METALS

ALUMINUM ALLOYS

There are many different aluminum alloys which the homebuilder should be familiar with in order to construct a safe airframe. Description of the various alloys are as follows:

2024 - One of the best non heat-treated, high strength alloys with excellent fatigue resistance which is used extensively in aircraft construction. It is readily formed in the annealed condition and may be heat treated. Welding is generally not recommended. Applications include aircraft structural components, aircraft fittings and hardware, wheels and parts for the transportation industry.

3003 - The most widely used of aluminum alloys, it is pure aluminum with manganese added which increases the strength approximately 20% over 1100 (pure) aluminum). It has good corrosion resistance and with its excellent workability it may be deep drawn, spun, welded or brazed. An aircraft application is prop spinners.

5052 - The highest strength alloy of the non heat-treatable grades. Fatigue strength is higher than most other alloys. Good resistance to marine atmosphere and salt water corrosion. Applications range from aircraft components to home appliances, marine and transportation industry parts.

6061 - The least expensive and most versatile of the heat-treatable alloys with a wide range of good mechanical properties and corrosion resistance. It can be welded by all methods and can be welded by all methods and can be furnace brazed. It is available in Alclad (a thin coat of pure aluminum), which improves corrosion resistance. Applications include truck bodies and frames, screw machine parts and structural components. 6061 alloy is used extensively in bolt-together aircraft airframes.

7075 - One of the highest strength alloys available 7075 is ideally suited for high stress parts and is commonly used in aircraft structures. Arc or gas welding is not recommended. It is available in "Alclad" which improves corrosion resistance with only a minor reduction in strength. Use where highest strength is needed such as bearing housing and retention plates in rotor hubs. The accompanying charts indicate the characteristics of aluminum alloy plate and sheet that are suitable for aircraft construction. The most commonly used grades for structural components are 2024T3, 6061T6, and 7075T6. Tensile strength is listed in thousands of pounds per square inch (PSI) Bend radius is expressed in thicknesses of sheet and plate material. As an example 2t-4t denotes the minimum radius of a 1/4 inch plates should be 1/2 to 1 inch.

ALUMINUM ALLOY CHARACTERISTICS

		GEN. AVAILABILITY				TYPICAL CHARACTERISTICS							SPECIFIED MECHANICAL PROPERTIES					
										WELDABILITY			Where range is shown, property varies with specific width and /or thickness dimensions					
		FLAT SHEET	COIL SHEET	CUT TO LENGTH	PLATE	CORROSION RESIST.	COLD WORKABILITY	MACHINABILITY	BRAZABILITY	GAS	ARC	RESIST SPOT & SEAM	Tensile strength - ksi				Elongation in 2" or 4 times diameter percent minimum	Cost Rating
													ULTIMATE		YIELD			
ALLOY	TEMPER												Minimum	Maximum	Minimum	Maximum	Sheet	
Non-Heat Treatable Alloy																		
	0	X	X	X	-	A	A	D	A	A	A	B	11	15.5	3.5'	-	15-30	90
1100	H14	X	X	X	-	A	A	C	A	A	A	A	16	21	14'	-	3-9	101
	0	X	X	X	-	A	A	D	A	A	A	B	14	19	5'			82
3003	H14	X	X	X	-	A	B	C	A	A	A	A	20	26	17'	-	1-7	92
	O	X	X	X	-	A	A	D	C	A	A	B	25	31	9.5'	-	15-20	130
5052	H32	X	X	X	X	A	B	C	C	A	A	A	31	38	23'	-	4-9	147
	H34	X	X	X	-	A	B	C	C	A	A	A	34	41	26'	-	3-7	147
Heat- Treatable Alloy																		
	0	X	-	-	X	C	B	D	D	D	C	B	-	32	-	14	12	205
BARE	T3	X	0	0	0	C	C	B	D	D	C	A	63-64	-	42	-	10-15	205
2024	T351	-	-	-	X	C	C	B	D	D	C	A	56-64	-	40-41	-	-	205
	T42	-	-	-	-	C	C	B	D	D	C	A	58-62	-	38	-	12-15	
	0	X	X	-	X	A	B	D	D	D	C	B	-	30-32	-	14	10-12	205
ALCLAD	T3	X	-	-	-	A	D	B	D	D	C	A	58-63	-	39-40	-	10-15	205
2024	T351	-	-	-	X	A	D	B	D	D	C	A	56-63	-	40-41	-	-	205
	T42	-	-	-	-	A	D	B	D	D	C	A	55-61	-	34-38	-	10-15	
	0	X	X	-	X	A	A	D	A	A	A	B	-	22	-	12	10-18	92
	T4	X	-	-	-	A	C	C	A	A	A	A	30	-	16	-	10-16	98
6061	T6	X	-	-	-	A	C	C	A	A	A	A	42	-	35	4-10	-	100
	T6	X	-	-	-	A	C	C	A	A	A	A	40-42	-	35	-	-	100
	T42	-	-	-	-	A	C	C	A	A	A	A	30	-	14	-	10-16	100
	0	X	-	-	-	C	D	D	D	D	D	B	-	40	-	21	10	
BARE	T6	X	-	-	-	C	D	B	D	D	D	B	76-77	-	65-66	-	7-8	
	T651	-	-	-	X	C	D	B	D	D	D	B	67-77	-	53-66	-	-	
ALCLAD	0	X	X	-	-	A	B	C	D	D	D	B	-	36-39	-	20-21	9-10	265
7075	T6	X	-	-	-	A	D	B	D	D	D	B	68-75	-	58-64	-	5-8	265

