

Structural Bolt Material Grades and Finishes

A-307B

MATERIAL GRADES

A307B - Medium strength, heat treated carbon steel

A325

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

A490

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

10.9

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

T-0

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

T-1

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	Minimum Thread Length	Thread Style*	Grip Size	Head Height	Item No.	Pkg. Qty.
Black Oxide						
1/2"-13 Coarse						
2 in	1 1/4 in	PT	3/4 in	1 1/2 in	41JU56	25
2 1/2 in	1 1/4 in	PT	1 1/4 in	1 1/2 in	41JU58	25
3 in	1 1/4 in	PT	1 3/4 in	1 1/2 in	41JU60	25
5/8"-11 Coarse						
1 1/2 in	1 1/2 in	FT	—	2 3/4 in	41JU61	10
2 1/2 in	1 1/2 in	PT	1 in	2 3/4 in	41JU65	10
3 in	1 1/2 in	PT	1 1/2 in	2 3/4 in	41JU67	10
3/4"-10 Coarse						
1 1/4 in	1 3/4 in	FT	—	1/2 in	41JU75	10
2 in	1 3/4 in	PT	3/4 in	1/2 in	41JU76	10
3 1/4 in	1 3/4 in	PT	1 1/2 in	1/2 in	41JU81	10
3 3/4 in	1 3/4 in	PT	2 in	1/2 in	41JU83	10
4 1/2 in	1 3/4 in	PT	2 3/4 in	1/2 in	41JU85	10
5 in	1 3/4 in	PT	3 1/4 in	1/2 in	41JU86	10
7/8"-9 Coarse						
5 in	2 in	PT	3 in	3 3/4 in	41JU96	5
1 1/4"-7 Coarse						
5 in	2 1/2 in	PT	2 1/2 in	3/4 in	41JV08	5

Length	Minimum Thread Length	Thread Style*	Grip Size	Head Height	Item No.	Pkg. Qty.
Hot Dipped Galvanized						
1/2"-13 Coarse						
1 1/2 in	1 1/4 in	PT	3/4 in	1 1/2 in	41JT95	25
2 1/2 in	1 1/4 in	PT	1 1/4 in	1 1/2 in	41JT99	25
5/8"-11 Coarse						
1 3/4 in	1 1/2 in	PT	3/4 in	2 3/4 in	41JU04	10
2 1/2 in	1 1/2 in	PT	1 in	2 3/4 in	41JU07	10
3 in	1 1/2 in	PT	1 1/2 in	2 3/4 in	41JU09	10
3/4"-10 Coarse						
2 in	1 3/4 in	PT	3/4 in	1/2 in	41JU18	10
3 in	1 3/4 in	PT	1 1/4 in	1/2 in	41JU22	10
3 1/2 in	1 3/4 in	PT	1 3/4 in	1/2 in	41JU24	10
4 in	1 3/4 in	PT	2 1/4 in	1/2 in	41JU26	10
7/8"-9 Coarse						
5 in	2 in	PT	3 in	3 3/4 in	41JU38	5
1"-8 Coarse						
4 in	2 1/4 in	PT	1 3/4 in	4 3/4 in	41JU44	5

* FT = Fully Threaded, PT = Partially Threaded.

