

## Splices, Compression, Full-Tension, ACSR



### 1. Scope

This standard covers the requirements for ACSR, full-tension, compression splices.

This standard applies to the following Seattle City Light (SCL) Stock Nos.:

Stock No.	Conductor Size (kcmil)	Conductor Code Name	Stranding
659123	477	Hen	30/7
659130	795	Drake	26/7
659144	795	Mallard	30/19
659148	954	Rail	45/7
659425	300	–	22/7

### 2. Application

Full-tension compression splices join two ACSR conductors of the same size.

See Table 4a for die size.

### 3. Industry Standards

Compression 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

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#### 4. Requirements

Compression splices shall have the following attributes:

- Made of high-strength aluminum alloy
- Capable of maintaining a minimum of 95 percent of the rated strength of standard ACSR conductor without baring the core wire
- Prevent insertion of either wire beyond the center of the splice
- Factory-filled with a measured amount of oxide-inhibiting compound
- Capped ends to prevent leakage of oxide-inhibiting compound
- Include one aluminum joint and two core grips

Dimensions shall be as shown in Table 4.

**Table 4. Compression Splice Length and Die Size**

Stock No.	Conductor Size (kcmil)	Conductor Code Name	Stranding	Splice Body Length (Before Compression) (in)	Die Size
659123	477	Hen	30/7	17.6–19.8	11CD
659130	795	Drake	26/7	19.2–21.6	12CD
659144	795	Mallard	30/19	22.4–23.4	14CD (AFL)/13CD (HUB)
659148	954	Rail	45/7	20.8–23.4	13CD
659425	300	–	22/7	33.7	76AH

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#### 5. Markings

Compression splices shall be clearly and indelibly marked with the following:

- Manufacturer name or symbol
  - Conductor range
  - Catalog number
  - Die size
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#### 6. Packaging

Compression splices shall be packaged to prevent damage during shipping, handling, and storage.

Individual packages shall be legibly marked with:

- Manufacturer name
- Manufacturer part number
- Product description
- Seattle City Light stock number

Shipping containers shall be legibly marked with:

- Seattle City Light purchase order number
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#### 7. Issuance

EA

**8. Approved Manufacturers**

<b>Stock No.</b>	<b>Conductor Size (kcmil)</b>	<b>AFL (Alcoa) Part No.</b>	<b>Hubbell Part No.</b>
659123	477	CJ116	A151122
659130	795	CJ126	A1512451
659144	795	CJ146	A1511346
659148	954	CJ133	A1511350
659425	300	8076.719SP	–

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**9. Sources**

**AFL, Quick Compress Compression Joints for ACSR Conductor, CJ Series, PP-3-00760**, Revision 2, 1.20.16, 2003

**www.AFLGLOBAL.com**

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