

## ALUMINUM SELECTION GUIDE

**1100** - (UNS A91100) Commercially pure aluminum (99.00% minimum). Excellent corrosion resistance, workability and weldability. Has a high thermal conductivity. Tensile strength range 14,000 to 24,000 psi. Applications include deep drawing and spinning requirements, sheet metal work, decorative and architectural applications, air ducts, name plates, and fan blades. Conforms to Federal specification QQ-A-250/1.

**3003** - (UNS A93003) Alloyed with 1.2% manganese to provide a tensile strength range of 17,000 to 30,000 psi. Excellent workability, weldability and corrosion resistance. Used for drawing, spinning, fuel tanks, sheet metal work and other applications where slightly higher strength (over 1100) is required. Conforms to Federal specification QQ-A-250/2.

**5005** - (UNS A95005) Alloyed with .8% magnesium. Tensile strength range 18,000 to 30,000 psi. Excellent workability, weldability and corrosion resistance. Specified for applications comparable to 1100 and 3003 where special anodizing is required. Anodized finish matches that of architectural alloy 6063. Conforms to ASTM specification B209.

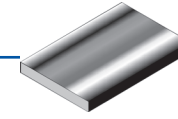
**5052** - (UNS A95052) Alloyed with 2.5% magnesium. Tensile strength range 31,000 to 44,000 psi. Very good corrosion resistance, good workability, good weldability, and strength. Used for aircraft fuel tanks, storm shutters, refrigerator liners, utensils, electronic mounting plates and panels, and fan blades. Comforms to Federal specification QQ-A-258/8.

**5083** - (UNS A95083) Alloyed with 4.45% magnesium, 0.65% manganese and 0.15% chromium. Tensile strength range 40,000 to 59,000 psi. For use in structures requiring high weld efficiency for maximum joint strength, light weight and corrosion resistance. Applications include marine components, truck bodies, construction equipment, tanks, structural towers, drilling rigs, cryogenic applications, etc. Conforms to ASME SB 209.

**5086** - (UNS A95086) Alloyed with 4.0% magnesium, 45% manganese and 0.15% chromium. This alloy had a typical tensile strength range of 40,000 to 54,000 psi. It offers resistance to stress corrosion and superior resistance to atmospheric corrosion plus good general workability. Applications include tanks, marine components and welded assemblies of all kinds. Comforms to Federal specification QQ-A-250/7.

**5054** - (UNS A95454) Alloyed with 2.7% magnesium, 0.8% manganese and 0.12% chromium. Tensile strength range of 36,000 to 47,000 psi. Good formability, weldability and corrosion resistance. Uses include pressure vessels (ASME code approved for up to 400° F), tanks, welded structures, etc. Conforms to Federal Specification QQ-A-250/10.

## ALUMINUM SHEET - 3003

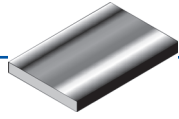


- 3003-H14
- Mill Finish
- QQ-A-250/2, ASTM B209, AMS 4008
- Items highlighted in blue are stock items.

	Size	Dimensions	Lbs/Sq.Ft.	Lbs/Sheet	Part No.
	.016"	36" x 120"	.2281	6.843	
	.025"	48" x 120"	.3564	14.26	
	.025"	48" x 144"	.3564	17.11	
	.032"	48" x 96"	.4562	14.60	Y8509
	.032"	48" x 120"	.4562	18.25	Y8455
	.032"	48" x 144"	.4562	21.90	
	.040"	48" x 96"	.5702	18.25	
White Aluminum >	.040"	48" x 120"	.5702	22.81	Y8477
	.040"	48" x 144"	.5702	27.37	
	.040"	60" x 144"	.5702	34.21	
	.050"	48" x 96"	.7130	22.82	
	.050"	48" x 120"	.7130	28.52	
	.050"	48" x 144"	.7130	34.22	
	.050"	60" x 144"	.7130	42.78	
	.063"	48" x 96"	.8981	28.74	Y8252
	.063"	48" x 120"	.8981	35.92	
	.063"	48" x 144"	.8981	43.11	
	.063"	60" x 144"	.8981	53.89	
	.080"	48" x 120"	1.140	45.60	Y8249
	.080"	48" x 144"	1.140	54.72	
	.080"	60" x 144"	1.140	68.40	
	.090"	48" x 120"	1.287	51.48	
	.090"	48" x 144"	1.287	61.78	Y8355
	.090"	60" x 144"	1.287	77.22	
	.125"	48" x 96"	1.782	57.02	Y8213
	.125"	48" x 120"	1.782	71.28	Y8227
	.125"	48" x 144"	1.782	85.54	
	.125"	60" x 120"	1.782	89.10	Y8491
	.190"	48" x 120"	2.713	108.5	
	.190"	48" x 144"	2.713	130.2	
	.190"	60" x 144"	2.713	162.8	
	.249"	48" x 144"	3.482	167.1	
	.249"	60" x 144"	3.482	208.9	

