

Terminal Lugs, Compression



1. Scope

This standard covers the requirements for compression terminal lugs for Aluminum Conductor Steel-Reinforced (ACSR) and All Aluminum Conductor (AAC) conductors.

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

Stock No.	Conductor Size (kcmil)	Conductor Code Name	Stranding
651220	477 ACSR	Hen	30/7
	795 AAC	Arbutus	37
651222	795 ACSR	Mallard	30/19
651224	795 ACSR	Drake	26/7
	954 AAC	Goldenrod	61
651229	954 ACSR	Rail	45/7

2. Application

Terminal lugs are used to connect ACSR or AAC jumpers to the tongue of deadend compression connectors. See SCL 6501.15; "Connectors, Compression, Deadend."

Deadend tongues and terminal pads are each constructed with a 15-degree angle, which permits the terminal connector to be bolted in either the straight or the 30-degree position.

3. Industry Standards

Terminal lugs shall meet the applicable requirements of the latest revision of the following industry standards:

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

ANSI/NEMA CC1; Electric Power Connection for Substations

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4. Requirements

Terminal lugs shall be made of high-strength aluminum alloy.

Terminal lugs shall be capable of maintaining a minimum of 40 percent of the rated strength of the respective standard ACSR or AAC conductors without baring the core wire.

Lugs shall be factory-filled with a measured amount of oxide-inhibiting compound that will not affect the dielectric strength or power factor of cables insulated with butyl, cross-linked polyethylene, or ethylene-propylene rubber.

Dimensions shall be as shown in Table 4 and Figure 4.

Terminal lugs shall have a 4-hole NEMA pad as specified in NEMA CC1 figure C3.

The pad of the terminal lug shall be angled 15 degrees as shown in Figure 4.

Figure 4. Compression Terminal Lug

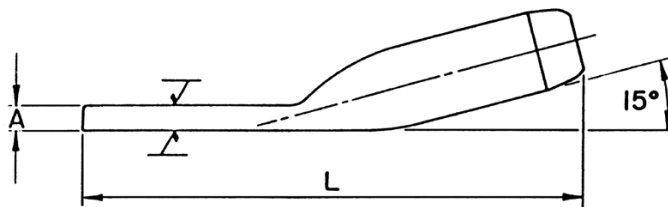


Table 4. Terminal Lug Dimensions and Die Size

Stock No.	Conductor Size (kcmil)	Conductor Code Name	Stranding	Terminal Length (L) (in)	Pad Thickness (A) (in)	Die Size
651220	477 ACSR	Hen	30/7	10.4	0.4	11CD
	795 AAC	Arbutus	37			
651222	795 ACSR	Mallard	30/19	12.0	0.6	14CD
651224	795 ACSR	Drake	26/7	11.0	0.4	12CD
	954 AAC	Goldenrod	61			
651229	954 ACSR	Rail	45/7	11.2	0.5	13CD

5. Marking

Each terminal lug shall be clearly and indelibly marked with the following:

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

6. Packaging

Terminal lugs 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

Stock No.	Conductor Size (kcmil)	AFL (formerly Alcoa)
651220	477 ACSR 795 AAC	TF11
651222	795 ACSR	TF14
651224	795 ACSR 954 AAC	TF12
651229	954 ACSR	TF13

9. Sources

AFL, Quick Compress Terminal for AAC Conductor, 15⁰, TF Series, PP-3-00759,
Revision 1, 7.18.12, 2003

AFL, Quick Compress Terminal for ACSR Conductor, 15⁰, TF Series, PP-3-00760,
Revision 3, 10.29.19, 2003

Stock Catalog Page 65-6 (March 12, 2001)

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