

## Splices, Automatic, ACSR, Full Tension



### 1. Scope

This standard details manufacturer requirements for full-tension, automatic splices.

This standard applies to the following Seattle City Light (SCL) stock numbers:

Stock No.	Conductor Size (AWG/kcmil)
014779	#2
650663	2/0
650665	4/0
650666	336.4
650668	397.5
014519	336.4 to 397.5

### 2. Application

Automatic splices are intended for use on AAC or ACSR conductors in overhead construction.

Stock No. 014519 is intended to transition from 336.4 AAC or ACSR to 397.5 ACSR.

### 3. Industry Standards

Automatic splices shall meet the applicable requirements of the latest revision of the following industry standard:

**ANSI C119.4**; American National Standard for Electric Connectors – Connectors for Use Between Aluminum-to-Aluminum and Aluminum-to-Copper Conductors Designed for Normal Operations at or Below 93° C and Copper-to-Copper Conductors Designed for Normal Operation at or Below 100°C

Standard Coordinator  
Curtis Lu

Standards Engineering Supervisor  
John Shipek

Division Director  
Andrew Strong

#### 4. Requirements

Automatic splices shall:

- Be made of high-strength aluminum alloy and meet the applicable requirements of ANSI C119.4.
- Be capable of developing a minimum of 90 percent of the rated strength of standard ACSR without baring the core wire.
- Be constructed so as to prevent insertion of either wire beyond the center of the splice.
- Incorporate strand guides and pilot cups or other means of ensuring that the wires can be easily inserted to full design depth.

##### 4.1 Full Tension Straight Splice

Automatic straight splices shall have tensile strength Class 1, as defined in ANSI C119.4.

Stock No.	Conductor Size (AWG/kcmil)	Color Code	Nominal Length (in)
014779	#2	Red	12
650663	2/0	Gray	18
650665	4/0	Pink	17
650666	336.4	Green	20
650668	397.5	Blue	22

##### 4.2 Full Tension, Reducing Splice

Automatic reducing splices shall have tensile strength Class 1, as defined in ANSI C119.4.

Stock No.	Conductor Size (AWG/kcmil)		Color Code	Nominal Length (in)
	End 1	End 2		
014519	397.5	336.4	–	20

#### 5. Markings

Each connector shall be clearly and indelibly marked with the following:

- Manufacturer name or symbol
- Aluminum or copper application
- Conductor range
- Catalog number

#### 6. Packaging

Splices shall be individually packaged in sealed polyethylene bags with instructions for their use either enclosed with each splice or imprinted on the bag.

Each shipping container shall be legibly marked with the following information:

- Seattle City Light purchase order number

Shipping container weight shall not exceed 50 pounds.

#### 7. Issuance

Stock Unit: EA

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## 8. Approved Manufacturers

<b>Stock No.</b>	<b>Conductor Size (AWG/kcmil)</b>	<b>Hubbell Power Systems / Fargo</b>	<b>MacLean Power Systems</b>	<b>ABB/Thomas &amp; Betts/ Blackburn</b>
014779	#2	GL404A	7652AP	ATS2
650663	2/0	GL407	7654AP	ATS1020
650665	4/0	GL409A	7656AP	ATS3040
650666	336.4	GL411	7658AP	ATS266336
650668	397.5	GL412	7659	ATS379477
014519	336.4 to 397.5	GL412411	-	-

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## 9. Sources

**EI TD-72**; Specifications for Line Connectors and Splices; 1949

**SCL Material Standard 6775.6**; "Splice, Automatic ACSR Full Tension" (canceled)

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**Wang, Quan**; SCL Standards Engineering, subject matter expert for 6501.49

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