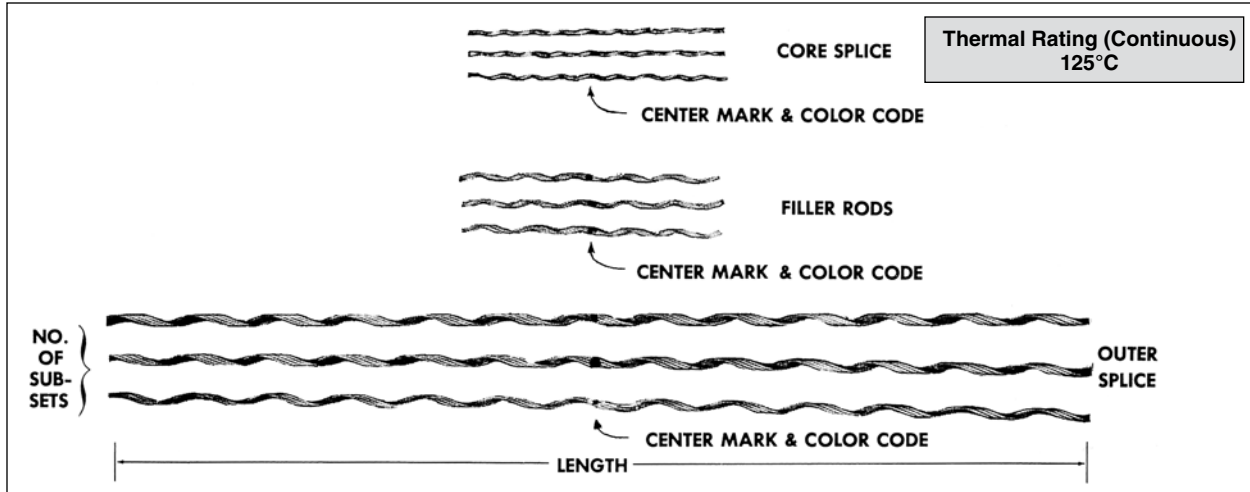




# ACSR Full Tension Splice

## NOMENCLATURE



**Sub-Sets:** Individual rods assembled into groups of two, three, or four.

**Core Splice:** Galvanized steel, sub-setted and gritted.

**Filler Rods:** Aluminum alloy, sub-setted, or single rods, not gritted. Filler Rods are not required for selected sizes corresponding to tabular information on catalog pages.

**Outer Splice:** Aluminum alloy, sub-setted and gritted.

**Center Mark:** Establishes recommended alignment of rods during application.

**Color Code and Length:** Assist in identification of conductor size, corresponding to tabular information appearing on catalog pages.

**Identification Tape:** Shows catalog number, nominal sizes.

## GENERAL RECOMMENDATIONS

**SPLICE:** ACSR FT. is designed as a three component assembly generally for Sub-EHV applications. Full Tension Splices are available for EHV applications. Contact PLP for details.



The Core Splice is applied after removal of the aluminum strands down to the steel core.



Filler rods, when required, are applied over the Core Splice to re-establish the original outside diameter of the conductor.



The Outer Splice is identical in design to the Conductor Splice (earlier in this section) except for the overall length.

**JOINING:** This splice will hold the full rated breaking strength of, and provide better conductivity than, an equal length of unspliced ACSR conductor.

**RESTORATIVE-REPAIR:** Splice: ACSR FT. will restore original conductivity and full rated breaking strength to ACSR conductor. This splice is recommended when damage to the core itself is suspected.

Other PREFORMED™ products with restorative-repair capabilities are *Aarmor Rods*, *Line Guards*, and *ARMOR-GRIP® Suspension: for Line Repair*.

**RATED HOLDING STRENGTH:** Published for individual sizes on the page following the specification page. In arriving at "Rated Hold Strength," actual results of tests on unweathered conductor are studied, and consideration is given to dimensional tolerances for the sizes encompassed.

