

**Table 7. American National Standard and Unified Standard Hex Nuts and Jam Nuts and Heavy Hex Nuts and Jam Nuts ANSI/ASME B18.2.2-1987 (R1999)**

Nominal Size or Basic Major Dia. of Thread	Width Across Flats <i>F</i>			Width Across Corners <i>G</i>		Thickness, Nuts <i>H</i>			Thickness, Jam Nuts <i>H<sub>1</sub></i>			
	Basic	Max.	Min.	Max.	Min.	Basic	Max.	Min.	Basic	Max.	Min.	
Hex Nuts (Fig. 5) and Hex Jam Nuts (Fig. 6)												
$\frac{1}{4}$	<b>0.2500</b>	$\frac{7}{16}$	<b>0.438</b>	<b>0.428</b>	<b>0.505</b>	<b>0.488</b>	$\frac{7}{32}$	<b>0.226</b>	<b>0.212</b>	$\frac{5}{32}$	<b>0.163</b>	<b>0.150</b>
$\frac{5}{16}$	<b>0.3125</b>	$\frac{1}{2}$	<b>0.500</b>	<b>0.489</b>	<b>0.577</b>	<b>0.557</b>	$\frac{7}{64}$	<b>0.273</b>	<b>0.258</b>	$\frac{3}{16}$	<b>0.195</b>	<b>0.180</b>
$\frac{3}{8}$	<b>0.3750</b>	$\frac{9}{16}$	<b>0.562</b>	<b>0.551</b>	<b>0.650</b>	<b>0.628</b>	$\frac{21}{64}$	<b>0.337</b>	<b>0.320</b>	$\frac{7}{32}$	<b>0.227</b>	<b>0.210</b>
$\frac{7}{16}$	<b>0.4375</b>	$\frac{11}{16}$	<b>0.688</b>	<b>0.675</b>	<b>0.794</b>	<b>0.768</b>	$\frac{3}{8}$	<b>0.385</b>	<b>0.365</b>	$\frac{1}{4}$	<b>0.260</b>	<b>0.240</b>
$\frac{1}{2}$	<b>0.5000</b>	$\frac{3}{4}$	<b>0.750</b>	<b>0.736</b>	<b>0.866</b>	<b>0.840</b>	$\frac{7}{16}$	<b>0.448</b>	<b>0.427</b>	$\frac{5}{16}$	<b>0.323</b>	<b>0.302</b>
$\frac{9}{16}$	<b>0.5625</b>	$\frac{7}{8}$	<b>0.875</b>	<b>0.861</b>	<b>1.010</b>	<b>0.982</b>	$\frac{31}{64}$	<b>0.496</b>	<b>0.473</b>	$\frac{5}{16}$	<b>0.324</b>	<b>0.301</b>
$\frac{5}{8}$	<b>0.6250</b>	$\frac{15}{16}$	<b>0.938</b>	<b>0.922</b>	<b>1.083</b>	<b>1.051</b>	$\frac{35}{64}$	<b>0.559</b>	<b>0.535</b>	$\frac{3}{8}$	<b>0.387</b>	<b>0.363</b>
$\frac{3}{4}$	<b>0.7500</b>	$1\frac{1}{8}$	<b>1.125</b>	<b>1.088</b>	<b>1.299</b>	<b>1.240</b>	$\frac{41}{64}$	<b>0.665</b>	<b>0.617</b>	$\frac{27}{64}$	<b>0.446</b>	<b>0.398</b>
$\frac{7}{8}$	<b>0.8750</b>	$1\frac{1}{16}$	<b>1.312</b>	<b>1.269</b>	<b>1.516</b>	<b>1.447</b>	$\frac{3}{4}$	<b>0.776</b>	<b>0.724</b>	$\frac{31}{64}$	<b>0.510</b>	<b>0.458</b>
<b>1</b>	<b>1.0000</b>	$1\frac{1}{2}$	<b>1.500</b>	<b>1.450</b>	<b>1.732</b>	<b>1.653</b>	$\frac{55}{64}$	<b>0.887</b>	<b>0.831</b>	$\frac{35}{64}$	<b>0.575</b>	<b>0.519</b>
$1\frac{1}{8}$	<b>1.1250</b>	$1\frac{11}{16}$	<b>1.688</b>	<b>1.631</b>	<b>1.949</b>	<b>1.859</b>	$\frac{31}{32}$	<b>0.999</b>	<b>0.939</b>	$\frac{39}{64}$	<b>0.639</b>	<b>0.579</b>
