

**Cold Rolled Steel
Electro Galvanized — Long Terne**

Gage	Mean of Gage	Min. of Gage	Max. of Gage	Lbs. Per Sq. Ft.
7	.1793	.1713	.1873	7.500
8	.1644	.1564	.1724	6.875
9	.1495	.1415	.1575	6.250
10	.1345	.1285	.1405	5.625
11	.1196	.1136	.1256	5.000
12	.1046	.0986	.1106	4.375
13	.0897	.0847	.0947	3.750
14	.0747	.0697	.0797	3.125
15	.0673	.0623	.0723	2.813
16	.0598	.0548	.0648	2.500
17	.0538	.0498	.0578	2.250
18	.0478	.0438	.0518	2.000
19	.0418	.0378	.0458	1.750
20	.0359	.0329	.0389	1.500
21	.0329	.0299	.0359	1.375
22	.0299	.0269	.0329	1.250
23	.0269	.0239	.0299	1.125
24	.0239	.0209	.0269	1.000
25	.0209	.0179	.0239	.875
26	.0179	.0159	.0199	.750
27	.0164	.0144	.0184	.688
28	.0149	.0129	.0169	.625

THICKNESS TOLERANCES PLATE

Permissible Variation in Thickness for Rectangular Carbon, High-Strength Low Alloy, and Alloy-Steel Plates, When Ordered to Thickness.

Note 1 — Permissible variation under specified thickness, 0.01 inch.

Note 2 — Thickness to be measured at 3/8 to 3/4 inch from the longitudinal edge.

Note 3 — For thickness measured at any location other than that specified in Note 2, the permissible maximum over tolerance shall be increased by 75%, rounded to the nearest 0.01 inch.

Tolerance Over Specified Thickness for Width In Inches

Specified Thickness Inches	Wt. Per Sq. Ft. In Lbs.	To 84" Excl.	84" To 96" Excl.	95" To 108" Excl.
3/16"	7.66	.03"	.03"	.03"
1/4"	10.21	.03"	.03"	.03"
5/16"	12.76	.03"	.03"	.03"
3/8"	15.32	.03"	.03"	.03"
7/16"	17.87	.03"	.03"	.03"
1/2"	20.42	.03"	.03"	.03"
9/16"	22.97	.03"	.03"	.03"
5/8"	25.53	.03"	.03"	.03"
3/4"	30.63	.03"	.03"	.04"
7/8"	35.74	.03"	.04"	.04"
1"	40.84	.06"	.06"	.07"

Source: ASTM A6, Table 1.

Sheet Thickness Tolerances

Stainless Steel				Lbs. Per Square Foot	
Gage	Mean of Gage	Min. of Gage	Max. of Gage	All 300 Series	All 400 Series
7	.1874	.1735	.2015	7.871	7.70
8	.1650	.1510	.1790	6.930	6.78
9	.150	.136	.164	6.300	6.165
10	.135	.129	.141	5.670	5.562
11	.120	.115	.125	5.040	4.944
12	.1054	.1004	.1104	4.427	4.342
13	.090	.0860	.094	3.780	3.708
14	.0751	.0711	.0791	3.154	3.094
15	.0673	.0643	.0703	2.826	2.766
16	.0595	.0565	.0625	2.499	2.451
17	.0538	.0508	.0568	2.259	2.211
18	.048	.045	.051	2.016	1.978
19	.042	.039	.045	1.764	1.726
20	.0355	.0335	.0375	1.491	1.463
21	.0324	.0304	.0344	1.360	1.33
22	.0293	.0273	.0313	1.231	1.207
23	.0264	.0249	.0279	1.1088	1.085
24	.0235	.0220	.0250	.987	.968
25	.0209	.0194	.0224	.8778	.8589
26	.0178	.0163	.0193	.748	.7315
27	.0165	.0150	.0180	.693	.6781
28	.0151	.0136	.0166	.634	.6206
29	.0138	.0123	.0153	.5796	.5671
30	.0125	.0110	.0140	.525	.5137