Grade A325 Structural Bolts

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



Length	Minimum Thread Length	Thread Style*	Grip Size	Head Height	Item No.	Pkg. Qty.
Black Oxide						
1/2"-13 Coarse						
1 1/2 in	1 in	PT	1/2 in	5/16 in	1RE46	25
2 in	1 in	PT	1/2 in	5/16 in	1TA17	25
2 1/2 in	1 in	PT	1 in	5/16 in	1RE48	25
2 3/4 in	1 in	PT	1 1/4 in	5/16 in	1RE49	25
5/8"-11 Coarse						
1 1/2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1RE57	10
2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1RE59	10
2 1/2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1TA30	10
2 3/4 in	1 1/4 in	PT	1 1/4 in	2 3/4 in	1RE61	10
3 in	1 1/4 in	PT	1 3/4 in	2 3/4 in	1RE63	10
3/4"-10 Coarse						
2 in	1 3/8 in	PT	5/8 in	1 1/2 in	1RE74	5
2 1/4 in	1 3/8 in	PT	5/8 in	1 1/2 in	1TA45	10
2 1/2 in	1 3/8 in	PT	7/8 in	1 1/2 in	1RE75	5
2 3/4 in	1 3/8 in	PT	1 1/8 in	1 1/2 in	1RE76	5
3 in	1 3/8 in	PT	1 1/8 in	1 1/2 in	1TA47	10
3 1/4 in	1 3/8 in	PT	1 3/8 in	1 1/2 in	1RE77	5
3 1/2 in	1 3/8 in	PT	1 3/8 in	1 1/2 in	1TA48	10
3 3/4 in	1 3/8 in	PT	1 5/8 in	1 1/2 in	1RE78	5
4 in	1 3/8 in	PT	1 5/8 in	1 1/2 in	1TA49	10
4 1/2 in	1 3/8 in	PT	2 3/8 in	1 1/2 in	1RE81	5
7/8"-9 Coarse						
2 1/2 in	1 1/2 in	PT	1 in	3 3/4 in	1TA69	5
4 in	1 1/2 in	PT	2 1/2 in	3 3/4 in	1RU12	5
4 1/2 in	1 1/2 in	PT	3 in	3 3/4 in	1RU14	5
6 1/2 in	1 1/2 in	PT	5 in	3 3/4 in	1RU19	5
1"-8 Coarse						
3 in	1 3/4 in	PT	1 1/4 in	3 3/4 in	1RU27	5
4 in	1 3/4 in	PT	2 1/4 in	3 3/4 in	1RU31	5

Length	Minimum Thread Length	Thread Style*	Grip Size	Head Height	Item No.	Pkg. Qty.
Hot Dipped Galvanized						
1/2"-13 Coarse						
1 1/4 in	1 in	PT	3/4 in	5/16 in	31JL86	25
1 1/2 in	1 in	PT	1/2 in	5/16 in	1TB56	25
1 3/4 in	1 in	PT	1/2 in	5/16 in	31JL87	25
2 in	1 in	PT	3/4 in	5/16 in	31JL88	25
2 1/2 in	1 in	PT	1 in	5/16 in	31JL89	25
2 3/4 in	1 in	PT	1 1/2 in	5/16 in	1TB60	25
3 in	1 in	PT	1 3/4 in	5/16 in	31JL92	25
5/8"-11 Coarse						
1 1/2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1RU84	10
1 3/4 in	1 1/4 in	PT	1/2 in	2 3/4 in	1RU85	10
2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1RU86	10
2 1/2 in	1 1/4 in	PT	1 1/4 in	2 3/4 in	1RU88	10
2 3/4 in	1 1/4 in	PT	3 3/4 in	2 3/4 in	1RU95	10
3/4"-10 Coarse						
2 in	1 3/8 in	PT	5/8 in	1 1/2 in	1RY11	5
2 1/2 in	1 3/8 in	PT	1 1/8 in	1 1/2 in	1RY13	5
2 3/4 in	1 3/8 in	PT	1 3/8 in	1 1/2 in	1RY14	5
3 in	1 3/8 in	PT	1 5/8 in	1 1/2 in	1RY15	5
3 1/4 in	1 3/8 in	PT	1 7/8 in	1 1/2 in	1RY16	5
7 in	1 3/8 in	PT	5 5/8 in	1 1/2 in	31JL82	10
7/8"-9 Coarse						
2 1/2 in	1 1/2 in	PT	1 in	3 3/4 in	1RY35	5
3 in	1 1/2 in	PT	1 1/2 in	3 3/4 in	1RY41	5
1"-8 Coarse						
3 in	1 3/4 in	PT	1 1/4 in	3 3/4 in	1RY61	5
1 1/4"-7 Coarse						
5 in	2 in	PT	3 in	1 1/2 in	1RY84	5
6 in	2 in	PT	4 in	1 1/2 in	1RY86	5

Length	Minimum Thread Length	Thread Style*	Grip Size	Head Height	Item No.	Pkg. Qty.
Zinc Yellow						
1/2"-13 Coarse						
1 1/4 in	1 in	PT	3/4 in	5/16 in	1TU47	50
5/8"-11 Coarse						
1 1/2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1TU49	25
1 3/4 in	1 1/4 in	PT	1/2 in	2 3/4 in	1TU50	25
2 in	1 1/4 in	PT	3/4 in	2 3/4 in	1TU51	25
3/4"-10 Coarse						
2 1/2 in	1 3/8 in	PT	1 1/8 in	1 1/2 in	1TU56	25

* PT = Partially Threaded.