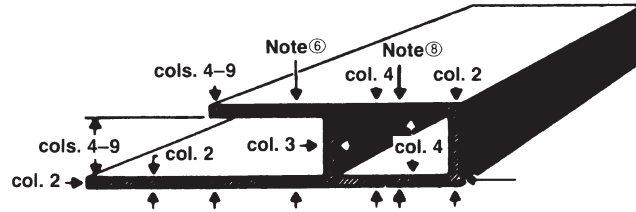


**TABLE 11.2 Cross-Sectional Dimension Tolerances—Profiles** ①

EXCEPT FOR T3510, T4510, T6510, T73510, T76510 AND T8510 TEMPER ⑦



SPECIFIED DIMENSION	TOLERANCE ② ③—in. plus and minus															
	METAL DIMENSIONS				SPACE DIMENSIONS											
	ALLOWABLE DEVIATION FROM SPECIFIED DIMENSION WHERE 75 PERCENT OR MORE OF THE DIMENSION IS METAL ⑨ ⑩				ALLOWABLE DEVIATION FROM SPECIFIED DIMENSION WHERE MORE THAN 25 PERCENT OF THE DIMENSION IS SPACE ⑥ ⑧											
in.	All Except Those Covered by Column 3		Wall Thickness ④ Completely ⑤ Enclosing Space 0.11 sq. in. and Over (Eccentricity)		At Dimensioned Points ② 0.250–0.624 inches from Base of Leg		At Dimensioned Points ③ 0.625–1.249 inches from Base of Leg		At Dimensioned Points ④ 1.250–2.499 inches from Base of Leg		At Dimensioned Points ⑤ 2.500–3.999 inches from Base of Leg		At Dimensioned Points ⑥ 4.000–5.999 inches from Base of Leg		At Dimensioned Points ⑦ 6.000–8.000 inches from Base of Leg	
Col. 1	Col. 2		Col. 3		Col. 4		Col. 5		Col. 6		Col. 7		Col. 8		Col. 9	
	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys	Standard Tolerance, All Except 5XXX Alloys ⑪	Precision Tolerance, All Except 5XXX Alloys

**Dim2 = 0.600**

**Precision = True**

**CIRCUMSCRIBING CIRCLE SIZES LESS THAN 10 INCHES IN DIAMETER**

Up thru 0.124	0.006	0.004	±10% of specified dimension; ±0.00 max. ±0.10 min.	±10% of specified dimension; ±0.00 max. ±0.10 min.	0.010	0.007	0.012	0.008	...	...	...	...	...	...	...	...	
0.125–0.249	0.007	0.005			0.012	0.008	0.014	0.009	0.016	0.014	...	...	...	...	...	...	...
0.250–0.499	0.008	0.005			0.014	0.009	0.016	0.011	0.018	0.012	0.018	0.013	0.020	0.013	...	...	...
0.500–0.749	0.009	0.006			0.016	0.011	0.018	0.012	0.020	0.013	0.020	0.013	0.025	0.015	...	...	...
0.750–0.999	0.010	0.007			0.018	0.012	0.020	0.013	0.022	0.015	0.025	0.015	0.025	0.017	...	...	...
1.000–1.499	0.012	0.008	±10% of specified dimension; ±0.00 max. ±0.10 min.	±10% of specified dimension; ±0.00 max. ±0.10 min.	0.021	0.014	0.023	0.015	0.026	0.017	0.030	0.020	0.024	0.042	0.028	0.050	0.033
1.500–1.999	0.014	0.009			0.024	0.016	0.026	0.017	0.031	0.020	0.036	0.024	0.042	0.028	0.045	0.080	0.053
2.000–3.999	0.024	0.016			0.034	0.022	0.038	0.025	0.048	0.032	0.057	0.038	0.068	0.045	0.080	0.110	0.073
4.000–5.999	0.034	0.022			0.044	0.029	0.050	0.033	0.064	0.042	0.078	0.051	0.094	0.062	0.110	0.140	0.092
6.000–7.999	0.044	0.029			0.054	0.036	0.062	0.041	0.082	0.054	0.099	0.065	0.120	0.079	0.140	0.170	0.112
8.000–9.999	0.054	0.036	0.064	0.042	0.074	0.049	0.100	0.066	0.120	0.079	0.145	0.096	0.170	0.200	0.132		

