Identification Mark: Yellow

AFL NO.	DIA. RANGE INCHES	NOMINAL CONDUCTOR SIZE	UNITS PER CARTON	WT. PER CARTON POUNDS	APPLIED LENGTH INCHES	COLOR CODE
STF 048P	.190-.215	#6, 6/1 #4, 7W, Compacted	75	11	16	Blue
STF 055P	.216-.244	#4, 7W, All Aluminum #4, 6/1, 7/1 Compacted	75	12	17	Brown
STF 062P	.245-.277	#4, 6/1, 7/1 #4, 7W, Aluminum Alloy	75	14	19	Orange
STF 070P	.278-.315	#3, 7W, Aluminum Alloy #2, 7W, All Aluminum	75	14	21	Purple
STF 080P	.316-.357	#2, 6/1, 7/1 #2, 7W, Aluminum Alloy #1, 6/1	75	18	24	Red
STF 091P	.358-.405	1/0, 7W, All Aluminum 1/0, 6/1 1/0, 7W, Aluminum Alloy	75	18	26	Yellow
STF 103P	.406-.459	2/0, 7W, All Aluminum 2/0, 6/1 2/0, 7W, Aluminum Alloy	75	26	28	Blue
STF 117P	.460-.520	3/0, 7W, All Aluminum 3/0, 6/1 3/0, 7W, Aluminum Alloy	75	26	30	Orange
STF 132P	.521-.588	4/0, 7W, All Aluminum 4/0, 6/1 4/0, 7W, Aluminum Alloy	35	13	32	Red
STF 149P	.589-.665	266.8, 37W, All Aluminum 266.8, 18/1	35	15	23	Purple
STF 169P	.666-.755	336.4, 18/1 336.4, 37W, All Aluminum 397.5, 19W, All Aluminum 336.4, 19W, All Aluminum	35	16	25	Brown
STF 192P	.756-.855	477, 19W, 37W, All Aluminum 477, 18/1, 24/7	35	17	26	Red
STF 217P	.856-.968	556.5, 19W, All Aluminum 636, 18/1 700, 37W, 61W, All Aluminum	35	19	28	Blue
STF 246P	.969-1.096	795, 37W, 61W, All Aluminum 715.5, 24/7 795, 54/7			29	Green
STF 278P	1.097-1.240	954, 6/1, 54/7 1033.5, 37W, 61W, All Aluminum			33	Yellow

Right-Hand Lay Standard

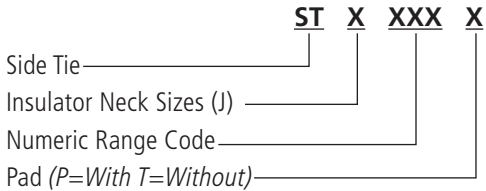
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## Side Tie

J Neck with Pad

ACSR, All-Aluminum, Aluminum Alloy, AWAC, Compacted All-Aluminum and Compacted ACSR

### Selection Information



3-1/2" Neck Diameter ANSI Class 55-6 and 55- 7 Single Skirt Pin Type / 56-1 Double Skirt Pint Type Groove Height Relationship 1/4" Min. 5/8" Max.

Insulator Identification Mark: Green

AFL NO.	DIA. RANGE INCHES	NOMINAL CONDUCTOR SIZE	UNITS PER CARTON	WT. PER CARTON POUNDS	APPLIED LENGTH INCHES	COLOR CODE
STJ 048P	.190-.215	#6, 6/1 #4, 7W, Compacted	75	11	16	Blue
STJ 055P	.216-.244	#4, 7W, All Aluminum #4, 6/1, 7/1 Compacted	75	11	17	Brown
STJ 062P	.245-.277	#4, 6/1, 7/1 #4, 7W, Aluminum Alloy	75	14	19	Orange
STJ 070P	.278-.315	#3, 7W, Aluminum Alloy #2, 7W, All Aluminum	75	15	21	Purple
STJ 080P	.316-.357	#2,6/1, 7/1 #2, 7W, Aluminum Alloy #1, 6/1	75	19	24	Red
STJ 091P	.358-.405	1/0, 7W-19W, All Aluminum 1/0, 6/1 1/0, 7W, Aluminum Alloy	75	20	26	Yellow
STJ 103P	.406-.459	2/0, 7W, All Aluminum 2/0, 6/1 2/0, 7W, Aluminum Alloy	75	29	31	Blue
STJ 117P	.460-.520	3/0, 7W, All Aluminum 3/0, 6/1 3/0, 7W, Aluminum Alloy	75	29	32	Orange
STJ 132P	.521-.588	4/0, 7W, All Aluminum 4/0, 6/1 4/0, 7W, Aluminum Alloy	35	16	34	Red
STJ 149P	.589-.665	266.8, 37W, All Aluminum 266.8, 18/1, 26/7	35	11	23	Purple
STJ 169P	.666-.755	336.4, 18/1 336.4, 37W, All Aluminum 397.5, 19W, All Aluminum 336.4, 19W, All Aluminum	35	15	25	Brown
STJ 192P	.756-.855	477, 19W, 37W, All Aluminum 477, 18/1, 24/7	35	15	26	Red
STJ 217P	.856-.968	556.5, 19W, All Aluminum 636, 18/1 700, 37W, 61W, All Aluminum	35	16	28	Blue
STJ 246P	.969-1.096	795, 37W, 61W, All Aluminum 715.5, 24/7 795, 54/7			29	Green
STJ 278P	1.097-1.240	954, 36/1, 54/7 1033.5, 37W, 61W, All Aluminum			33	Yellow

Right-Hand Lay Standard

Formed Wire