*Ratings A, B, C. D are relative in decreasing order of merit. Weldability and brazability ratings are specifically defined as:

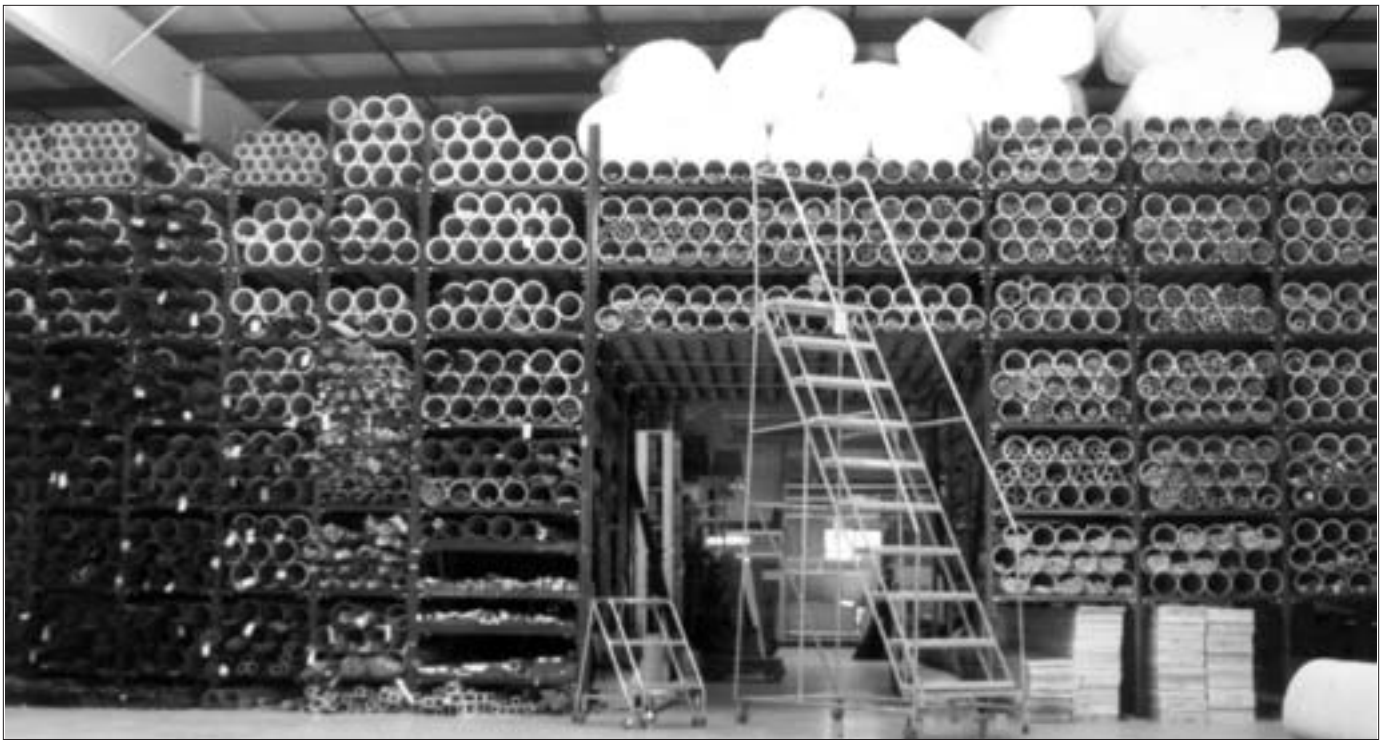
A- Generally weldable by all commercial procedures and methods.

B - Weldable with special technique or specific applications which justify preliminary trials or testing to develop welding procedure and weld performance.

C - Limited weldability because of crack sensitivity or loss on resistance to corrosion, and all mechanical properties.

D - No commonly used welding methods have so far been developed.