**APPLICATION-INSPECTION:** All conductors, new or weathered, must be thoroughly scratch-brushed until bright and clean. Immediately thereafter, an industry accepted inhibitor (compatible with the product) should be applied before installing the product.

# ACSR Full Tension Splice

## GENERAL RECOMMENDATIONS (cont.)

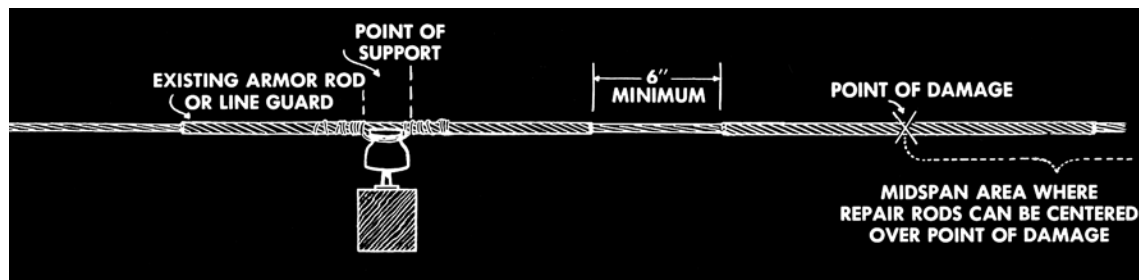


FIG. 1

When centered over the point of damage, the ends of the *Splice: ACSR F.T.* should not be positioned closer than 6 inches to existing *Armor Rods* or *Line Guards*. The restorative-repair function of this splice should be limited to damage located out in the "Midspan Area" or at the "Point of Support" (see Fig. 1).

**TAPPING:** Tapping over a *Splice: ACSR F.T.* is permissible. Whenever a tapping clamp will be installed over a splice, it is imperative that the conductor be scratch brushed and an inhibitor be used. The outer surface of the splice should be thoroughly scratch brushed to remove any oxides and glue which may be present. Inhibitor should then be applied to the area beneath the tap itself.

