

## Structural Bolt Material Grades and Finishes

A-307B

A325

A490

10.9

T-0

T-1

### MATERIAL GRADES

**A307B** - Medium strength, heat treated carbon steel

**A325 Type 1** - Strong, heavy-duty material containing two types of quenched and tempered steel for structural steel-to-steel connections

**A490 Type 1** - Made from alloy steel creating a higher strength fastener

**Class 10.9** - Strong steel, used for high-stress applications or materials

**A394 Type 0** - Used for steel tower bolts; corrosion resistant and chemical resistant, made to withstand environmental pressures

**A394 Type 1** - Used for steel transmission tower bolts; corrosion resistant and chemical resistant, made to withstand environmental pressures

### FINISHES AND COATINGS

**Black Oxide** - A black coating that covers the top layer of a ferrous material with a chemical treatment. Corrosion resistant in dry environments.

**Hot Dipped Galvanized** - Molten zinc finishing process that creates a tightly bonded alloy for superior corrosion resistance. Thicker than other finishes and should be used with hot dipped galvanized nuts.

**Zinc Yellow** - Yellow-plated zinc finish that protects against corrosion in wet environments.

## Grade A307B Heavy Hex Bolts

- Tensile strength: 60,000 psi
- Meet ASME B18.2.1, ASTM A307 standards

Length	Thread Style	Grip Size	Head Height	Item No.	Pkg. Qty.
<b>Black Oxide</b>					
<b>1/2"-13 Coarse</b>					
1 1/2"	Partially Threaded	1/4 in	1 1/2 in	41JU54	25
2"	Partially Threaded	3/4 in	1 1/2 in	41JU56	25
2 1/4"	Partially Threaded	1 in	1 1/2 in	41JU57	25
2 1/2"	Partially Threaded	1 1/4 in	1 1/2 in	41JU58	25
3"	Partially Threaded	1 3/4 in	1 1/2 in	41JU60	25
<b>5/8"-11 Coarse</b>					
1 1/2"	Fully Threaded	—	2 3/4 in	41JU61	10
3"	Partially Threaded	1 1/2 in	2 3/4 in	41JU67	10
3 1/2"	Partially Threaded	2 in	2 3/4 in	41JU69	10
4"	Partially Threaded	2 1/2 in	2 3/4 in	41JU71	10
5"	Partially Threaded	3 1/2 in	2 3/4 in	41JU73	10
<b>3/4"-10 Coarse</b>					
2"	Partially Threaded	1/4 in	1 1/2 in	41JU76	10
3 1/4"	Partially Threaded	1 1/2 in	1 1/2 in	41JU81	10
3 1/2"	Partially Threaded	1 3/4 in	1 1/2 in	41JU82	10
3 3/4"	Partially Threaded	2 in	1 1/2 in	41JU83	10
<b>7/8"-9 Coarse</b>					
5"	Partially Threaded	3 in	3 3/4 in	41JU96	5
<b>1"-8 Coarse</b>					
4"	Partially Threaded	1 3/4 in	4 3/4 in	41JV03	5
4 1/2"	Partially Threaded	2 1/4 in	4 3/4 in	41JV04	5
5"	Partially Threaded	2 3/4 in	4 3/4 in	41JV05	5
<b>1 1/4"-7 Coarse</b>					
2 3/4"	Fully Threaded	—	2 3/2 in	41JV12	5
4 1/2"	Partially Threaded	1 3/4 in	2 3/2 in	178D38	10
5"	Partially Threaded	2 1/4 in	2 3/2 in	41JV11	5



Length	Thread Style	Grip Size	Head Height	Item No.	Pkg. Qty.
<b>Hot Dipped Galvanized</b>					
<b>1/2"-13 Coarse</b>					
1 1/2"	Partially Threaded	1/4 in	1 1/2 in	41JT95	25
2"	Partially Threaded	3/4 in	1 1/2 in	41JT97	25
2 1/2"	Partially Threaded	1 1/4 in	1 1/2 in	41JT99	25
<b>5/8"-11 Coarse</b>					
1 1/2"	Fully Threaded	—	2 3/4 in	41JU03	10
2"	Partially Threaded	1 1/2 in	2 3/4 in	41JU05	10
3"	Partially Threaded	1 1/2 in	2 3/4 in	41JU09	10
4 1/2"	Partially Threaded	3 in	2 3/4 in	41JU14	10
<b>3/4"-10 Coarse</b>					
2"	Partially Threaded	1/4 in	1 1/2 in	41JU18	10
3"	Partially Threaded	1 1/4 in	1 1/2 in	41JU22	10
3 1/4"	Partially Threaded	1 1/2 in	1 1/2 in	41JU23	10
3 1/2"	Partially Threaded	1 3/4 in	1 1/2 in	41JU24	10
4"	Partially Threaded	2 1/4 in	1 1/2 in	41JU26	10
<b>7/8"-9 Coarse</b>					
2"	Partially Threaded	2 in	3 3/4 in	178C75	25
4 1/2"	Partially Threaded	2 1/2 in	3 3/4 in	178C76	20
5"	Partially Threaded	3 in	3 3/4 in	41JU38	5
<b>1"-8 Coarse</b>					
4"	Partially Threaded	1 3/4 in	4 3/4 in	41JU44	5