## ALUMINUM SHEET - 5052

- 5052-H32
- Mill Finish
- QQ-A-250/8, ASTM B209, AMS 4016
- Items highlighted in blue are stock items.



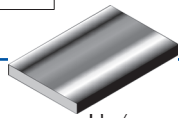
Size	Dimensions	Lbs/Sq.Ft.	Lbs/Sheet	Part No.
.040"	48" x 96"	.559	17.89	
.040"	48" x 120"	.559	22.36	
.040"	48" x 144"	.559	26.83	
.050"	48" x 96"	.698	22.34	
.050"	48" x 120"	.698	27.92	
.050"	48" x 144"	.698	33.50	
.050"	60" x 144"	.698	41.88	
.063"	48" x 96"	.8800	28.16	Y8252
.063"	48" x 120"	.8800	35.20	
.063"	48" x 144"	.8800	42.24	
.063"	60" x 144"	.8800	52.80	
.080"	48" x 96"	1.116	35.71	
.080"	48" x 120"	1.116	44.64	
.080"	48" x 144"	1.116	53.57	
.090"	48" x 96"	1.261	40.35	
.090"	48" x 120"	1.261	50.44	
.090"	48" x 144"	1.261	60.53	
.090"	60" x 144"	1.261	75.66	
.100"	48" x 120"	1.397	55.88	
.100"	48" x 144"	1.397	67.06	
.125"	48" x 96"	1.746	55.87	Y8213
.125"	48" x 120"	1.746	69.84	Y8227
.125"	48" x 144"	1.746	83.81	Y8201
.125"	60" x 144"	1.746	104.8	Y8233
.125"	72" x 144"	1.746	125.7	
.190"	48" x 96"	2.658	85.01	
.190"	48" x 144"	2.658	127.6	
.249"	48" x 144"	3.482	167.1	
.249"	60" x 144"	3.482	208.9	

## ALUMINUM PLATE

- 3003, 5052, and 6061

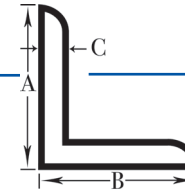
Size	W x L	Type	Lbs/ Sq.Ft.	Part No.
3/16"	4' x 8'	3003	2.737	Y8138
1/4"	4' x 8'	5052	3.60	Y8625
1/4"	4' x 10'	5052	3.60	Y8238

Size	W x L	Type	Lbs/ Sq.Ft.	Part No.
1/4"	4' x 12'	5052	3.60	Y8224
3/8"	4' x 12'	6061	2.62	Y8602
.190"	4' x 8'	3003	8.68	Y8604



## ALUMINUM ANGLES

- 6061-T6 Extruded
- QYA-200/8 and ASTM B221
- Available in 20' and 25' Lengths
- Items highlighted in blue are stock items.