**LessThan10 = True**

**CIRCUMSCRIBING CIRCLE SIZES 10 INCHES IN DIAMETER AND OVER**

Up thru 0.124	0.014	0.009	±15% of specified dimension; ±0.090 max. ±0.10 min.	±15% of specified dimension; ±0.090 max. ±0.10 min.	0.018	0.012	0.020	0.013	...	...	...	...	...	...	...	...	
0.125–0.249	0.015	0.010			0.019	0.013	0.022	0.015	0.028	0.018	...	...	...	...	...	...	...
0.250–0.499	0.016	0.011			0.020	0.013	0.024	0.016	0.030	0.020	0.033	0.024	0.046	0.030	0.059	0.042	0.059
0.500–0.749	0.017	0.011			0.022	0.015	0.027	0.018	0.040	0.024	0.046	0.030	0.059	0.042	0.059	0.042	0.059
0.750–0.999	0.018	0.012			0.023	0.015	0.030	0.020	0.050	0.033	0.070	0.046	0.090	0.059	0.073	0.110	0.073
1.000–1.499	0.019	0.012	±15% of specified dimension; ±0.090 max. ±0.10 min.	±15% of specified dimension; ±0.090 max. ±0.10 min.	0.024	0.016	0.034	0.022	0.060	0.040	0.080	0.053	0.100	0.066	0.110	0.066	
1.500–1.999	0.024	0.014			0.022	0.016	0.044	0.029	0.070	0.046	0.090	0.059	0.110	0.073	0.170	0.112	
2.000–3.999	0.034	0.022			0.029	0.016	0.054	0.036	0.080	0.053	0.100	0.066	0.120	0.079	0.180	0.119	
4.000–5.999	0.044	0.029			0.044	0.029	0.064	0.042	0.090	0.059	0.110	0.073	0.130	0.086	0.190	0.125	
6.000–7.999	0.054	0.036			0.054	0.036	0.074	0.049	0.100	0.066	0.120	0.079	0.140	0.092	0.200	0.132	
8.000–9.999	0.064	0.042	±15% of specified dimension; ±0.090 max. ±0.10 min.	±15% of specified dimension; ±0.090 max. ±0.10 min.	0.074	0.049	0.084	0.055	0.110	0.073	0.130	0.086	0.150	0.099	0.210	0.139	
10.000–11.999	0.074	0.049			0.084	0.055	0.094	0.062	0.120	0.079	0.140	0.092	0.160	0.106	0.220	0.145	
12.000–13.999	0.084	0.055			0.094	0.062	0.104	0.069	0.130	0.086	0.150	0.099	0.170	0.112	0.230	0.152	
14.000–15.999	0.094	0.062			0.104	0.069	0.114	0.075	0.140	0.092	0.160	0.106	0.180	0.119	0.240	0.158	
16.000–17.999	0.104	0.069			0.114	0.075	0.124	0.082	0.150	0.099	0.170	0.112	0.190	0.125	0.250	0.165	
18.000–19.999	0.114	0.075	±15% of specified dimension; ±0.090 max. ±0.10 min.	±15% of specified dimension; ±0.090 max. ±0.10 min.	0.124	0.082	0.134	0.088	0.160	0.106	1.800	1.188	0.200	0.132	0.260	0.172	
20.000–21.999	0.124	0.082			0.134	0.088	0.144	0.095	0.170	0.112	0.190	0.125	0.210	0.139	0.270	0.178	
22.000–24.000	0.134	0.088			0.144	0.095	0.154	0.102	0.180	0.119	0.200	0.132	0.220	0.145	0.280	0.185	

**Return this Value!!!!**

**Dim1 = 2.400**

**Footnotes for Tables 11.2 through 11.4**

① These Standard and Precision Tolerances are applicable to the average profile. The extrusion conditions required to produce the wide variety of alloy-temper and profile combinations require close review between customer and producer to determine critical characteristics and tolerance capability. Aggressive profile characteristics may require wider than standard tolerance and closer than precision tolerance may be feasible for other characteristics.  
 ② The tolerance applicable to a dimension composed of two or more component dimensions is the sum of the tolerances of the component dimensions if all of the component dimensions are indicated.  
 ③ When a dimension tolerance is specified other than as an equal bilateral tolerance, the value of the standard tolerance is that which applies to the mean

of the maximum and minimum dimensions permissible under the tolerance for the dimension under consideration.

④ Where dimensions specified are outside and inside, rather than wall thickness itself, the allowable deviation (eccentricity) given in Column 3 applies to mean wall thickness. (Mean wall thickness is the average of two wall thickness measurements taken at opposite sides of the void.)

⑤ In the case of Class 1 Hollow Profiles the standard wall thickness tolerance for extruded round tube is applicable. (A Class 1 Hollow Profile is one whose void is round and one inch or more in diameter and whose weight is equally distributed on opposite sides of two or more equally spaced axes.)

(Continued on bottom of next page)