

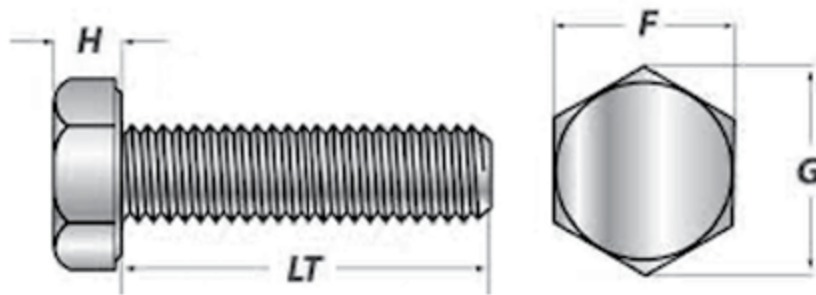


CONQUEST

CONQUER THE JOB

STRUCTURAL HEAVY HEX HEAD BOLTS INCH SERIES

1.0 DIMENSIONS: ASME B18.2.6



Nominal Size or Basic Product Diameter	E		F		G		H		LT
	Body Diameter		Width Across Flats		Width Across Corners		Head Height		Thread Length
	Max	Min	Max	Min	Max	Min	Max	Min	Ref
1/2"	0.515	0.482	0.875	0.850	1.010	0.969	0.323	0.302	Fully Threaded
5/8"	0.642	0.605	1.062	1.031	1.227	1.175	0.403	0.378	Fully Threaded
3/4"	0.768	0.729	1.250	1.212	1.443	1.383	0.483	0.455	Fully Threaded
7/8"	0.895	0.852	1.438	1.394	1.660	1.589	0.563	0.531	Fully Threaded
1"	1.022	0.976	1.625	1.575	1.876	1.796	0.627	0.591	Fully Threaded
1-1/8"	1.149	1.098	1.812	1.756	2.093	2.002	0.718	0.658	Fully Threaded
1-1/4"	1.277	1.223	2.000	1.938	2.309	2.209	0.813	0.749	Fully Threaded
1-3/8"	1.404	1.345	2.188	2.119	2.526	2.416	0.878	0.810	Fully Threaded
1-1/2"	1.531	1.470	2.375	2.300	2.742	2.622	0.974	0.902	Fully Threaded

Notes: Dimensions of structural bolts are same as that of heavy hex head cap screws. The only difference is that the structural bolts have a longer body length & shorter thread length, when compared to heavy hex head cap screw. Therefore, even though the mechanical properties of SAE J429 grade 5 & 8 are similar to structural grades A325 & A490, a standard heavy hex head cap screws should not be used in place of structural bolts.

Thread Class of Fit: Plain Finish: 2A. Hot Dip Galvanized Finish: 2A before coating.

Disclaimer: The above is a compilation of data, from various industry standards. Conquest Fasteners has taken every effort to present the data accurately. However Conquest Fasteners cannot be held liable for any claim traceable to any errors typographical or otherwise contained herein.

STRUCTURAL HEAVY HEX HEAD BOLTS INCH SERIES

2.0 MECHANICAL PROPERTIES (FOR FULL SIZE BOLT TESTING)

2.1 Steel Type I

Standard: ASTM F3125/F3125M

Grade	Hardness	Tensile Strength	Proof Load	Grade Marking
A325	Up to 1 Inch : Length less than 2D : HRC 25 to 34. Length 2D and longer : HRC 34 Maximum. Above 1 inch : Length less than 3D : HRC 25 to 34. Length 3D and longer : HRC 34 Maximum.	Minimum 120,000 PSI	Minimum 85,000 PSI	A325
A490	Up to 1 Inch : Length less than 2D : HRC 33 to 38. Length 2D and longer : HRC 38 Maximum. Above 1 inch : Length less than 3D : HRC 33 to 38. Length 3D and longer : HRC 38 Maximum.	Minimum 150,000 PSI and Maximum 173,000 PSI	Minimum 120,000 PSI	A490

Notes: Bolts will have manufacturer's identification marking in addition to the grade marking mentioned in the table.

3.0 Surface Finish:

A325: Plain and Hot Dip Galvanized. Hot Dip Galvanized as per ASTM F2329/F2329M or ASTM A153/A153M. RoHS compliant. Coating thickness for diameters 3/8 11 & below: minimum 0.0017" (43 microns) and for diameters above 3/8" 11 minimum 0.0020" (50 microns).

A490: Plain