Size	Lbs/Ft.	Part No.
1/2" x 1/2" x 1/8"		Y8634
3/4" x 3/4" x 1/16"	.1058	-
3/4" x 3/4" x 1/8"	.2011	Y8209
1" x 1" x 1/8"	.2752	Y8202
1" x 1" x 3/16"	.3998	-
1" x 1" x 1/4"	.5139	-
1-1/4" x 1-1/4" x 1/8"	.3434	-
1-1/4" x 1-1/4" x 3/16"	.5104	Y8206
1-1/4" x 1-1/4" x 1/4"	.6562	-
1-1/2" x 1-1/4" x 1/8"	.3869	-
1-1/2" x 1-1/4" x 3/16"	.5657	-
1-1/2" x 1-1/4" x 1/4"	.7338	-
1-1/2" x 1-1/2" x 1/8"	.4234	Y8231
1-1/2" x 1-1/2" x 3/16"	.6221	Y8954
1-1/2" x 1-1/2" x 1/4"	.8091	-
1-3/4" x 1-1/4" x 1/8"	.4210	-
1-3/4" x 1-1/4" x 3/16"	.6209	-
1-3/4" x 1-1/4" x 1/4"	.8091	-
1-3/4" x 1-3/4" x 1/8"	.4974	-
1-3/4" x 1-3/4" x 3/16"	.7315	-
1-3/4" x 1-3/4" x 1/4"	.9561	-
2" x 1-1/2" x 1/8"	.4963	-
2" x 1-1/2" x 3/16"	.7315	-
2" x 1-1/2" x 1/4"	.9561	-
2" x 2" x 1/8"	.5774	Y8208
2" x 2" x 3/16"	.8502	Y8122
2" x 2" x 1/4"	1.110	Y8258
2" x 2" x 3/8"	1.606	-
2-1/2" x 2" x 3/16"	.9608	-
2-1/2" x 2" x 1/4"	1.257	-
2-1/2" x 2-1/2" x 3/16"	1.070	Y8273
2-1/2" x 2-1/2" x 1/4"	1.404	-

Size	Lbs/Ft.	Part No.
2-1/2" x 2-1/2" x 5/16"	1.729	-
2-1/2" x 2-1/2" x 3/8"	2.047	-
3" x 2" x 3/16"	1.071	-
3" x 2" x 1/4"	1.403	-
3" x 2" x 3/8"	2.047	-
3" x 2-1/2" x 1/4"	1.537	-
3" x 3" x 1/8"		Y8955
3" x 3" x 3/16"	1.275	Y8957
3" x 3" x 1/4"	1.684	-
3" x 3" x 5/16"	2.082	-
3" x 3" x 3/8"	2.474	-
3" x 3" x 1/2"	3.227	-
3-1/2" x 2-1/2" x 1/4"	1.684	-
3-1/2" x 2-1/2" x 5/16"	2.082	-
3-1/2" x 2-1/2" x 3/8"	2.470	-
3-1/2" x 3-1/2" x 1/4"	1.989	-
3-1/2" x 3-1/2" x 5/16"	2.461	-
4" x 3" x 1/4"	1.989	Y8773
4" x 3" x 3/8"	2.926	-
4" x 4" x 1/4"	2.283	-
4" x 4" x 3/8"	3.366	-
4" x 4" x 1/2"	4.414	-
5" x 3" x 3/8"	3.349	-
5" x 3-1/2" x 1/2"	4.704	-
5" x 5" x 3/8"	4.237	-
5" x 5" x 1/2"	5.578	-
6" x 3-1/2" x 3/8"	4.121	-
6" x 4" x 3/8"	4.237	-
6" x 4" x 1/2"	5.578	-
6" x 6" x 3/8"	5.119	Y8703
6" x 6" x 1/2"	6.754	-
8" x 8" x 1/2"	9.141	-

## ALUMINUM CHANNEL

- 6063 - T5 and 6061 - T6
- QQA 200 16
- Available in 20' and 25' Lengths

Size	Lbs/Ft.	Part No.
3/4" x 3/4" x 1/8"	.300	Y8520
1-1/4" x 1-1/4" x 1/8"	.526	Y8953
2" x 1" x 1/8"	.564	Y8518
3" x 1.498" x .258"	1.729	Y8517
5" x 2-1/4" x .150"	2.212	Y8956
6" x 3-1/4" x 3/16"	4.030	Y8299
7" x 2.75" x .170"	-	Y8771

