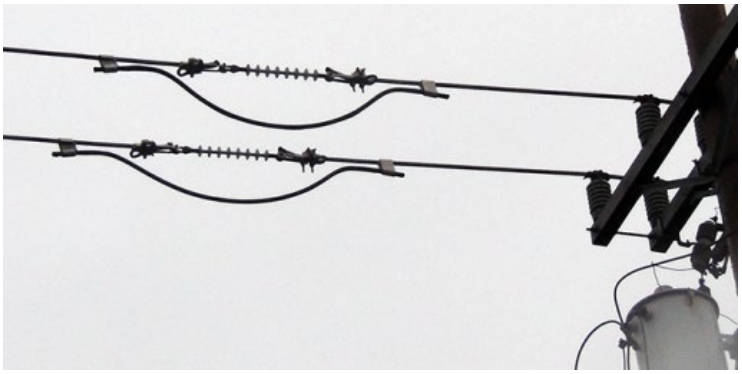
Burndy Compression Connector Wedge Taps



1. Scope

This standard covers the material requirements for Burndy compression connector wedge taps and tool accessories which are compatible with both aluminum and copper conductors.

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

		Size	
Stock No.	**Description**	**Run**	**Tap**
013610	Wedge	2/0 AWG	2/0 AWG
013611	"	4/0 AWG	4/0 AWG
013612	"	397.5 kcmil	#4 AWG
013613	"	397.5 kcmil	2/0 AWG
013614	"	397.5 kcmil	4/0 AWG
013615	"	300 kcmil ACSS - 397.5 kcmil	300 kcmil ACSS - 397.5 kcmil
013616	"	477 kcmil	500 kcmil
013617	"	477 kcmil	2/0-4/0 AWG
013618	"	4/0 AWG	#4 AWG
013619	"	954 kcmil	397.5 kcmil
013620	"	397.5 kcmil	397.5 kcmil
013621	"	4/0 AWG	#1–1/0 AWG
013622	"	#2 AWG	#2 AWG Cu
013623	"	1/0 AWG	#2 AWG Cu tap
013624	"	954 kcmil	954 kcmil
013625	"	954 kcmil	795 kcmil
013626	"	795 kcmil	795 kcmil AAC
013627	"	954 kcmil	500 kcmil Cu
013628	"	4/0 AWG	4/0 AWG
013629	Shell, blue	#2 AWG–300 kcmil	#6 AWG–300 kcmil
013630	Shell, red	#8–1/0 AWG	#8–#2 AWG
013631	Shell, yellow	266.8-1590 kcmil	#6 AWG–1590 kcmil

AMP products are outside the scope of this standard.

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2. Application

A compression connector wedge tap provides an electrical connection between a primary conductor and a tap conductor. Joined conductors may be aluminum or copper, or both. Wedge taps allow a tap to a primary conductor to power another tap conductor.

Wedge taps have a variety of applications. For example, they can be used as a single-phase or three-phase overhead primary line jumper, or to power a line switch to an underground termination pole.

Wedge taps are removable, which allows sections of the line to be isolated and de-energized if necessary.

SCL uses both Burndy and AMP compression connector systems. A system consists of tools, wedges and shells (or shot). The third letter in the manufacturer catalog number identifies the shell color that is required to install the connector.

The tools for each system are supplied by the Tool Room. Both tools can be used with both wedges; however, shells are not interchangeable. Table 2 describes the interchangeability between the two systems.

Table 2. Compression Connector System Compatibility Matrix

Tool	Burndy Wedge	Burndy Shell	AMP Wedge	AMP Shell
AMP	YES	NO	YES	YES
Burndy	YES	YES	YES	NO

3. Industry Standards

Wedge taps shall meet the requirements of the following industry standards:

ANSI C119.4; Electric Connectors—Connectors for Use Between Aluminum-to-Aluminum and Aluminum-to-Copper Bare Overhead Conductors

ASTM B117-73; Salt Spray and Salt Fog Testing

4. Requirements

Wedge taps shall be compatible with both aluminum and copper conductors.

Wedge taps shall be manufactured from extruded heat-treated aluminum.

Wedge taps shall be impact shaped to ensure spring loading meets high temperature rating ANSI C119.4 Class 3, NEMA CC3 1973 Class AA, 500 heat cycles.

Wedge taps shall be color coded as well as ink-stamped with commonly used run and tap size information to assist with identification.

Wedge taps shall be prefilled with a high temperature antioxidant inhibitor.

A chamfer shall be machined into the end of the run connector groove (which is always larger than the tap) for visual and tactile identification and to aid in proper placement.

5. Packaging

Wedge taps shall be packaged individually in plastic bags. A label shall be attached to the outside of each bag that details the following:

- Manufacturer name and symbol
- Wire size and range of each wedge tap
- Manufacturer catalog number
- Date of manufacture
- SCL stock number

6. Issuance

Stock unit: EA

7. Approved Manufacturers

All wedge taps are aluminum C-type taps unless otherwise stated.

		Size		
Stock No.	**Description**	**Run**	**Tap**	**Burndy Catalog No.**
013610	Wedge	2/0 AWG	2/0 AWG	WCB11
013611	"	4/0 AWG	4/0 AWG	WCB20
013612	"	397.5 kcmil	#4 AWG	WCY49
013613	"	397.5 kcmil	2/0 AWG	WCY52
013614	"	397.5 kcmil	4/0 AWG	WCY54
013615	"	300 kcmil ACSS - 397.5 kcmil	300 kcmil ACSS - 397.5 kcmil	WCY56
013616	"	477 kcmil	500 kcmil	WCY61
013617	"	477 kcmil	2/0-4/0 AWG	WCY64
013618	"	4/0 AWG	#4 AWG	WCB16
013619	"	954 kcmil	397.5 kcmil	WCY94
013620	"	397.5 kcmil	397.5 kcmil	WCY62
013621	"	4/0 AWG	#1–1/0 AWG	WCB17
013622	"	#2 AWG	#2 AWG Cu	WCB10
013623	"	1/0 AWG	#2 AWG Cu tap	WCR29
013624	"	954 kcmil	954 kcmil	WCY88
013625	"	954 kcmil	795 kcmil	WCY89
013626	"	795 kcmil	795 kcmil AAC	WCY90
013627	"	954 kcmil	500 kcmil Cu	WCY93
013628	"	4/0 AWG	4/0 AWG	WCB40C40
013629	Shell, blue	#2 AWG–300 kcmil	#6 AWG–300 kcmil	WPBBNB0
013630	Shell, red	#8–1/0 AWG	#8–#2 AWG	WPBRNB0
013631	Shell, yellow	266.8-1590 kcmil	#6 AWG–1590 kcmil	WPBYNB0

8. Sources

Tilley, Kathy; SCL Electrical Engineering Support Specialist and originator of SCL 6774.31

www.burndy.com