$1\frac{1}{4}$	<b>1.2500</b>	$1\frac{7}{8}$	<b>1.875</b>	<b>1.812</b>	<b>2.165</b>	<b>2.066</b>	$1\frac{1}{16}$	<b>1.094</b>	<b>1.030</b>	$\frac{23}{32}$	<b>0.751</b>	<b>0.687</b>
$1\frac{3}{8}$	<b>1.3750</b>	$2\frac{1}{16}$	<b>2.062</b>	<b>1.994</b>	<b>2.382</b>	<b>2.273</b>	$1\frac{11}{64}$	<b>1.206</b>	<b>1.138</b>	$\frac{25}{32}$	<b>0.815</b>	<b>0.747</b>
$1\frac{1}{2}$	<b>1.5000</b>	$2\frac{1}{4}$	<b>2.250</b>	<b>2.175</b>	<b>2.598</b>	<b>2.480</b>	$1\frac{9}{32}$	<b>1.317</b>	<b>1.245</b>	$\frac{27}{32}$	<b>0.880</b>	<b>0.808</b>
Heavy Hex Nuts (Fig. 5) and Heavy Hex Jam Nuts (Fig. 6)												
$\frac{1}{4}$	0.2500	$\frac{1}{2}$	0.500	0.488	0.577	0.556	$\frac{15}{64}$	0.250	0.218	$\frac{11}{64}$	0.188	0.156
$\frac{5}{16}$	0.3125	$\frac{9}{16}$	0.562	0.546	0.650	0.622	$\frac{19}{64}$	0.314	0.280	$\frac{13}{64}$	0.220	0.186
$\frac{3}{8}$	0.3750	$\frac{11}{16}$	0.688	0.669	0.794	0.763	$\frac{23}{64}$	0.377	0.341	$\frac{15}{64}$	0.252	0.216
$\frac{7}{16}$	0.4375	$\frac{3}{4}$	0.750	0.728	0.866	0.830	$\frac{27}{64}$	0.441	0.403	$\frac{17}{64}$	0.285	0.247
$\frac{1}{2}$	<b>0.5000</b>	$\frac{7}{8}$	<b>0.875</b>	<b>0.850</b>	<b>1.010</b>	<b>0.969</b>	$\frac{31}{64}$	<b>0.504</b>	<b>0.464</b>	$\frac{19}{64}$	<b>0.317</b>	<b>0.277</b>
$\frac{9}{16}$	0.5625	$\frac{15}{16}$	0.938	0.909	1.083	1.037	$\frac{35}{64}$	0.568	0.526	$\frac{21}{64}$	0.349	0.307
$\frac{5}{8}$	<b>0.6250</b>	$1\frac{1}{16}$	<b>1.062</b>	<b>1.031</b>	<b>1.227</b>	<b>1.1175</b>	$\frac{39}{64}$	<b>0.631</b>	<b>0.587</b>	$\frac{23}{64}$	<b>0.381</b>	<b>0.337</b>
$\frac{3}{4}$	<b>0.7500</b>	$1\frac{1}{4}$	<b>1.250</b>	<b>1.212</b>	<b>1.443</b>	<b>1.382</b>	$\frac{47}{64}$	<b>0.758</b>	<b>0.710</b>	$\frac{27}{64}$	<b>0.446</b>	<b>0.398</b>
$\frac{7}{8}$	<b>0.8750</b>	$1\frac{1}{2}$	<b>1.438</b>	<b>1.394</b>	<b>1.660</b>	<b>1.589</b>	$\frac{55}{64}$	<b>0.885</b>	<b>0.833</b>	$\frac{31}{64}$	<b>0.510</b>	<b>0.458</b>
<b>1</b>	<b>1.0000</b>	$1\frac{3}{8}$	<b>1.625</b>	<b>1.575</b>	<b>1.876</b>	<b>1.796</b>	$\frac{63}{64}$	<b>1.012</b>	<b>0.956</b>	$\frac{35}{64}$	<b>0.575</b>	<b>0.519</b>
$1\frac{1}{8}$	<b>1.1250</b>	$1\frac{5}{16}$	<b>1.812</b>	<b>1.756</b>	<b>2.093</b>	<b>2.002</b>	$1\frac{1}{64}$	<b>1.139</b>	<b>1.079</b>	$\frac{39}{64}$	<b>0.639</b>	<b>0.579</b>
