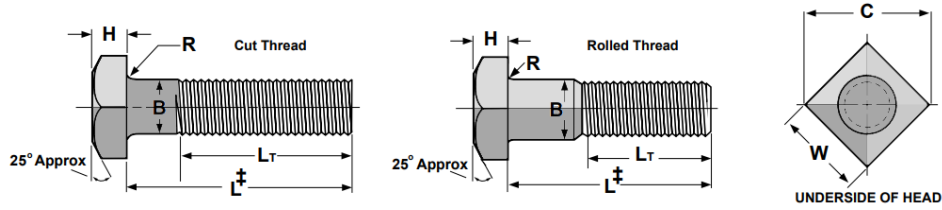


# Square Head Bolts: Dimensions & Specifications



Square Bolts Nominal or Basic Product Diameter		Diameter of Full Size Body (B)		Width Across Flats (W)		Width Across Corners (C)		Head Height (H)		Radius of Fillet (R)		Thread Length for Bolt Lengths	
		Max	Min	Max	Min Sharp	Max	Min	Max	Min	Max	Min (Basic)	6 in. & Shorter (Basic)	over 6 in. (Basic)
1/4	.2500	.260	.237	.375	.362	.530	.498	.188	.156	0.03	0.01	.750	1.000
5/16	.3125	.324	.298	.500	.484	.707	.665	.220	.186	0.03	0.01	.875	1.125
3/8	.3750	.388	.360	.562	.544	.795	.747	.268	.232	0.03	0.01	1.000	1.250
7/16	.4375	.452	.421	.625	.603	.884	.828	.316	.278	0.03	0.01	1.125	1.375
1/2	.5000	.515	.482	.750	.725	1.061	.995	.348	.308	0.03	0.01	1.250	1.500
5/8	.6250	.642	.605	.938	.906	1.326	1.244	.444	.400	0.06	0.02	1.500	1.750
3/4	.7500	.768	.729	1.125	1.088	1.591	1.494	.524	.476	0.06	0.02	1.750	2.000
7/8	.8750	.895	.852	1.312	1.269	1.856	1.742	.620	.568	0.06	0.02	2.000	2.250
1	1.0000	1.022	.976	1.500	1.450	2.121	1.991	.684	.628	0.09	0.03	2.250	2.500
1-1/8	1.1250	1.149	1.098	1.688	1.631	2.386	2.239	.780	.720	0.09	0.03	2.500	2.750
1-1/4	1.2500	1.277	1.223	1.875	1.812	2.652	2.489	.876	.812	0.09	0.03	2.750	3.000
1-3/8	1.3750	1.404	1.345	2.062	1.994	2.917	2.738	.940	.872	0.09	0.03	3.000	3.250
1-1/2	1.5000	1.531	1.470	2.250	2.175	3.182	2.986	1.036	.964	0.09	0.03	3.250	3.500

Nominal Bolt Diameter	Up to 1 in., incl.		Over 1 in. to 2-1/2 in., incl.		Over 2-1/2 in. to 4 in., incl.		Over 4 in. to 6 in., incl.		Longer than 6 in.	
	+0.02	-0.03	+0.02	-0.04	+0.04	-0.06	+0.06	-0.10	+0.10	-0.18
1/4 - 3/8	+0.02	-0.03	+0.02	-0.04	+0.04	-0.06	+0.06	-0.10	+0.10	-0.18
7/16 & 1/2	+0.02	-0.03	+0.04	-0.06	+0.06	-0.08	+0.08	-0.10	+0.12	-0.18
9/16 - 3/4	+0.02	-0.03	+0.06	-0.08	+0.08	-0.10	+0.10	-0.10	+0.14	-0.18
7/8 - 1			+0.08	-0.10	+0.10	-0.14	+0.12	-0.16	+0.16	-0.20
1-1/8 - 1-1/2			+0.12	-0.12	+0.16	-0.16	+0.18	-0.18	+0.22	-0.22

Square Bolts: Performance & Mechanical Stats	
<b>Description</b>	A low or medium carbon steel, externally threaded mechanical device 1/4" diameter or larger, with a trimmed square shaped external wrenching head.
<b>Applications</b>	Offers greater bearing surface for wrenching than hex head bolts.
<b>Material</b>	Bolts shall be made from a carbon steel which conforms to the following chemical composition requirements-- Phosphorus: 0.06% maximum; Sulfur: 0.15% maximum
<b>Hardness</b>	Bolts of a length less than 3 times diameter: Rockwell B69-100 Bolts of a length 3 times diameter and longer: Rockwell B100 maximum
<b>Tensile Strength</b>	60,000 psi. minimum
<b>Elongation in 2 in.</b>	18% minimum