

Table 8-2

Diameters and Area of Unified Screw Threads UNC and UNF*

Size Designation	Nominal Major Diameter in	Coarse Series—UNC				Fine Series—UNF		
		Threads per Inch N	Tensile-Stress Area A_t , in ²	Minor-Diameter Area A_r , in ²	Threads per Inch N	Tensile-Stress Area A_t , in ²	Minor-Diameter Area A_r , in ²	
0	0.0600				80	0.001 80	0.001 51	
1	0.0730	64	0.002 63	0.002 18	72	0.002 78	0.002 37	
2	0.0860	56	0.003 70	0.003 10	64	0.003 94	0.003 39	
3	0.0990	48	0.004 87	0.004 06	56	0.005 23	0.004 51	
4	0.1120	40	0.006 04	0.004 96	48	0.006 61	0.005 66	
5	0.1250	40	0.007 96	0.006 72	44	0.008 80	0.007 16	
6	0.1380	32	0.009 09	0.007 45	40	0.010 15	0.008 74	
8	0.1640	32	0.014 0	0.011 96	36	0.014 74	0.012 85	
10	0.1900	24	0.017 5	0.014 50	32	0.020 0	0.017 5	
12	0.2160	24	0.024 2	0.020 6	28	0.025 8	0.022 6	
$\frac{1}{4}$	0.2500	20	0.031 8	0.026 9	28	0.036 4	0.032 6	
$\frac{5}{16}$	0.3125	18	0.052 4	0.045 4	24	0.058 0	0.052 4	
$\frac{3}{8}$	0.3750	16	0.077 5	0.067 8	24	0.087 8	0.080 9	
$\frac{7}{16}$	0.4375	14	0.106 3	0.093 3	20	0.118 7	0.109 0	
$\frac{1}{2}$	0.5000	13	0.141 9	0.125 7	20	0.159 9	0.148 6	
$\frac{9}{16}$	0.5625	12	0.182	0.162	18	0.203	0.189	
$\frac{5}{8}$	0.6250	11	0.226	0.202	18	0.256	0.240	
$\frac{3}{4}$	0.7500	10	0.334	0.302	16	0.373	0.351	
$\frac{7}{8}$	0.8750	9	0.462	0.419	14	0.509	0.480	
1	1.0000	8	0.606	0.551	12	0.663	0.625	
$1\frac{1}{4}$	1.2500	7	0.969	0.890	12	1.073	1.024	
$1\frac{1}{2}$	1.5000	6	1.405	1.294	12	1.581	1.521	

* This table was compiled from ANSI B1.1-1974. The minor diameter was found from the equation $d_r = d - 1.299 038p$, and the pitch diameter from $d_m = d - 0.649 519p$. The sum of the pitch diameter and the minor diameter was used to compute the tensile-stress area.