Stainless Steel Plate Thickness

Thickness Tolerance Over Variation * In Inches

Thickness In Inches	Est. Wt. Sq. Ft. In Lbs.	Widths To 84" Incl.	Widths Over 84" To 120" Incl.	Widths Over 120" To 144" Incl.	Widths Over 144" Incl.
3/16"	8.58	.045"			
1/4"	11.16	.045"			
5/16"	13.75	.045"			
3/8"	16.49	.055"	.060"	.075"	.090"
1/2"	21.66	.055"	.060"	.075"	.090"
5/8"	26.83	.055"	.060"	.075"	.090"
3/4"	32.12	.060"	.065"	.085"	.100"
7/8"	37.29	.060"	.065"	.085"	.100"
1"	42.66	.060"	.075"	.095"	.115"

*Thickness is measured along the longitudinal edges of the plate at least 3/8", but not more than 3", in from the edge. No plate shall vary more than .01" under the thickness ordered.

Source: ASTM A480, Table A1.17.

Sheet Thickness Tolerances

Hot Dipped Galvanized — Aluminized Steel				
Gage	Mean of Gage	Min. of Gage	Max. of Gage	Lbs. Per Sq. Ft.
8	.1681	.1591	.1771	7.031
9	.1532	.1442	.1622	6.406
10	.1382	.1292	.1472	5.781
11	.1233	.1143	.1323	5.156
12	.1084	.0994	.1174	4.531
13	.0934	.0854	.1014	3.906
14	.0785	.0705	.0865	3.281
15	.0710	.0650	.0770	2.969
16	.0635	.0575	.0695	2.656
17	.0575	.0525	.0625	2.406
18	.0516	.0466	.0566	2.156
19	.0456	.0406	.0506	1.906
20	.0396	.0356	.0436	1.656
21	.0366	.0326	.0406	1.531
22	.0336	.0296	.0376	1.406
23	.0306	.0266	.0346	1.281
24	.0276	.0236	.0316	1.156
25	.0247	.0207	.0287	1.031
26	.0217	.0187	.0247	.906
27	.0202	.0172	.0232	.844
28	.0187	.0157	.0217	.781
29	.0172	.0142	.0202	.719
30	.0157	.0127	.0187	.656

Sheet Thickness Tolerances

Electrolytic Tin Plate				
Lb. Per Base Box	Mean of Gage	Min. of Gage	Max. of Gage	Lb. Per Sq. Ft.
55	.0061	.0055	.0067	.253
60	.0066	.0059	.0073	.276
65	.0072	.0065	.0079	.298
70	.0077	.0069	.0085	.321
75	.0083	.0075	.0091	.344
80	.0088	.0079	.0097	.367
85	.0094	.0085	.0103	.390
90	.0099	.0089	.0109	.413
95	.0105	.0094	.0116	.436
100	.0110	.0099	.0121	.459
107	.0118	.0106	.0130	.491
112	.0123	.0111	.0135	.514
118	.0130	.0117	.0143	.542
128	.0141	.0127	.0155	.588
135	.0149	.0134	.0164	.620
148	.0163	.0143	.0183	.680
155	.0170	.0150	.0190	.712
175	.0192	.0162	.0222	.804
180	.0198	.0168	.0228	.827
195	.0214	.0184	.0244	.895
210	.0231	.0201	.0261	.964
215	.0236	.0206	.0266	.987
235	.0258	.0228	.0288	1.079
240	.0264	.0234	.0294	1.102
255	.0280	.0250	.0310	1.171
270	.0297	.0267	.0327	1.240
275	.0302	.0272	.0332	1.263

Aluminum Sheet Thickness Tolerances
 36"-48" Wide
 Alloys 1100, 3003, 3005, 3105, 5005, 5457