## Grade A325 Structural Bolts

- Tensile strength: 120,000 psi
- Meet ASME B18.2.6, ASTM A325 and ASTM F3125 standards

Length	Thread Style	Grip Size	Head Height	Item No.	Pkg. Qty.
<b>Black Oxide</b>					
<b>1/2"-13 Coarse</b>					
1 1/2"	Partially Threaded	1/2 in	5/8 in	1TA17	25
1 3/4"	Partially Threaded	3/4 in	5/8 in	1RE47	25
2"	Partially Threaded	1 in	5/8 in	1RE48	25
<b>5/8"-11 Coarse</b>					
2"	Partially Threaded	3/4 in	2 5/4 in	1RE59	10
2 1/2"	Partially Threaded	1 1/4 in	2 5/4 in	1RE61	10
3"	Partially Threaded	1 3/4 in	2 5/4 in	1RE63	10
<b>3/4"-10 Coarse</b>					
2"	Partially Threaded	5/8 in	1 5/2 in	1TA45	10
2 1/4"	Partially Threaded	7/8 in	1 5/2 in	1RE75	5
2 1/2"	Partially Threaded	1 1/8 in	1 5/2 in	1TA47	10
2 3/4"	Partially Threaded	1 3/8 in	1 5/2 in	1TA48	10
3"	Partially Threaded	1 5/8 in	1 5/2 in	1TA49	10
3 1/4"	Partially Threaded	1 7/8 in	1 5/2 in	1RE79	5
<b>7/8"-9 Coarse</b>					
2 3/4"	Partially Threaded	1 1/4 in	3 5/4 in	1TA70	5
3"	Partially Threaded	1 1/2 in	3 5/4 in	1TA71	5
3 1/4"	Partially Threaded	1 3/4 in	3 5/4 in	1RE99	5
4"	Partially Threaded	2 1/2 in	3 5/4 in	1TA75	5
4 1/2"	Partially Threaded	3 in	3 5/4 in	1TA77	5
<b>1"-8 Coarse</b>					
3"	Partially Threaded	1 1/4 in	3 3/4 in	1RU27	5
4"	Partially Threaded	2 1/4 in	3 3/4 in	1TA96	5
6"	Partially Threaded	4 1/4 in	3 3/4 in	1RU37	5



Length	Thread Style	Grip Size	Head Height	Item No.	Pkg. Qty.
<b>Hot Dipped Galvanized</b>					
<b>1/2"-13 Coarse</b>					
1 1/4"	Partially Threaded	3/4 in	5/8 in	1TB57	25
2"	Partially Threaded	1 in	5/8 in	1TB58	25
3"	Partially Threaded	2 in	5/8 in	1TB62	25
<b>5/8"-11 Coarse</b>					
2"	Partially Threaded	3/4 in	2 5/4 in	1TB69	10
2 1/4"	Partially Threaded	1 in	2 5/4 in	1RU87	10
6"	Partially Threaded	4 3/4 in	2 5/4 in	1TB81	10
<b>3/4"-10 Coarse</b>					
2"	Partially Threaded	5/8 in	1 5/2 in	1RY11	5
2 1/4"	Partially Threaded	7/8 in	1 5/2 in	1RY12	5
2 1/2"	Partially Threaded	1 1/8 in	1 5/2 in	1RY13	5
<b>7/8"-9 Coarse</b>					
3 1/4"	Partially Threaded	1 3/4 in	3 5/4 in	1RY43	5
<b>1"-8 Coarse</b>					
3"	Partially Threaded	1 1/4 in	3 3/4 in	1TE41	5
4"	Partially Threaded	2 1/4 in	3 3/4 in	1RY65	5
6"	Partially Threaded	4 1/4 in	3 3/4 in	1RY71	5
<b>1 1/4"-7 Coarse</b>					
4 1/2"	Partially Threaded	2 1/2 in	1 1/6 in	1RY82	5
5"	Partially Threaded	3 in	1 1/6 in	1TE65	5
<b>1 1/4"-7 Coarse</b>					
4 1/2"	Partially Threaded	2 1/2 in	2 5/2 in	1TE83	5
5 1/2"	Partially Threaded	3 1/2 in	2 5/2 in	1TA10	5
<b>Zinc Yellow</b>					
<b>1/2"-13 Coarse</b>					
1 1/4"	Partially Threaded	3/4 in	5/8 in	1TU47	50
<b>5/8"-11 Coarse</b>					
1 1/2"	Partially Threaded	3/4 in	2 5/4 in	1TU49	25
1 3/4"	Partially Threaded	7/8 in	2 5/4 in	1TU50	25
<b>3/4"-10 Coarse</b>					
2"	Partially Threaded	5/8 in	1 5/2 in	1TU54	25
2 1/4"	Partially Threaded	7/8 in	1 5/2 in	1TU55	25