$1\frac{1}{4}$	<b>1.2500</b>	<b>2</b>	<b>2.000</b>	<b>1.938</b>	<b>2.309</b>	<b>2.209</b>	$1\frac{1}{32}$	<b>1.251</b>	<b>1.187</b>	$\frac{23}{32}$	<b>0.751</b>	<b>0.687</b>
$1\frac{3}{8}$	<b>1.3750</b>	$2\frac{3}{16}$	<b>2.188</b>	<b>2.119</b>	<b>2.526</b>	<b>2.416</b>	$1\frac{11}{32}$	<b>1.378</b>	<b>1.310</b>	$\frac{25}{32}$	<b>0.815</b>	<b>0.747</b>
$1\frac{1}{2}$	<b>1.5000</b>	$2\frac{3}{8}$	<b>2.375</b>	<b>2.300</b>	<b>2.742</b>	<b>2.622</b>	$1\frac{15}{32}$	<b>1.505</b>	<b>1.433</b>	$\frac{27}{32}$	<b>0.880</b>	<b>0.808</b>
$1\frac{5}{8}$	1.6250	$2\frac{9}{16}$	2.562	2.481	2.959	2.828	$1\frac{19}{32}$	1.632	1.556	$\frac{29}{32}$	0.944	0.868
$1\frac{3}{4}$	<b>1.7500</b>	$2\frac{3}{4}$	<b>2.750</b>	<b>2.662</b>	<b>3.175</b>	<b>3.035</b>	$1\frac{23}{32}$	<b>1.759</b>	<b>1.679</b>	$\frac{31}{32}$	<b>1.009</b>	<b>0.929</b>
$1\frac{7}{8}$	1.8750	$2\frac{15}{16}$	2.938	2.844	3.392	3.242	$1\frac{27}{32}$	1.886	1.802	$1\frac{1}{32}$	1.073	0.989
<b>2</b>	<b>2.0000</b>	$3\frac{1}{8}$	<b>3.125</b>	<b>3.025</b>	<b>3.608</b>	<b>3.449</b>	$1\frac{31}{32}$	<b>2.013</b>	<b>1.925</b>	$1\frac{3}{32}$	<b>1.138</b>	<b>1.050</b>
$2\frac{1}{4}$	2.2500	$3\frac{1}{2}$	3.500	3.388	4.041	3.862	$2\frac{13}{64}$	2.251	2.155	$1\frac{13}{64}$	1.251	1.155
$2\frac{1}{2}$	2.5000	$3\frac{3}{4}$	3.875	3.750	4.474	4.275	$2\frac{23}{64}$	2.505	2.401	$1\frac{23}{64}$	1.505	1.401
$2\frac{3}{4}$	2.7500	$4\frac{1}{4}$	4.250	4.112	4.907	4.688	$2\frac{45}{64}$	2.759	2.647	$1\frac{37}{64}$	1.634	1.522
<b>3</b>	<b>3.0000</b>	$4\frac{3}{8}$	<b>4.625</b>	<b>4.475</b>	<b>5.340</b>	<b>5.102</b>	$2\frac{61}{64}$	<b>3.013</b>	<b>2.893</b>	$1\frac{45}{64}$	<b>1.763</b>	<b>1.643</b>
$3\frac{1}{4}$	3.2500	<b>5</b>	5.000	4.838	5.774	5.515	$3\frac{1}{16}$	3.252	3.124	$1\frac{13}{16}$	1.876	1.748
$3\frac{1}{2}$	3.5000	$5\frac{3}{8}$	5.375	5.200	6.207	5.928	$3\frac{1}{16}$	3.506	3.370	$1\frac{15}{16}$	2.006	1.870
$3\frac{3}{4}$	3.7500	$5\frac{1}{2}$	5.750	5.562	6.640	6.341	$3\frac{11}{16}$	3.760	3.616	$2\frac{1}{16}$	2.134	1.990
<b>4</b>	<b>4.0000</b>	$6\frac{1}{8}$	<b>6.125</b>	<b>5.925</b>	<b>7.073</b>	<b>6.755</b>	$3\frac{15}{16}$	<b>4.014</b>	<b>3.862</b>	$2\frac{3}{16}$	<b>2.264</b>	<b>2.112</b>

All dimensions are in inches.

**Bold type shows nuts unified dimensionally with British and Canadian Standards.**

Threads are Unified Coarse-, Fine-, or 8-thread series (UNC, UNF or 8UN), Class 2B. Unification of fine-thread nuts is limited to sizes 1 inch and under.