

Wire, Copper-Clad Steel, Coated



1. Scope

This standard covers the requirements for coated, round, copper-clad steel wire.
This standard applies to Seattle City Light (SCL) Stock No. 012702.

2. Application

Wire is used to fabricate pole grounds and in other applications where theft is a concern. Unlike solid copper wire, conductor is very difficult to cut and has little value as salvage.

In 2013, this standard was revised to require the wire's outer surface be treated to resemble steel. The SCL stock number remained the same.

One half second (30 cycle) fusing current is approximately 5,650 amperes.

Refer to ASTM B910 for tensile strength and resistance per unit length values.

3. Industry Standards

Wire shall meet the applicable requirements of the following industry standards:

ASTM B910-2007; Standard Specification for Annealed Copper-Clad Steel Wire

NEMA WC-26; Binational Wire and Cable Packaging Standard

4. Requirements

Wire shall meet the requirements of ASTM B910.

Wire shall not be used for redraw.

The outer surface of wire shall be treated to resemble steel.

Table 4. Wire Requirements

Size	#4 AWG, solid
Temper	Annealed
Diameter	
Minimum (in)	0.2012
Nominal (in)	0.2043
Maximum (in)	0.2073
Conductivity, % IACS, nominal	40

5. Marking

Each standard package shall be legibly marked with the following information:

- Manufacturer identification
- Product description
- Package length of product
- Package weight (gross or net)
- Date of manufacture
- Seattle City Light purchase order number
- Seattle City Light stock number

6. Packaging

Wire packaging shall meet the requirements of NEMA WC-26 and Table 5 below.

Table 5. Packaging Details

Packaging	Coil
Diameter, coil	
Outside Coil Diameter, Nominal (in)	25
Inside Coil Diameter, Nominal (in)	21
Weight per 100 ft., Approx. (lb)	11.7
Weight per Package, Approx. (lb)	50
Length per Package +/-10% (ft)	431

Actual quantity per standard package may vary from the quantity stated on the Purchase Order by plus or minus 10 percent.

7. Issuance

Stock Unit: FT

8. Approved Manufacturers

Manufacturer	Product ID
Copperweld, Inc.	Q6C2043A-CAMO

9. Sources

ED5278 REV 12/14, CAMO Anti-Theft Copperweld CCS Coated Grounding Wire, Copperweld

IEEE 80-2000; IEEE Guide for Safety in AC Substation Grounding

Shipek, John; SCL Standards Engineer, subject matter expert and originator of 6100.00 (john.shipek@seattle.gov)

www.copperweld.com