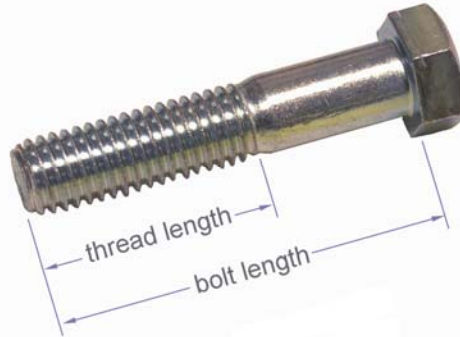


STEEL HEX BOLT**1. Foreword****1.1 Scope**

This material standard covers the requirements for steel hex bolts.

1.2 Application

Hex bolts are for general use.

1.3 Industry Standards

Hex bolts 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 B633-98e1 - Standard Specification for Electrodeposited Coatings of Zinc on Iron and Steel

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	hexagon head bolt	ASME B18.12, Section 3.1.1.17
Material	steel	ASME B18.2.1, Table 2, Note (15)
Dimensions	per reference	ASME B18.2.1, Table 2
Threads	standard series UNC Class 2A	ASME B18.2.1, Table 2, Note (13)
Minimum Thread Length	per reference	ASME B18.2.1, Table 2, Note (11)
Corrosion Protection	zinc-coated	ASTM B633 or ASTM B695

2.1 Common Requirements, continued

Hex bolt thread length shall be according to ASME B18.2.1, Table 2, Note (11).

Hex bolts shall be protected from corrosion according to ASTM B633 or ASTM B695.

2.2 Marking

Hex bolt heads shall be marked according to ASME B18.2.1, Section 2.8.

STANDARDS COORDINATOR

John Shipek

STANDARDS SUPERVISOR

John Barnett

UNIT DIRECTOR

Hardev Juj

MATERIAL STANDARD

Steel Hex Bolt

STANDARD NUMBER: **7847.1**
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 EFFECTIVE DATE: July 19, 2006

2.3 Detailed Requirements

Nominal Size, in.	Threads per in.	Minimum Thread Length, in.	Product Length, in.	Stock Number			
1/4	20	full	1/2	784701			
			3/4	784703			
		3/4	1	784705			
			1-1/4	784706			
			1-1/2	784707			
			1-3/4	784708			
			2	784709			
			2-1/4	784710			
			2-1/2	784711			
			2-3/4	784712			
			3	784713			
			4	784717			
			5/16	18	full	1/2	784731
						3/4	784733
7/8	1	784735					
	1-1/4	784736					
	1-1/2	784737					
	1-3/4	784738					
	2	784739					
	2-1/4	784740					
	2-1/2	784741					
	2-3/4	784742					
	3	784743					
	3/8	16			full	3/4	784763
						1	784765
					1	1-1/4	784766
1-1/2			784767				
1-3/4			784768				
2			784769				
2-1/4			784770				
2-1/2			784771				
2-3/4			784772				
3			784773				
3-1/2			784775				

MATERIAL STANDARD

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2.3 Detailed Requirements, continued

Nominal Size, in.	Threads per in.	Minimum Thread Length, in.	Product Length, in.	Stock Number
7/16	14	full	1	784795
			1-1/4	784796
		1-1/8	1-1/2	784797
			2	784799
1/2	13	full	3/4	784823
			1	784825
		1-1/4	1-1/4	784826
			1-1/2	784827
			1-3/4	784828
			2	784829
			2-1/4	784830
			2-1/2	784831
			2-3/4	784832
			3	784833
			3-1/4	784834
			3-1/2	784835
			4	784837
			5	784841
5/8	11	full	1	784885
			1-1/4	784886
			1-1/2	784887
		1-1/2	1-3/4	784888
			2	784889
			2-1/4	784890
			2-1/2	784891
			2-3/4	784892
			3	784893
			3-1/2	784895
4	784897			
3/4	10	full	1-1/2	784917
			1-3/4	784918
		1-3/4	2	784919
			2-1/2	784921
			2-3/4	784922
			3	784923
			3-1/2	784925
			4	784927

MATERIAL STANDARD

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3. Packaging

Bolt standard packaging shall be as follows:

Nominal Size, in.	Product Length, in.	Quantity per Box
1/4	all	50 or 100
5/16, 3/8	all	25 or 50
7/16, 1/2	all	25 or 50
5/8, 3/4	all	10, 20 or 25

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.