METALS



4130 AIRCRAFT TUBING

4130 is a through-hardening, chrominum-molybdenum alloy tubing used extensively in the aircraft, and anywhere light strong structural tubing is needed. It is resistant to oxidation and scaling and has smooth, clean interior and exterior surfaces. 4130 is produced by the cold drawn seamless process from electric-furnace processed steel. Applications: The weldability of 4130 is excellent, and therefore it finds popular utilization in aircraft type construction where welding is a requirement. Specifications: MIL-T-6736, AMS -6360 Revison (Magnaflux Quality) UNS G41330. 4130 "seamless" tubing (MIL-T-6736) is interchangable with 4130 "welded" tubing (MIL-T-6731). MECHANICAL PROPERTIES

MECHANICAL PROPERTIES
CONDITION "N" NORMALIZED

	Minimum Tensile Strength (psi)	Minimum Yield Strength (psi)	Elongation % in 2" Tube	Strip
Up to .035 Inc.	95,000	75,000	10	5
Over .035 to .188 Inc.	95,000	75,000	12	7
Over .188	90,000	70,000	15	10
Condition HT-125	125,000	100,000	12	7

MECHANICAL PROPERTIES
CONDITION "F" HARDENED & TEMPERED

	Tensile Strength psi	Yield Strength psi	Elongation in 2"	Reduction of AREA
Condition F	125,000 min.	1000,00 min	17% min.	55% min.

ELEMENT ANALYSIS

Carbon	Manganese	Phosphorus	Sulphur	Silicon	Chromium	Nickel	Molybdenum
.28/.33	.40/.60	.025 max.	.025 max.	.15/.35	.80/1.10	.25 max.	15/.25

OUTSIDE DIAMETER TOLERANCES

Outside Diameter	Condition (A) & (N)	Quenched & Temered	Wall Tolerance
3/16 od to under 1/2 od	+/- .004	+\- .010	+/- 15"
1/2 od to under 1-1/2 od	+\- .005	+\- .015	+\- 10%
1-1/2 od to 3-1/2 od Inc.	+/- .010	+/- .030	+/-10%

Heat Treatment
Normalize - 1600°/1700°F
Austenitize - 1500°/1600°F
Quench - Oil
Temper - 700°/1250°F

Color Marking
Normalized bars - ends painted pink
Heat Treated bars - ends painted white
Unannealed billets - ends painted pink

HARDENABILITY: As required by MIL-S-6758, minimum end-quench hardenability values for grade are Rockwell "C" 35 at 5/16" and Rockwell "C" at 8/16".

BARGAIN BOX
4130 steel tubing assorted sizes
10-lb box BOX-ST - 25.00

UPS charges additional handling on lengths longer than 5 ft.
LARGE Tubing orders requiring wooden crates
Crate fees: 6 ft or less $4.00 6 ft or longer $8.00

METALS

4130 STEEL TUBING

This chromium-molybdenum alloy is one of the most widely used aircraft steels because of its combination of weldability, ease of fabrication and mild hardenability. MIL-T-6736 **Note: *CERTS NOT AVAILABLE only on sizes marked ***

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/ FT.	PART NUMBER	PRICE P/FT
	.028	.131	.0478	R3/16x028-41	2.66
3/16	.035	.118	.0572	R3/16x035-41	2.90
	.028	.194	.0664	R1/4x028-41	3.19
	.035	.180	.0804	R1/4x035-41	2.39
1/4	.049	.152	.1052	R1/4x049-41	3.50
	.058	.134	.1189	R1/4x058-41	3.42
	.065	.120	.1284	R1/4x065-41	4.40
	.095	.060	.1573	R1/4x095-41	
	.028	.256	.0852	R5/16x028-41	3.89
	.035	.243	.1039	R5/16x035-41	2.85
5/16	.049	.215	.1382	R5/16x049-41	3.10
	.058	.196	.1580	R5/16x058-41	2.76
	.065	.182	.1722	R5/16x065-41	3.57
	.095	.123	.2212	R5/16x095-41	
	.028	.319	.1038	R3/8x028-41	2.55
	.035	.305	.1271	R3/8x035-41	2.85
	.049	.277	.1706	R3/8x049-41	2.75
3/8	.058	.259	.1964	R3/8x058-41	2.30
	.065	.249	.2152	R3/8x065-41	2.89
	.083	.209	.2588	R3/8x083-41	3.79
	.095	.185	.2841	R3/8x095-41	4.06
	.035	.367	.1506	R7/16x035-41	3.25
	.049	.340	.2036	R7/16x049-41	3.94
7/16	.058	.322	.2354	R7/16x058-41	3.64
	.065	.307	.2589	R7/16x065-41	3.25
	.095	.247	.3480	R7/16x095-41	3.35
	.120	.197	.4075	R7/16x120-41	4.74
	.028	.444	.1411	R1/2x028-41	2.68
	.035	.430	.1738	R1/2x035-41	2.56
	.049	.402	.2360	R1/2x049-41	2.95
1/2	.058	.384	.2738	R1/2x058-41	3.50
	.065	.370	.3020	R1/2x065-41	3.19
	.083	.334	.3696	R1/2x083-41	3.35
	.095	.310	.4109	R1/2x095-41	4.25
	.120	.260	.4870	R1/2x120-41	5.39
	.035	.492	.1974	R9/16x035-41	3.85
	.049	.464	.2690	R9/16x049-41	3.35
9/16	.065	.432	.3457	R9/16x065-41	4.12
	.120	.322	.5677	R9/16x120-41	4.25
	.028	.569	.1785	R5/8x028-41	2.89
	.035	.555	.2205	R5/8x035-41	2.55
	.049	.527	.3014	R5/8x049-41	2.85
5/8	.058	.509	.3512	R5/8x058-41	2.75
	.065	.495	.3888	R5/8x065-41	3.25
	.095	.435	.5377	R5/8x095-41	4.92
	.120	.385	.6472	R5/8x120-41	4.67
	.156	.313	.7814	R5/8x156-41	5.28
11/16	.035	.617	.2441	R11/16x035-41	
	.120	.447	.7279	R11/16x120-41	6.35
	.028	.694	.2159	R3/4x028-41	3.99
	.035	.680	.2673	R3/4x035-41	2.55
	.049	.652	.3668	R3/4x049-41	2.80
	.058	.634	.4287	R3/4x058-41	2.85
3/4	.065	.620	.4755	R3/4x065-41	2.53
	.095	.560	.6646	R3/4x095-41	4.22
	.120	.510	.8074	R3/4x120-41	4.30
	.156	.437	.9897	R3/4x156-41	5.33
	.188	.375	1.128	R3/4x188-41	11.19
13/16	.120	.575	.8881	R13/16x120-41	5.31
	.028	.819	.2533	R7/8x028-41	3.35
	.035	.805	.3140	R7/8x035-41	3.15
7/8	.049	.777	.4323	R7/8x049-41	2.90
	.058	.759	.5061	R7/8x058-41	2.99
	.065	.745	.5623	R7/8x065-41	3.53
	.083	.709	.7021	R7/8x083-41	3.74
	.095	.685	.7914	R7/8X095-41	3.84
	.120	.635	.9676	R7/8x120-41	5.89
	.188	.500	1.379	R7/8x188-41	7.67

