

MATERIAL STANDARD**STEEL HEX HEAD CAP SCREW, HIGH STRENGTH****1. Foreword****1.1 Scope**

This material standard covers the requirements for high strength, zinc-coated steel, hex head cap screws.

1.2 Application

High strength cap screws are for use on network protectors.

An ASTM A449 steel cap screw is equivalent in strength to an SAE Grade 5 fastener.

1.3 Industry Standards

Cap screws shall meet the applicable requirements of the following industry standards:

ASME B18.2.1-1996 - Square and Hex Bolts and Screws (Inch Series)

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

ASTM A449-1993 - Standard Specification for Quenched and Tempered Steel Bolts and Studs

ASTM B695-2004 - Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel

2. Fabrication**2.1 Common Requirements**

	Requirements	Reference
Product Name	hex cap screw	ASME B18.12, Section 3.1.2.7
Material	type 1 or type 2 steel	ASTM A449
Dimensions	per reference	ASME B18.2.1, Table 4
Threads	standard series UNC Class 2A	ASME B18.2.1, Table 4, Note (12)
Minimum Thread Length	per reference	ASME B18.2.1, Table 4, Note (9)
Corrosion Protection	zinc-coated	ASTM A449, Section 5.1.3, and ASTM B695, Class 50

STANDARDS COORDINATOR

John Shipek

STANDARDS SUPERVISOR

John Barnett

UNIT DIRECTOR

Hardev Juj

MATERIAL STANDARD

Steel Hex Head Cap Screw, High Strength

STANDARD NUMBER: **7847.2**

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SUPERSEDING: January 15, 2003

EFFECTIVE DATE: July 19, 2006

2.2 Marking

Cap screw heads shall be marked according to ASME B18.2.1, Section 2.8 and ASTM A449, Section 15.



type marking

2.3 Detailed Requirements

Nominal Size, in.	Threads per in.	Product Length in.	Stock Number
1/2	13	1-1/4	011910
		1-1/2	011911
		1-3/4	011912

3. Packaging

Standard package quantity shall not exceed 50 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.