

**MATERIAL STANDARD****ALUMINUM HEX NUT, HEAVY****1. Foreword****1.1 Scope**

This material standard covers the requirements for aluminum heavy hex nuts.

**1.2 Application**

Aluminum hardware is used to make up bolted aluminum-to-aluminum and aluminum-to-copper electrical connections. Refer to Construction Guideline D14-4/NSV-20. This includes connections to integral web channel bus (IWCB) in the Network, transformer and bus terminals, and aluminum lugs in stations, and elsewhere.

Aluminum fasteners are anodized and lubricated for corrosion resistance and to prevent galling and seizing.

**1.3 Industry Standards**

Hex nuts shall meet the applicable requirements of the following industry standards:

**ASME B18.2.2-1987 (R1999)** - Square and Hex Nuts (Inch Series)

**ASTM F467-1993** - Standard Specification for Nonferrous Nuts for General Use

**ASME B18.12-2001** - Glossary of Terms for Mechanical Fasteners

**2. Fabrication****2.1 Common Requirements**

	<b>Requirements</b>	<b>Reference</b>
<b>Product Name</b>	heavy hexagon nut	ASME B18.12, Section 3.2.1.14
<b>Material</b>	aluminum alloy 6262-T9	ASTM F467, Tables 1 and 2
<b>Dimensions</b>	per reference	ASME B18.2.2, Table 9
<b>Threads</b>	standard series UNC Class 2B	ASME B18.2.2, Table 9, General Note (d)

Nuts shall be anodized and coated with Aluminite 205.

STANDARDS COORDINATOR

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John Barnett

UNIT DIRECTOR

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**MATERIAL STANDARD**

Aluminum Hex Nut, Heavy

**2.2 Marking**

Nuts shall be marked according to ASTM F467, Section 17.1.

**2.3 Detailed Requirements**

<b>Stock Number</b>	<b>Nominal Size, in.</b>	<b>Threads per in.</b>
783558	1/2	13
783560	5/8	11

**3. Packaging**

Nuts shall be packaged 25, 50 or 100 per box.

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

- Manufacturer's identification
- Product description
- Seattle City Light's Stock Number
- Quantity contained

Each shipping container shall be legibly marked with the following information:

- Manufacturer's identification
- Country of origin
- Product description
- Seattle City Light's Purchase Order Number
- Seattle City Light's Stock Number

**4. Shipping**

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

**5. Issuance**

Stock Unit: EA

**6. Approved Manufacturers**

Seattle City Light Material Control personnel will identify and approve distributors, and hence manufacturers, for this group of Stock Numbers.