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/ FT.	PART NUMBER	PRICE P/FT
	.028	.944	.2907	R1x028-41	4.15
	.035	.930	.3607	R1x035-41	2.96
	.049	.902	.4977	R1x049-41	2.86
	.058	.884	.5835	R1x058-41	2.50
1	.065	.870	.6491	R1x065-41	3.84
	.083	.834	.8129	R1X083-41	4.50
	.095	.810	.9182	R1x095-41	4.40
	.120	.760	1.128	R1x120-41	4.85
	.134	.720	1.237	R1x134-41	6.55
	.156	.687	1.406	R1x156-41	6.41
	.188	.625	1.630	R1x188-41	9.50
	.035	1.055	.4074	R1-1/8x035-41	4.65
	.049	1.027	.5631	R1-1/8x049-41	3.29
1-1/8	.058	1.009	.6609	R1-1/8x058-41	3.64
	.065	.995	.7359	R1-1/8x065-41	3.62
	.095	.935	1.045	R1-1/8x095-41	4.89
	.120	.885	1.288	R1-1/8x120-41	5.99
	.250	.625	2.388	R1-1/8x250-41	13.90
	.035	1.180	.4542	R1-1/4x035-41	3.03
	.049	1.152	.6285	R1-1/4x049-41	3.78
	.058	1.134	.7384	R1-1/4x058-41	3.82
	.065	1.120	.8226	R1-1/4x065-41	3.82
1-1/4	.083	1.084	1.034	R1-1/4x083-41	3.82
	.095	1.060	1.172	R1-1/4x095-41	3.82
	.120	1.010	1.448	R1-1/4x120-41	3.82
	.156	.938	1.823	R1-1/4x156-41	9.59
	.250	.750	2.67	R1-1/4x250-41	11.87
	.035	1.305	.5009	R1-3/8x035-41	6.23
	.049	1.277	.6939	R1-3/8x049-41	4.60
	.058	1.259	.8158	R1-3/8x058-41	3.90
1-3/8	.065	1.245	.9094	R1-3/8x065-41	4.20
	.095	1.185	1.299	R1-3/8x095-41	5.48
	.120	1.135	1.608	R1-3/8x120-41	7.28
	.035	1.430	.5476	R1-1/2x035-41	4.22
	.049	1.402	.7593	R1-1/2x049-41	4.93
	.058	1.384	.8932	R1-1/2x058-41	4.00
1-1/2	.065	1.370	.9962	R1-1/2x065-41	4.60
	.083	1.334	1.256	R1-1/2x083-41	6.14
	.095	1.310	1.426	R1-1/2x095-41	6.41
	.120	1.260	1.769	R1-1/2x120-41	5.99
	.188	1.125	2.634	R1-1/2x188-41	10.35
	.049	1.527	.8248	R1-5/8x049-41	5.60
	.058	1.509	.9707	R1-5/8x058-41	4.97
	.065	1.495	1.495	R1-5/8x065-41	4.79
1-5/8	.095	1.435	1.552	R1-5/8x095-41	7.22
	.120	1.385	1.929	R1-5/8x120-41	8.87
	.156	1.312	2.447	R1-5/8x156-41	9.83
	.188	1.250	2.885	R1-5/8x188-41	8.50
	.049	1.652	.8902	R1-3/4x049-41	6.34
	.058	1.634	1.048	R1-3/4x058-41	6.31
1-3/4	.065	1.620	1.170	R1-3/4x065-41	6.00
	.095	1.560	1.679	R1-3/4x095-41	5.85
	.120	1.510	2.089	R1-3/4x120-41	8.12
	.188	1.375	3.136	R1-3/4x188-41	14.97
1-7/8	.065	1.745	1.257	R1-7/8x065-41	8.37
	.049	1.902	1.021	R2x049-41	6.25
2	.058	1.884	1.203	R2x058-41	7.60
	.065	1.870	1.343	R2x065-41	6.25
	.095	1.810	1.933	R2x095-41	6.25
	.120	1.760	2.409	R2x120-41	7.67
	.188	1.625	3.638	R2x188-41	9.50
2-1/8	.065	1.995	1.430	R2-1/8x065-41	
2-1/4	.120	2.010	2.730	R2-1/4x120-41	8.40
	.250	1.750	.5134	R2-1/4x250-41	14.42
	.120	2.260	3.050	R2-1/2x120-41	11.20
2-1/2	.188	2.124	4.462	R2-1/2x188-41	
	.250	2.000	6.008	R2-1/2x250-41	23.95
2-3/4	.065	2.620	1.864	R2-3/4x065-41	
				R2-3/4X125-41	14.25