## ALUMINUM ROUND TUBE

- Type 6061
- Available in 12' and 24' Lengths

Size	Lbs/Ft.	Part No.
3/4" x .065	.160	Y8236
1" x .065	.229	Y8645
1-1/2" x .125	.635	Y8024
2-1/2" x .125	1.120	Y8445
3" x .120	1.341	Y8298
3" x .125	1.341	Y8700

## ALUMINUM SQUARE TUBE

- 6063 - T52 and 6061-T6
- QQA 200 9
- Available in 24' Lengths

Size	Lbs/Ft.	Part No.
1" x 1" x 11GA	.526	Y8034
1" x 1" x 1/8"	.526	Y8023
1-1/2" x 1-1/2" x .125"	.824	Y8496
2-1/2" x 2-1/2" x .125"	1.425	Y8708
4" x 4" x 1/4" (6061)	4.50	Y8064

## ALUMINUM RECTANGULAR TUBE

- 6063 - T52 and 6061-T6
- QQA 200 9

Size	Lbs/Ft.	Part No.
1" x 1" x 4-1/8"	-	Y8115
2-1/2" x 1-1/4" x 1/8"	-	Y8952

## ALUMINUM MECHANICAL TUBE

Size	Lbs/Ft.	Part No.
2" x .125" x 24'	1.75	Y8255
2-1/8" x .065" x 12'	-	Y8254

## ALUMINUM FLAT BAR

- 6061 - T6/6063-T5
- QQA 200 18
- ASTM B221
- Available in 12' and 20' Lengths

Size	Lbs/Ft.	Part No.
1/8" x 1" (6061)	.150	Y8707
1/8" x 4" (6061)	.600	Y8706
1/8" x 6" (6063)	.900	Y8094
3/16" x 4" (6061)	.902	Y8705
1/4" x 1/2" (6063)	.150	Y8575
1/4" x 1" (6063)	.300	Y8210
1/4" x 1-1/2" (6063)	.450	Y8471
1/4" x 2 (6063)	.600	Y8256
1/4" x 2-1/2" (6061)	.735	Y8642
1/4" x 3" (6063)	.900	Y8510
1/4" x 4" (6063)	1.200	Y8514
1/4" x 6" (6061)	1.800	Y8266
3/8" x 1" (6063)	.450	Y8472
3/8" x 2" (6061)	.900	Y8641
1/2" x 1" (6061)	.400	Y8207
1" x 4" (6061)	4.703	Y8006
1" x 12" (6061)	14.40	Y8521

## ALUMINUM PIPE

- 6063 - T52
- Schedule 40 and Schedule 80
- Available in 20' Lengths

Size	Lbs/Ft.	Sch.	Type	Part No.
1/4"	.147	Sch.40	6063	Y8644
3/4"	.391	Sch.40	6063	Y8218
3/4"	-	Sch.80	6061	Y8550
1"	.581	Sch.40	6063	Y8600
1"	-	Sch.80	6061	Y8606
1-1/4"	.786	Sch.40	6063	Y8118
1-1/2"	18.8	Sch.40	6063	Y8609
2"	1.264	Sch.40	6063	Y8119
5"	5.057	Sch.40	6061	Y8443
8"	9.777	Sch.40	6061	Y8117

## ALUMINUM TREADBRITE

- Type 3003

Size	W x L	Type	Lbs/Sq.Ft.	Part No.
.063"	4' x 8'	3003	1.071	Y8597
.080"	4' x 12'	3003	1.30	Y8200
1/8"	4' x 8'	3003	2.00	Y1282
1/8"	4' x 10'	3003	2.00	Y1281
1/8"	4' x 12'	3003	2.00	Y1283
1/8"	4' x 16'	3003	2.00	Y8260
1/8"	5' x 10'	3003	2.00	Y1279
3/16"	4' x 8'	3003	2.829	Y8253
1/4"	4' x 8'	3003	2.90	Y8261
1/4"	4' x 16'	3003	3.90	Y8259

## ALUM. EXTRUDED METAL

Size	W x L	Type	Part No.
1/2" x .081"	4" x 8"	-	Y8356
3/4" x 9"	4" x 8"	Flattened	Y8251