Aluminum			Lbs. Per Square Foot						
Mean of Gage	Min. of Gage	Max. of Gage	1100 & 3105	3003 & 3005	5005 & 5457	5052 & 5252	2024	6061	5086 & 5083
.012	.010	.014	.169	—	.169	—	—	—	.165
.016	.014	.018	.226	.228	.226	—	.232	—	.221
.020	.018	.022	.282	.285	.282	.279	.288	.282	.276
.025	.023	.027	.353	.356	.353	.349	.360	.353	.346
.032	.0295	.0345	.452	.456	.452	.447	.461	.452	.443
.040	.0365	.0435	.564	.570	.564	.559	.576	.564	.552
.050	.0485	.0535	.706	.713	.706	.698	.720	.706	.692
.063	.0595	.0665	.889	.898	.889	.880	.907	.889	.871
.080	.0755	.0845	1.13	1.14	1.13	1.12	1.15	1.13	1.11
.090	.0855	.0945	1.27	1.28	1.27	1.26	1.30	1.27	1.24
.100	.0945	.1055	1.41	1.43	1.41	1.40	1.45	1.41	1.38
.125	.1195	.1305	1.76	1.78	1.76	1.75	1.80	1.76	1.72
.160	.151	.169	2.27	2.28	2.27	2.23	2.30	2.25	2.22
.190	.181	.199	2.69	2.71	2.69	2.65	2.74	2.69	2.64
.249	.235	.263	3.52	—	3.52	3.49	—	—	3.45

Tolerances
 (In Plus and Minus)
 Aluminum Plate Thickness
 Alloys 1100, 3003, 3005, 3105, 5005, 5457

Thickness Inches	Approx. Wt. Per Sq. Ft.	Thru 39.37	Over 39.37 Thru 59.06	Over 59.06 Thru 78.74
.250"	3.456	.012	.014	.015
.313"	4.310	.012	.014	.015
.375"	5.184	.017	.017	.020
.500"	6.912	.023	.023	.027
.625"	8.640	.023	.023	.027
.750"	10.37	.031	.031	.037
.875"	12.60	.031	.031	.037
1.000"	14.11	.039	.039	.047

Aluminum Sheet Thickness Tolerances

36"-48" Wide

Alloys 5052, 5083, 5086, 5252, 6061

Aluminum			Lbs. Per Square Foot						
Mean of Gage	Min. of Gage	Max. of Gage	1100 & 3105	3003 & 3005	5005 & 5457	5052 & 5252	2024	6061	5086 & 5083
.012	.0095	.0145	.169	—	.169	—	—	—	.165
.016	.0135	.0185	.226	.228	.226	—	.232	—	.221
.020	.0175	.0225	.282	.285	.282	.279	.288	.282	.276
.025	.0225	.0275	.353	.356	.353	.349	.360	.353	.346
.032	.0285	.0355	.452	.456	.452	.447	.461	.452	.443
.040	.036	.044	.564	.570	.564	.559	.576	.564	.552
.050	.0445	.0545	.706	.713	.706	.698	.720	.706	.692
.063	.0585	.0675	.889	.898	.889	.880	.907	.889	.871
.080	.074	.086	1.13	1.14	1.13	1.12	1.15	1.13	1.11
.090	.084	.096	1.27	1.28	1.27	1.26	1.30	1.27	1.24
.100	.093	.107	1.41	1.43	1.41	1.40	1.45	1.41	1.38
.125	.118	.132	1.76	1.78	1.76	1.75	1.80	1.76	1.72
.160	.150	.170	2.27	2.28	2.27	2.23	2.30	2.25	2.22
.190	.180	.200	2.69	2.71	2.69	2.65	2.74	2.69	2.64
.249	.234	.264	3.52	—	3.52	3.49	—	—	3.45

Tolerances

(In Plus and Minus)

Aluminum Plate Thickness

Alloys 5052, 5083, 5086, 5252, 6061

Thickness Inches	Approx. Wt. Per Sq. Ft.	Thru 39.37	Over 39.37 Thru 59.06	Over 59.06 Thru 78.74
.250"	3.456	.012	.015	.019
.313"	4.310	.012	.015	.019
.375"	5.184	.017	.018	.022
.500"	6.912	.023	.023	.028
.625"	8.640	.023	.023	.028
.750"	10.37	.031	.031	.037
.875"	12.60	.031	.031	.037
1.000"	14.11	.039	.039	.047

Aluminum Plate Thickness Tolerances

(In Plus and Minus)