METALS

122 SEAMLESS COPPER TUBING

Seamless copper tubing for primer, fuel and oil pressure lines. Comes in 50 ft. rolls. Alloy 122, DHP

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT.	PART NUMBER	PRICE P/FOOT
1/8"	.030	.065	.0347	R1/8x030-122	1.40
1/4"	.030	.190	.0804	R1/4x030-122	0.74
5/16"	.032	.248	.109	R5/16x032-122	0.85
3/8"	.032	.311	.134	R3/8x032-122	1.00

304 STAINLESS STEEL TUBING MIL-T-8504

304 is a low carbon "18-8" chromium-nickel stainless steel. It combines excellent physical properties with remarkable resistance to many corrosive agents encountered in domestic and industrial use. The low carbon content provides good corrosion resistance in welded construction where subsequent solution heat treatment is not practical. It has good heat resistance and maintains its strength elevated temperatures to 800°F. It is a non-magnetic in the annealed condition and hot hardenable by heat treatment. Both hardness and tensile strength can be increased by cold working. Because of its lack of magnetism it is highly desirable for instruments. Intended for use in high pressure hydraulic and pneumatic systems . Tensile PSI - 85,000 - Yield PSI - 35,000. Purchased in random lengths.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT	PART NUMBER	PRICE P/FOOT
1/8"	.020	.085	.0224	R1/8x020-304	2.89
1/8"	.035	.055	.0336	R1/8x035-304	NLA
3/16"	.028	.131	.0478	R3/16x028-304	NLA
3/16"	.035	.118	.0572	R3/16x035-304	2.91
1/4"	.035	.180	.0804	R1/4x035-304	4.74
3/8"	.035	.305	.1271	R3/8x035-304	5.95
1/2"	.035	.430	.1738	R1/2x035-304	3.94
5/8"	.035	.555	.2205	R5/8x035-304	6.50

321 STAINLESS STEEL TUBING MIL-T-8808

Round, seamless, welded and drawn, annealed stainless tubing, MIL-T-8808 is intended for use in high pressure hydraulic and pneumatic systems where corrosion and heat resistance are required and in which welding or brazing may be involved during fabrication. Resists oxidation at temperature to 1200°F, but is useful at that temperature only when stresses are low. Aircraft hydraulic quality, Tensile PSI - 90,000, Yield PSI - 35,000. Purchased in random lengths.

O.D. IN.	Wall THICKNESS	I.D. IN.	WEIGHT P/FT	PART NUMBER	PRICE P/FOOT
1-1/4"	.028	1.194	.4541	R1-1/4x028-321	14.30
1-1/2"	.035	1.430	.5476	R1-1/2x035-321	16.57
1-3/4"	.035	1.680	.6411	R1-3/4x035-321	12.48
2"	.035	1.930	.7345	R2x035-321	14.11

1015 BUSHING STOCK

Low Carbon Steel (Drill or ream to fit) Note: 1015 material not available in all sizes. Stock may be 1010, 1015, 1018, 1020 or 1026 depending on availability. Purchased in random lengths.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT.	PART NUMBER	PRICE P/FOOT
1/4"	.065	1/8	.1284	BS1/4-1015	NLA
5/16"	.065	3/16	.1722	BS5/16-1015	2.75
3/8"	.065	1/4	.2152	BS3/8-1015	3.33
7/16"	.065	5/16	.2589	BS7/16-1015	2.50
1/2"	.065	3/8	.3020	BS1/2-1015	1.99
9/16"	.065	7/16	.3457	BS9/16-1015	1.45
5/8"	.065	1/2	.3888	BS5/8-1015	1.50
3/4"	.065	5/8	.4755	BS3/4-1015	2.25

