

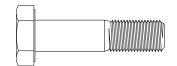
Marking: A325 and manufactures ID

Earnest Technical Bulletin

Structural Bolts

ASTM A325 Heavy Hex





Structural bolts per ASTM A325 are made to the dimensional requirements of ANSI/ASME B18.2.6 and feature a larger width across the flats (heavy hex) than standard grade 5 or 8 hex cap screws would have. Structural bolts also have a shorter thread length than is found on grade 5 and grade 8 bolts and screws.

A325 bolts are the most commonly specified structural bolt grade for use in the construction of buildings, warehouses and bridges. The A325 strength level is very similar to the SAE grade 5 strength level.

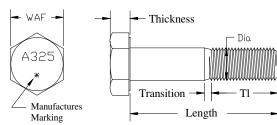
Material: Medium Carbon (or Alloy) Steel

CarbonManganesePhosphorusSulfur.30 to .55.060 min.035 max.040 max

Tensile Strength: 1/4 to 1" Dia 120,000 psi min 1 1/8 to 1 1/2" Dia 105,000 psi min

Percent Elongation: 14% min

Hardness (Core): 1/4 to 1" Dia Rc 25 / 34 1 1/8 to 1 1/2" Dia Rc 19 / 30



Nominal	WAF	Head	Thread	Thread
Size		Thickness	Length	Transitional
1/2	7/8	5/16	1.0	.19
5/8	1 1/16	25/64	1.25	.22
3/4	1 1/4	15/32	1.38	.25
7/8	1 7/16	35/64	1.50	.28
1	1 5/8	39/64	1.75	.31
1 1/8	1 13/16	11/16	2.0	.34
1 1/4	2	25/32	2.0	.38
1 3/8	2 3/16	27/32	2.25	.44
1 1/2.	2.3/8	15/16	2.25	.44

Lengths that are fully threaded

Lengths that are runy threaded				
Nominal Size	Lengths up to			
1/2"	1 1/4			
5/8	1 1/2			
3/4	1 3/4			
7/8	2			
1	2 1/4			
1 1/8	2 3/4			
1 1/4	2 3/4			
1 3/8	3			
1 1/2	3			