

MATERIAL STANDARD

WIRE, AAC, BARE



1. Foreword

1.1 Scope

This material standard covers the requirements for bare, concentric-lay stranded, all aluminum wire. Aluminum strands are made from round 1350-H19 (extra hard) alloy wire.

This material standard applies to the following Seattle City Light Stock Numbers:

Stock No.	Size, kcmil	Code Word
600113	397.5	Canna
600121	795	Arbutus
600126	954	Goldenrod

Wire identified by code word shall be consistent with the requirements of Aluminum Association Table 1. Code words define:

- Size (kcmil)
- Number of strands

1.2 Application

Wire is used as a bare, overhead, transmission or distribution conductor.

For similar conductors with a steel component (more appropriate for long span applications) refer to Material Standard 6000.00.

1.3 Industry Standards

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

Aluminum Association Code Words for Overhead Aluminum Electrical Conductors, Seventh Edition (January 1999)

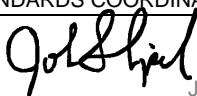
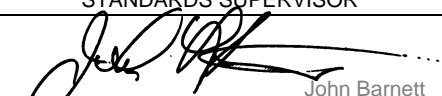
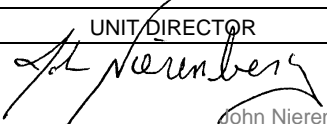
ASTM B231-2004 - Standard Specification for Concentric-Lay-Stranded Aluminum 1350 Conductors

NEMA WC-26-2000 - Binational Wire and Cable Packaging Standard

1.4 Conflict

Where conflict exists, the following order of precedence shall apply:

1. Seattle City Light Purchase Order
2. This Seattle City Light Material Standard
3. Aluminum Association
4. ASTM standards
5. Other industry standards

STANDARDS COORDINATOR	STANDARDS SUPERVISOR	UNIT DIRECTOR
 John Shipek	 John Barnett	 John Nierenberg

2. Construction

Wire shall meet the requirements of ASTM B231 and Table A.

Table A

Stock Number	Size, kcmil	Class	Number of Strands	Code Word	Nominal Diameter, in.	Minimum Rated Strength, lbs.
600113	397.5	A, AA	19	Canna	0.724	7,110
600121	795	AA	37	Arbutus	1.026	13,900
600126	954	A	61	Goldenrod	1.126	16,900

3. Detailed Packaging Requirements

Wire shall be packaged on reels according to the requirements of WC 26 and Table B or as specified otherwise on the request for quote or purchase order.

Table B

Stock Number	Size, kcmil	Reel Type	Maximum Outside Flange Diameter, in.	Maximum Outside Width, in.	Nominal Drum Diameter, in.	Length per Reel ± %, ft.	Approximate Weight per 100 ft., lbs.
600113	397.5	wood	48	33	24	5,090	37.3
600121	795	steel - RM	66	38	36	4,690	74.5
600126	954	wood	48	33	24	2,100	89.5

Reel gross weight shall not exceed 17,000 pounds.

Actual quantity per reel may vary from the quantity stated on the Purchase Order by plus or minus 10%.

Wood reels shall be either reusable type according to WC 26, Section 2.2, or nonreturnable type according to WC 26, Section 2.3.

Wood reels may be new or recycled.

Recycled wood reels (when provided) shall have the surface of both outside flanges painted over with a solid color.

Recycled wood reels (when provided) shall be equivalent to new in quality and strength.

Type RM steel reels shall be returnable, with fluted or corrugated flange and flat bar tires according to WC 26, Section 2.1.2.

Type RMT steel reels shall be returnable, with fluted or corrugated flange and I-beam tires according to WC 26, Section 2.1.2.

Reels shall be protected for shipment with coverings consistent with the recommendations of NEMA WC 26, Section 4.

The inner end shall not be brought out through the reel arbor.

The outer end shall be securely fastened to the inner side of the flange.

Wood reels shall be provided with metal bushings if the gross weight of the reel exceeds 1,000 pounds.

3. Detailed Packaging Requirements, continued

Each reel shall be legibly marked with the following information:

- Manufacturer's identification
- Product description, including code word
- Shipping length of wire on reel
- Gross weight
- Tare weight
- Net weight
- Date of manufacture
- Reel identification according to NEMA WC 26, Section 5
- Seattle City Light's Purchase Order Number
- Seattle City Light's Stock Number

4. Shipping

Reels shall be shipped and delivered in the upright position (on the flange edges) on open flatbed trucks suitable for side unloading by forklift.

Reels shall not be strapped or palleted.

Wire shall be shipped to the address specified on the Purchase Order.

5. Issuance

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6. Approved Manufacturers

Alcan Cable

General/BICC

Nehring Electrical Works Company

Nexans Energy USA

Southwire Company