## DESIGN MODIFICATIONS

### Armor Splice

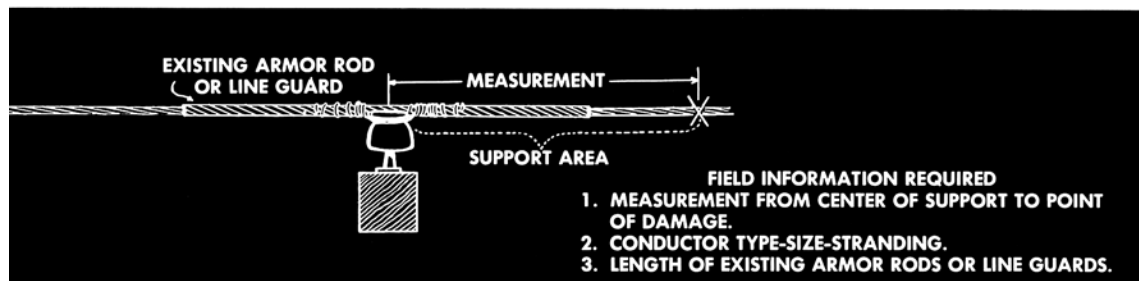


FIG. 2

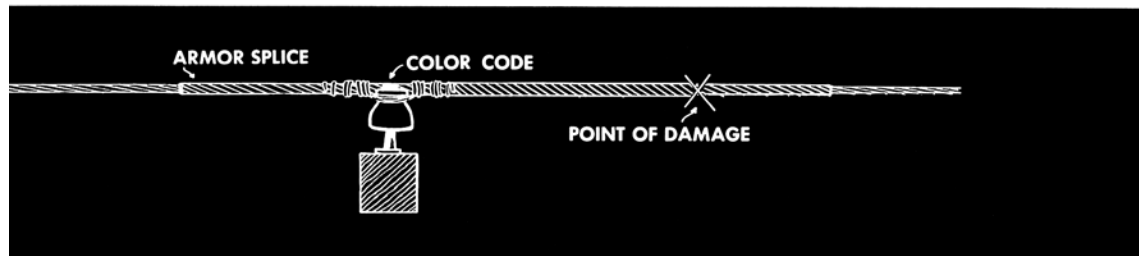


FIG. 3

The *Armor Splice* combines the features of both *Armor Rods* and *Conductor Splices*, which are described in their respective catalog sections. The *Armor Splice* should be considered when damage occurs in the "support area," or where installation would locate the ends of repair rods within 6 inches of existing rods.

Upon receipt of the field information specified in Figure 2, Preformed Line Products will furnish the correct Catalog Number.

The *Armor Splice* is custom designed to assure that when the color code mark is centered at the support point, a continuous length will extend beyond the area of damage. (See Figure 3)



# ACSR Full Tension Splice

## O.D. CALCULATIONS

Applied overall diameter computed as follows:  
 Conductor O.D. can be found in the Conductor Chart,  
 General Information Section.

Rod Diam.	.121" x 2 = .242"
Conductor Diam.	+ .398"
Total Applied O.D.	.640"



### For use on: ACSR

Catalog Number	ACSR Conductor Size Min.	Units per carton	Wt./Lbs. per carton	Outer Splice		Rod Diameter (Inches)	Color Codes		
				Length (Inches)	No. of Subsets		Core	Filler	Outer
FTS-5100	#4, 6/1	100	34	35	3	.094	Black	None	Orange
FTS-5101	#4, 7/1	100	34	35	3	.094	Black	None	Orange
FTS-5102	#2, 6/1	100	58	44	3	.102	Black	None	Red
FTS-5103	#2, 7/1	100	66	45	3	.102	Black	None	Red
FTS-5104	1/0, 6/1	50	80	52	3	.121	Black	Black	Yellow
FTS-5105	2/0, 6/1	50	65	55	3	.136	Black	Black	Blue
FTS-5108	3/0, 6/1	25	38	59	3	.146	Black	Black	Orange
FTS-5110	4/0, 6/1	25	56	67	3	.167	Black	Black	Red
FTS-5106	101.8, 12/7	25	40	65	3	.136	Black	None	Blue
FTS-5107	110.8, 12/7	25	50	69	3	.136	Black	None	Green
FTS-5109	134.6, 12/7	10	68	75	3	.167	Black	None	Purple
FTS-5111	266.8, 26/7	10	40	91	3	.182	Black	Black	Yellow
FTS-5112	336.4, 18/1	10	40	87	3	.204	Black	Black	Blue
FTS-5113	336.4, 26/7	10	65	103	3	.250	Black	Black	Green
FTS-5114	336.4, 30/7	10	70	108	3	.250	Black	Black	Orange
FTS-5115	397.5, 26/7	5	40	110	3	.250	Black	Black	Purple
FTS-5116	477, 24/7	5	40	113	3	.250	Black	Black	Blue
FTS-5117	477, 26/7	5	48	120	4	.250	Black	Black	Blue
FTS-5118	556.5, 26/7	3	44	129	3	.310	Black	Black	Green
FTS-5119	636, 24/7	3	48	132	4	.310	Black	Black	Yellow
FTS-5120	636, 26/7	3	50	134	4	.310	Black	Black	Yellow
FTS-5121	795, 45/7	3	52	153	4	.310	Black	Black	Blue
FTS-5122	795, 26/7	3	78	158	4	.365	Black	Black	Orange
FTS-5123	1,272, 45/7	3	133	203	4	.463	Black	Black	Yellow

Right-hand lay standard

**EXPLANATORY NOTES:**

- (1) ACSR Conductor Sizes should be used only with Catalog Numbers shown. Consult PLP® for sizes or strandings not shown.
- (2) Rated Holding Strengths are 100% of the published RBS for the specified conductor.