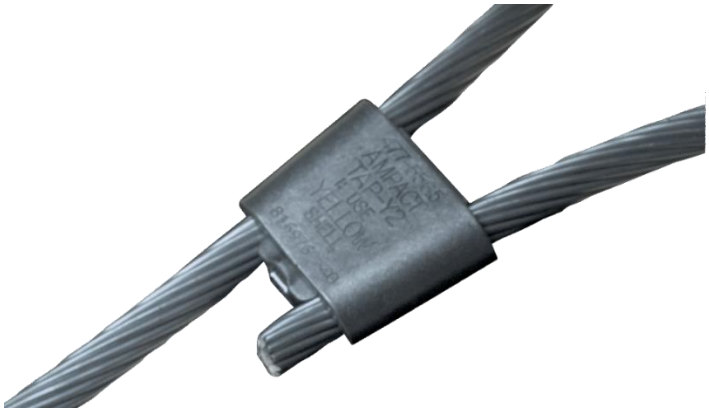
AMPACT Compression Connector Wedge Taps and Shells



1. Scope

This standard covers the material requirements for AMPACT compression connector wedge taps and shells. Shells are also referred to as shot.

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

Stock No.	Description
651101	Wedge, 397.5 kcmil run to 397.5 kcmil tap
750010	Shell, blue, to install and remove 2/0 to 4/0
750012	Shell, red, to install and remove #14 AWG – 1/0
750015	Shell, yellow, to install and remove 336.4
750016	Shell, white, to install and remove #8 AWG – 1/0

Burndy products are outside the scope of this standard.

2. Application

Compression connector wedge taps provide 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 AMPACT and Burndy compression connector systems. A system consists of tools, wedges and shells (or shot). 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	AMPAC T Wedge	AMPAC T Shell
AMPACT	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 Base Overhead Connectors

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 identification
- Wire size and range
- Manufacturer catalog number
- Date of manufacture
- SCL stock number

6. Issuance

Stock Unit: EA

7. Approved Manufacturers

Stock No.	Description	AMPACT Catalog No.
651101	Wedge, 397.5 kcmil run to 397.5 kcmil tap	166020314
750010	Shell, blue, to install and remove 2/0 to 4/0	69338-1
750012	Shell, red, to install and remove #14 AWG – 1/0	69338-2
750015	Shell, yellow, to install and remove 336.4	69338-4
750016	Shell, white, to install and remove #8 AWG – 1/0	69338-5

8. Sources

SCL Material Standard 6774.31; "Burndy Compression Connector Wedge Taps"

TE Connectivity AMPACT Taps, Stirrups, and Application Tooling, Customer Manual 409-2106, 06 OCT 14 Rev T

Tilley, Kathy; SCL Electrical Engineering support specialist and originator of 6774.33 (kathy.tilley@sattle.gov)

Wang, Quan; SCL Electrical Engineer and subject matter expert for 6774.33 (quan.wang@seattle.gov)

www.te.com