

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 Word	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

Standards Coordinator
Quan Wang

Standards Supervisor
John Shipek

Unit Director
Andrew Strong

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	11CD
659130	795	Drake	26/7	19.2	12CD
659144	795	Mallard	30/19	22.4	14CD
659148	954	Rail	45/7	20.8	13CD
659425	300	–	22/7	33.7	76AH

5. Markings

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

- Manufacturer name or symbol
- Conductor range
- Catalog number
- Die size

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

7. Issuance

EA

8. Approved Manufacturers

Stock No.	Conductor Size (kcmil)	AFL (Alcoa) Part No.
659123	477	CJ116
659130	795	CJ126
659144	795	CJ146
659148	954	CJ133
659425	300	8076.719SP

9. Sources

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

www.AFLGLOBAL.com

Stock Catalog Page 65-1 (January 8, 2014)

Wang, Quan; SCL Standards Engineer and subject matter expert for 6501.25
(quan.wang@seattle.gov)