1020 CARBON STEEL

Drawn over mandrel steel tubing is formed from strip and electric resistance welded. The welded tube is subsequently normalized and cold drawn to a smaller dimension and thinner wall. Drawn over mandrel may be machined, formed, welded, carburize and subjected to other facricating techniques that are ordinarily applied to low carbon steel. Up to 2-3/4" od x 125 max wall: Tensile strength - 80,000 psi, Yield strength - 70,000 psi, Elongation 15%, Rockwell B - 80.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT.	PART NUMBER	PRICE P/FOOT
1"	.134	.732	1.239	R1x134-1020	4.64
1-1/4"	.134	.982	1.597	R1-1/4x134-1020	NLA
1-1/2"	.134	1.232	1.955	R1-1/2x134-1020	NLA

2024-T3 ALUMINUM TUBING

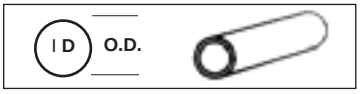
2024-T3 tubing has high strength and excellent fatigue resistance which is used to advantage on structures and parts where a good strength-to-weight ratio is desired. Arc or gas welding is generally not recommended, although this alloy may be spot, seam or flash welded. Tubing is wrought - meaning neither annodized nor alclad. Purchased in 12 ft lengths, 8 ft & longer must purchase 12 ft.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/ FT	PART NUMBER	PRICE P/FOOT
1/4"	.035	.180	.0281	R1/4x035-T3	NLA
5/16"	.035	.243	.0366	R5/16x035-T3	NLA
5/16"	.049	.215	.0487	R5/16x049-T3	4.55
5/16"	.065	.182	.0487	R5/16x065-T3	2.85
3/8"	.035	.305	.0449	R3/8x035-T3	2.59
3/8"	.049	.277	.0602	R3/8x049-T3	2.34
3/8"	.065	.249	.0798	R3/8x065-T3	2.95
1/2"	.035	.430	.0612	R1/2x035-T3	3.17
1/2"	.049	.402	.0829	R1/2x049-T3	2.67
1/2"	.058	.384	.0970	R1/2x058-T3	2.34
1/2"	.065	.370	.1061	R1/2x065-T3	3.85
5/8"	.035	.555	.0775	R5/8x035-T3	3.99
5/8"	.049	.527	.1060	R5/8x049-T3	3.75
5/8"	.065	.495	.1367	R5/8x065-T3	4.85
3/4"	.035	.680	.0938	R3/4x035-T3	3.89
3/4"	.049	.652	.1288	R3/4x049-T3	3.37
3/4"	.065	.620	.1670	R3/4x065-T3	4.37
3/4"	.188	.375	.3920	R3/4x188-T3	NLA
7/8"	.049	.777	.1530	R7/8x049-T3	3.99
7/8"	.058	.759	.1785	R7/8x058-T3	NLA
7/8"	.065	.745	.1979	R7/8x065-T3	4.31
7/8"	.120	.635	.3420	R7/8x120-T3	NLA
1"	.035	.930	.1250	R1x035-T3	4.70
1"	.049	.902	.1754	R1x049-T3	3.45
1"	.058	.884	.2076	R1x058-T3	6.80
1"	.065	.870	.2295	R1x065-T3	5.16
1"	.095	.810	.3244	R1x095-T3	5.16
1-1/4"	.049	1.152	.2213	R1-1/4x049-T3	4.63
1-3/8"	.049	1.277	.2448	R1-3/8x049-T3	NLA
1-1/2"	.049	1.402	.2683	R1-1/2x049-T3	NLA
1-1/2"	.065	1.370	.3519	R1-1/2x065-T3	8.95
1-1/2"	.250	1.000	1.173	R1-1/2x250-T3	19.23
1-3/4"	.250	1.250	1.428	R1-3/4x250-T3	23.48

UPS charges additional handling on lengths longer than 5 ft
LARGE tubing orders required wooden crates
Crate fees: Less than 6 ft $4.00, longer $12.00

METALS

3003-0 ALUMINUM TUBING ASTM B483



3003-0 aluminum has the same characteristics as 1100, but higher strength. This soft aluminum tubing is essentially commercially pure with the addition of manganese which increase its strength. Has excellent corosions resistance, workability which may be deep drawn or spun, welded or brazed. Received in 50 ft rolls.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT.	PART NUMBER	PRICE P/FOOT
1/8"	.025	.075	.0092	R1/8x025-3003-0	0.55
3/16"	.028	.131	.0170	R3/16x028-3003-0	0.65
1/4"	.032	.186	.0263	R1/4x032-3003-0	0.75
5/16"	.035	.243	.0360	R5/16x035-3003-0	0.67
3/8"	.035	.305	.0440	R3/8x035-3003-0	0.89
1/2"	.035	.430	.0600	R1/2x035-3003-0	0.99
5/8"	.035	.555	.1100	R5/8x035-3003-0	1.25