Alloys 2024, 7075

Aluminum			Lbs. Per Square Foot						
Mean of Gage	Min. of Gage	Max. of Gage	1100 & 3105	3003 & 3005	5005 & 5457	5052 & 5252	2024	6061	7075
.012	.0095	.0145	.169	—	.169	—	—	—	.175
.016	.0135	.0185	.226	.228	.226	—	.232	—	.232
.020	.0175	.0225	.282	.285	.282	.279	.288	.282	.291
.025	.0225	.0275	.353	.356	.353	.349	.360	.353	.364
.032	.030	.0345	.452	.456	.452	.447	.461	.452	.466
.040	.038	.042	.564	.570	.564	.559	.576	.564	.582
.050	.047	.053	.706	.713	.706	.698	.720	.706	.727
.063	.060	.066	.889	.898	.889	.880	.907	.889	.916
.080	.0765	.0835	1.13	1.14	1.13	1.12	1.15	1.13	1.16
.090	.0885	.0935	1.27	1.28	1.27	1.26	1.30	1.27	1.31
.100	.0965	.1035	1.41	1.43	1.41	1.40	1.45	1.41	1.45
.125	.1215	.1285	1.76	1.78	1.76	1.75	1.80	1.76	1.82
.160	.153	.167	2.27	2.28	2.27	2.23	2.30	2.25	2.32
.190	.183	.197	2.69	2.71	2.69	2.65	2.74	2.69	2.77
.249	.234	.264	3.52	—	3.52	3.49	—	—	3.62

Tolerances

(In Plus and Minus)

Aluminum Plate Thickness

Alloys 2024, 7075

Thickness Inches	Approx. Wt. Per Sq. Ft.	Thru 39.37	Over 39.37 Thru 47.24	Over 47.24 Thru 55.12	Over 55.12 Thru 59.06	Over 59.06 Thru 70.87	Over 70.87 Thru 78.74
.250"	3.456	.012	.015	.015	.015	.019	.019
.313"	4.310	.012	.015	.015	.015	.019	.019
.375"	5.184	.017	.018	.018	.018	.022	.022
.500"	6.912	.023	.023	.023	.023	.028	.028
.625"	8.640	.023	.023	.023	.023	.028	.028
.750"	10.37	.031	.031	.031	.031	.037	.037
.875"	12.60	.031	.031	.031	.031	.037	.037
1.000"	14.11	.039	.039	.039	.039	.047	.047

**International Thickness Tolerance of
Perforated Plates and Sheets**

Table 4: Tolerance on Thickness of USA Standard Specifications for Industrial Perforated Plate and Sheets.

Gage	Steel		Tolerance on Gage	
	USA Industrial Standard In.	USA Industrial Decimal Equivalent In.	Standard (Metric) mm	USA Industrial Standard In.
25.4	1		+1.00	+0.040
			-0.25	-0.010
22.4	7/8		-0.25	+0.035
			+0.89	-0.010
19.0	3/4		+0.84	+0.033
			-0.25	-0.010
16.0	5/8		+0.79	+0.031
			-0.25	-0.010
12.5	1/2		+0.76	+0.030
			-0.25	-0.010
9.50	3/8		+0.66	+0.026
			-0.25	-0.010
8.00	5/16		+0.64	+0.025
			-0.25	-0.010
6.30	1/4		+0.53	+0.021
			-0.25	-0.010
4.75	3/16		+0.51	+0.020
			-0.25	-0.010
4.25	No.8 USS gage	0.1644	±0.25	±0.010
3.35	10	0.1345	±0.25	±0.010
3.00	11	0.1196	±0.25	±0.010
2.65	12	0.1046	±0.25	±0.010
1.90	14	0.0747	±0.18	±0.007
1.52	16	0.0598	±0.13	±0.005
1.21	18	0.0478	±0.10	±0.004
0.91	20	0.0359	±0.08	±0.003
0.76	22	0.0299	±0.08	±0.003
0.61	24	0.0239	±0.08	±0.003
0.45	26	0.0179	±0.05	±0.002
0.38	28	0.0149	±0.05	±0.002
0.30	30	0.0120	±0.05	±0.002