











Fastener Specifications

Hex Head & Structural Bolt Specifications

Ident. Grade Mark	Specs	Nominal Size Range (Inches)	Ultimate Tensile Min. PSI	Yield Strength Min. PSI	Elongation Min. %	Reduction of Area Min. %	Hardness	
							Min.	Max.
	ASTM A490	5/8" to 1-1/2"	150,000 to 170,000	130,000	14	40	33HRC	38HRC
	SAE Grade 8	1/4" to 1-1/2"	150,000	130,000	12	35	33HRC	39HRC
	ASTM A354BD	1/4" to 2-1/2"	150,000	130,000	14	40	33HRC	39HRC
		Over 2-1/2"	140,000	115,000	14	40	31HRC	39HRC
	ASTM A325	1/4" to 1"	120,000	92,000	14	35	25HRC	34HRC
		1-1/8" to 1-1/2"	105,000	81,000	14	35	19HRC	30HRC
	SAE Grade 5	1/4" to 1"	120,000	92,000	14	35	25HRC	34HRC
		1-1/8" to 1-1/2"	105,000	81,000	14	35	19HRC	31HRC
	ASTM A449	1/4" to 1"	120,000	92,000	14	35	25HRC	34HRC
		1-1/8" to 1-1/2"	105,000	81,000	14	35	19HRC	30HRC
		1-5/8" to 3"	90,000	58,000	14	35	183BHN	235BHN
	ASTM A193-B7	1/4 to 2-1/2"	125,000	105,000	16	50	N/A	35HRC
		2-3/4" to 4"	115,000	95,000	16	50	N/A	33HRC
	ASTM A354-BC	1/4" to 2-1/2"	125,000	109,000	16	50	26HRC	36HRC
		Over 2-1/2"	115,000	99,000	16	45	22HRC	33HRC
	ASTM A307 A	1/4" to 4"	60,000	N/A	18	n/A	69HRC	100HRB
	ASTM A307B	1-1/8" to 2"	60,000 to 100,000	N/A	18	N/A	69HRB	100HRB

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