5052-0 ALUMINUM TUBING

5052-0 has the highest strength alloy of the more common non heat treatable grades. Fatigue strength is higher than most aluminum alloys, in addition to good resistance to marine atmosphere and salt water corrosion. Has excellent workability which may be drawn or formed into intricate shapes. Its slightly greater strength in the annealed condition minimizes tearing that occurs in 3003. Can be deep drawn or spun, welded or brazed. It is most always used for fuel and hydraulic lines. Bought in 12' lengths, the 1/8-1/4 may be rolled for shipping; however, each rolling work hardens the tubings. **Rolled tubing may not be returned.**

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT	PART NUMBER	PRICE P/FOOT
1/8"	.035	.055	.0101	R1/8x035-50	2.90
3/16"	.035	.118	.0168	R3/16x035-50	2.25
1/4""	.035	.180	.0281	R1/4x035-50*	1.47
1/4"	.049	.152	.0371	R1/4x049-50	4.50
5/16"	.035	.243	.0360	R5/16x035-50	1.35
3/8"	.035	.305	.449	R3/8x035-50*	1.85
3/8"	.049	.277	.0602	R3/8x049-50	1.99
1/2"	.035	.430	.0612	R1/2x035-50	2.10
1/2"	.049	.402	.0829	R1/2x049-50	2.15
5/8"	.035	.555	.0755	R5/8x035-50	3.25
5/8"	.049	.527	.1060	R5/8x049-50	2.80
3/4"	.035	.680	.0938	R3/4x035-50	2.40
3/4"	.049	.652	.1288	R3/4x049-50	5.83
1"	.049	.902	.1754	R1x049-50	3.99

6061-T6 ALUMINUM TUBING

6061-T6 Bare T6 obtains its full properties by artificial aging. It is weldable by all methods and can be furnace brazed. Offer good range of mechanical properties and can be fabricated by most of the commonly used techniques. Tensile strength 45,000 psi. Yield strength 40,000 psi. Not annodized. * Indicates extruded - one size only R1-1/4x125-T6.* Purchased in 12 ft lengths, 8 ft or longer must buy 12 ft.

O.D. IN.	Wall THICKNESS	I.D. IN.	WEIGHT P/FT	PART NUMBER	PRICE P/FOOT
901/4"	.035	.180	.0281	R1/4x035-T6	1.12
5/16"	.035	.243	.0366	R5/16x035-T6	1.37
5/16"	.049	.215	.0477	R5/16x049-T6	1.35
3/8"	.028	.319	.0356	R3/8x028-T6	2.92
3/8"	.035	.305	.0449	R3/8x035-T6	2.92
3/8"	.058	.259	.0694	R3/8x058-T6	2.50
3/8"	.065	.249	.0999	R3/8x065-T6	1.68
3/8"	.083	.209	.0895	R3/8x083-T6	3.07
7/16"	.065	.307	.0896	R7/16x065-T6	1.80
1/2"	.028	.444	.0496	R1/2x028-T6	1.45
1/2"	.035	.430	.0612	R1/2x035-T6	1.35
1/2"	.049	.402	.0816	R1/2x049-T6	1.45
1/2"	.058	.384	.0962	R1/2x058-T6	1.86
1/2"	.065	.370	.1040	R1/2x065-T6	2.50
1/2"	.120	.260	.168	R1/2x120-T6	2.75

6061-T6 ALUMINUM ROUND TUBING - cont.

