ANSI/ASME B18.2.2 1986

SQUARE NUTS

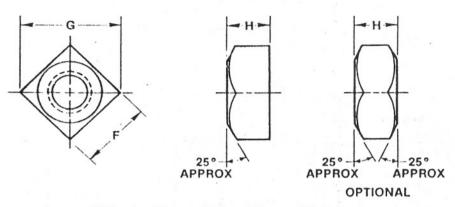


Table 1 Dimensions of Square Nuts

Nominal Size or Basic Major Dia of Thread		F Width Across Flats			G Width Across Corners		H Thickness		
		0.2500	7/16	0.438	0.425	0.619	0.554	7/32	0.235
0.3125	9/16	0.562	0.547	0.795	0.721	17/64	0.283	0.249	
0.3750	5/8	0.625	0.606	0.884	0.802	21/64	0.346	0.310	
0.4375	3/4	0.750	0.728	1.061	0.970	3/8	0.394	0.356	
0.5000	13/16	0.812	0.788	1.149	1.052	7/16	0.458	0.418	
0.6250	1	1.000	0.969	1.414	1.300	35/64	0.569	0.525	
0.7500	1 1/8	1.125	1.088	1.591	1.464	21/32	0.680	0.632	
0.8750	1 5/16	1.312	1.269	1.856	1.712	49/64	0.792	0.740	
1.0000	1 1/2	1.500	1.450	2.121	1.961	7/8	0.903	0.847	
1.1250	1 11/16	1.688	1.631	2.386	2.209	1	1.030	0.970	
1.2500	1 7/8	1.875	1.812	2.652	2.458	1 3/32	1.126	1.062	
1.3750	2 1/16	2.062	1.994	2.917	2.708	1 13/64	1.237	1.169	
1.5000	2 1/4	2.250	2.175	3.182	2.956	1 5/16	1.348	1.276	
	0.2500 0.3125 0.3750 0.4375 0.5000 0.6250 0.7500 0.8750 1.0000 1.1250 1.2500 1.3750	ajor Dia read Basic 0.2500 7/16 0.3125 9/16 0.3750 5/8 0.4375 3/4 0.5000 13/16 0.6250 1 0.7500 1 1/8 0.8750 1 5/16 1.0000 1 1/2 1.1250 1 1/16 1.2500 1 7/8 1.3750 2 1/16	al Size or ajor Dia oread Basic Max 0.2500 7/16 0.438 0.3125 9/16 0.562 0.3750 5/8 0.625 0.4375 3/4 0.750 0.5000 13/16 0.812 0.6250 1 1.000 0.7500 1 1/8 1.125 0.8750 1 5/16 1.312 1.0000 1 1/2 1.500 1.1250 1 1/16 1.688 1.2500 1 7/8 1.875 1.3750 2 1/16 2.062	Width Across Flats	Width Across Width Across Cor	Width Across Flats Corners	Width Across Flats Width Across Corners	Width Across Flats Width Across Corners Thickness Corners Corners Thickness Corners Thickness Corners Corners	

Notes to Talle 1:

- 1. Unification. Bold type indicates products unified dimensionally with British and Canadian standards.
- 2. Tops of Nuts. Tops of nuts shall be flat and chamfered or washer crowned. Diameter of the chainfer circle shall be equal to the maximum width across flats within a tolerance of minus 15 percent. The surface of the chamfer may be slightly convex or rounded.
- 3. Width Across Flats. Maximum width across flats shall not be exceeded (see exception in General Data). No transverse section through the nut between 25 and 75 percent of the actual nut thickness as measured from the bearing surface shall be less than the minimum width across flats.
- 4. Bearing Surface. Bearing surface shall be perpendicular to the axis of the threaded hole within a tolerance of 3 deg for 1 in. nominal size nuts or smaller, and 2 deg for nuts larger than 1 in.
- 5. True Position of Tapped Hole. The axis of tapped hole shall be located at true position with respect to the axis of nut body within a tolerance zone having a diameter equivalent to 10 percent of the maximum width across flats, regardless of feature size.

- 6. Threads. Threads shall be Unified coarse thread series (UNC series), Class 2B, in accordance with ANSI/ASME B1.1, page A-26.
- 7. Material. Unless otherwise specified, chemical and mechanical properties of steel nuts shall conform with Grade A of ASTM A563, page B-108. Nuts of other materials such as corrosion resistant (stainless) steel, brass, bronze and aluminum alloys shall have properties as agreed upon between the manufacturer and purchaser. The properties for nuts of several grades of corrosion resistant steel alloys are covered in ASTM F594, page B-124, and of several nonferrous materials in ASTM F467, page B-130.
- 8. Nominal Size. Where specifying nominal size in decimals, zeros preceding the decimal and in the fourth decimal place shall be omitted.
- 9. For additional requirements, see the Introductory Notes and General Data, page D-1.
- 10. Weights of square nuts are given on page M-24.
- 11. Formulas for nut dimensions are given in Appendix II, page D-19.