

# HEX WASHER HEAD TAPPING SCREWS

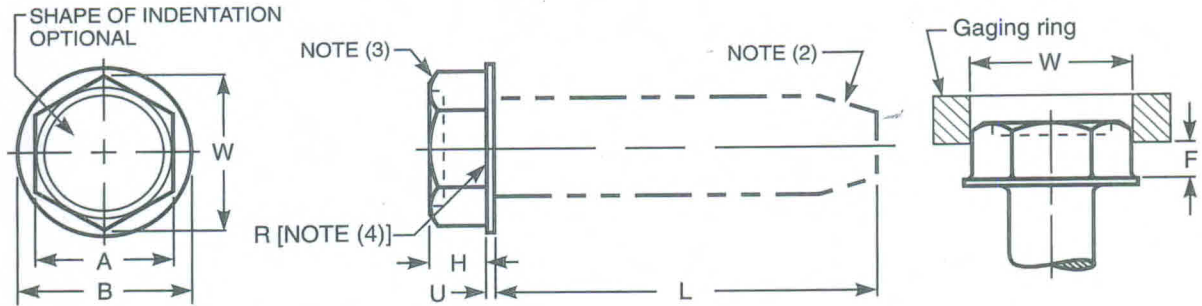


Table 29 Dimensions of Hex Washer Head Tapping Screws

Nominal Size or Basic Screw Diameter	Applicable to Screw Types	A		W	H		B		U		F
		Width Across Flats		Width Across Corners	Head Height		Washer Diameter		Washer Thickness		Protrusion Beyond Gaging Ring
		Code Symbols	Max	Min	Min	Max	Min	Max	Min	Max	Min
2 0.0860	●◆▲	0.125	0.120	0.134	0.050	0.040	0.166	0.154	0.016	0.010	0.024
3 0.0990	●◆▲	0.125	0.120	0.134	0.055	0.044	0.177	0.163	0.016	0.010	0.026
4 0.1120	●◆▲■	0.188	0.181	0.202	0.060	0.049	0.243	0.225	0.019	0.011	0.029
5 0.1250	●◆▲■	0.188	0.181	0.202	0.070	0.058	0.260	0.240	0.025	0.015	0.035
6 0.1380	●◆▲■	0.250	0.244	0.272	0.093	0.080	0.328	0.302	0.025	0.015	0.048
7 0.1510	●◆▲	0.250	0.244	0.272	0.093	0.080	0.328	0.302	0.029	0.017	0.048
8 0.1640	●◆▲■	0.250	0.244	0.272	0.110	0.096	0.348	0.322	0.031	0.019	0.058
10 0.1900	●◆▲■	0.312	0.305	0.340	0.120	0.105	0.414	0.384	0.031	0.019	0.063
12 0.2160	●◆▲■	0.312	0.305	0.340	0.155	0.139	0.432	0.398	0.039	0.022	0.083
14 0.2420	◆	0.375	0.367	0.409	0.190	0.172	0.520	0.480	0.050	0.030	0.103
1/4 0.2500	●▲■	0.375	0.367	0.409	0.190	0.172	0.520	0.480	0.050	0.030	0.103
5/16 0.3125	●▲■	0.500	0.489	0.545	0.230	0.208	0.676	0.624	0.055	0.035	0.125
20 0.3200	◆	0.500	0.489	0.545	0.230	0.208	0.676	0.624	0.055	0.035	0.125
24 0.3720	◆	0.562	0.551	0.614	0.295	0.270	0.780	0.720	0.063	0.037	0.162
3/8 0.3750	▲■	0.562	0.551	0.614	0.295	0.270	0.780	0.720	0.063	0.037	0.162
7/16 0.4375	▲■	0.625	0.610	0.682	0.348	0.321	0.870	0.790	0.073	0.043	0.193
1/2 0.5000	▲■	0.750	0.735	0.820	0.400	0.367	1.040	0.960	0.085	0.050	0.220
See Notes 1	2	3, 5		3, 5, 6							6

**NOTES:**

- (1) Where specifying nominal size in decimals, zeros preceding decimal and in the fourth decimal place shall be omitted.
- (2) Applicable to screw types as indicated by code symbols below. See referenced tables for thread and point dimensions and minimum practical screw lengths.
  - Type AB thread forming, see Table 6, page H-26.
  - ◆ Type A thread forming, except for short lengths, see Appendix E, page H-64.
  - ▲ Types B and BP thread forming, see Table 7; and Types BF and BT thread cutting, see Table 8, pages H-27 and H-28.
  - Type C thread forming, see Appendix V; and Types D, F, G, and T thread cutting, see Table 9, page H-29.
- (3) A slight rounding of all edges and corners of the hex surfaces of heads shall be permissible.
- (4) Fillet radius *R* at junction of sides of hex and top of washer shall not exceed 0.15 times the basic screw diameter.
- (5) Dimensions across flats and across corners of the head shall be measured at the point of maximum metal. Taper of sides of hex (angle between one side and the axis) shall not exceed 2° or 0.004 in., whichever is greater, the specified width across flats being the large dimension.
- (6) The rounding due to lack of fill on all six corners of the head shall be reasonably uniform and the width across corners of the head shall be such that when a sharp ring having an inside diameter equal to the specified minimum width across corners is placed on the top of the head, the hex portion of the head shall protrude by an amount equal to, or greater than, the *F* value tabulated. See Appendix II for across corners gaging of hex heads.
- (7) For additional requirements, refer to Para. 2, page H-18.