O.D. IN.	WALL THICKNESS	I.D. IN.	WEIGHT P/FT	PART NUMBER	PRICE P/FOOT
5/8"	.035	.555	.0775	R5/8x035-T6	2.60
5/8"	.058	.509	.1220	R5/8x058-T6	2.50
5/8"	.065	.495	.1340	R5/8x065-T6	2.50
3/4"	.035	.680	.093	R3/4x035-T6	1.65
3/4"	.049	.652	.652	R3/4x049-T6	1.55
3/4"	.058	.634	.1506	R3/4x058-T6	1.84
3/4"	.065	.620	.164	R3/4x065-T6	1.89
7/8"	.035	.805	.109	R7/8x035-T6	1.65
7/8"	.049	.777	.150	R7/8x049-T6	1.99
7/8"	.058	.759	.175	R7/8x058-T6	2.56
7/8"	.065	.745	.194	R7/8x065-T6	2.21
7/8"	.120	.635	.339	R7/8X120-T6	3.87
1"	.035	.930	.1248	R1x035-T6	1.99
1"	.049	.902	.172	R1x049-T6	1.99
1"	.058	.884	.206	R1x058-T6	2.30
1"	.065	.870	.2250	R1x065-T6	2.24
1"	.083	.830	.281	R1x083-T6	2.67
1"	.095	.810	.318	R1x095-T6	3.25
1"	.125	.750	.404	R1x125-T6	3.89
1"	.250	.500	.693	R1x250-T6	4.20
1-1/8"	.049	1.027	.185	R1-1/8x049-T6	2.81
1-1/8"	.058	1.009	.229	R1-1/8x058-T6	2.53
1-1/8"	.125	.885	.4618	R1-1/8x125-T6	5.68
1-1/4"	.035	1.180	.157	R1-1/4x035-T6	1.94
1-1/4"	.049	1.152	.2213	R1-1/4x049-T6	2.87
1-1/4"	.058	1.134	.2601	R1-1/4x058-T6	3.26
1-1/4"	.065	1.120	.2845	R1-1/4x065-T6	3.12
1-1/4"	.120	1.010	.5100	R1-1/4x120-T6	7.23
1-1/4"*	.125	1.00	.5275	*R1-1/4x125-T6	4.93
1-3/8"	.058	1.259	.2822	R1-3/8x058-T6	5.88
1-1/2"	.035	1.430	.1523	R1-1/2x035-T6	2.55
1-1/2"	.049	1.402	.2683	R1-1/2x049-T6	3.20
1-1/2"	.058	1.384	.3137	R1-1/2x058-T6	5.17
1-1/2"	.065	1.370	.3519	R1-1/2x065-T6	3.29
1-1/2"	.125	1.125	.635	R1-1/2x125-T6	6.25
1-1/2"	.250	1.000	1.173	R1-1/2x250-T6	5.38
1-5/8"	.058	1.509	.3409	R1-5/8x058-T6	3.75
1-5/8"	.125	1.375	.7035	R1-5/8x125-T6	9.25
1-3/4"	.035	1.680	.2264	R1-3/4x035-T6	4.11
1-3/4"	.049	1.652	.3142	R1-3/4x049-T6	4.28
1-3/4"	.058	1.634	.3703	R1-3/4x058-T6	3.95
1-3/4"	.083	1.584	.5202	R1-3/4x083-T6	4.65
1-7/8"	.058	1.759	.3954	R1-7/8x058-T6	4.50
2"	.049	1.902	.3601	R2x049-T6	3.46
2"	.058	1.884	.416	R2x058-T6	4.30
2"	.065	1.870	.4743	R2x065-T6	4.48
2-1/4"	.049	2.152	.406	R2-1/4x049-T6	4.69
2-1/4"	.065	2.120	.5328	R2-1/4x065-T6	4.24
2-1/4"	.083	2.084	.824	*R2-1/4x083-T6	
2-1/4"	.125	2.010	.999	R2-1/4x125-T6	5.97
2-1/2"	.035	2.430	.3254	R2-1/2x035-T6	8.20
2-1/2"	.049	2.402	.444	R2-1/2x049-T6	5.00
2-1/2"	.065	2.370	.5847	R2-1/2x065-T6	5.94
3"	.065	2.870	.7140	R3x065-T6	8.92
4"	.049	3.902	.7263	R4x049-T6	22.98
5"	.065	4.87	1.203	R5x065-T6	32.84

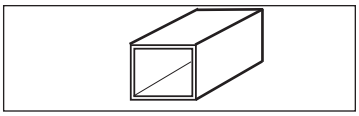
*extruded (drawn)

Ups charges additional handling on lengths longer than 5 ft
Large tubing orders require wooden crates
Crate fees: Less than 6 ft: $4.00 longer: $12.00

METALS

4130 SQUARE TUBING

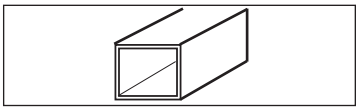
Purchased in random lengths.



OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	PART NUMBER	PRICE PER FOOT
3/8"x3/8"	.035		**SQ3/8x035-41**	**5.17**
3/8"x3/8"	.049	.2172	**SQ3/8x049-41**	**5.66**
1/2"x1/2"	.035	.2213	**SQ1/2x035-41**	**4.62**
1/2"x1/2"	.049	.3005	**SQ1/2x049-41**	**6.37**
5/8"x5/8"	.035	.2808	**SQ5/8x035-41**	**5.70**
5/8"x5/8"	.049	.3838	**SQ5/8x049-41**	**5.50**
5/8"x5/8"	.058	.4471	**SQ5/8x058-41**	
5/8"x5/8"	.065	.4950	**SQ5/8x065-41**	**0.21**
3/4"x3/4"	.035	.3403	**SQ3/4x035-41**	**6.15**
3/4"x3/"4	.049	.4671	**SQ3/4x049-41**	**5.98**
3/4"x3/4"	.058	.5454	**SQ3/4x058-41**	**6.25**
3/4"x3/4"	.065	.6055	**SQ3/4x065-41**	**4.70**
7/8"x7/8"	.049	.5504	**SQ7/8x049-41**	
1"x1"	.035	.4593	**SQ1x035-41**	**6.25**
1"x1"	.049	.6337	**SQ1x049-41**	**4.48**
1"x1"	.058	.7430	**SQ1x058-41**	
1"x1"	.065	.8265	**SQ1x065-41**	**7.31**
2 "x 2"	.065	1.710	**SQ2x065-41**	

6061-T6 SQUARE ALUMINUM TUBING

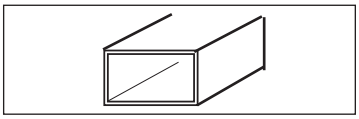
Outside and inside corners are rounded or squared.



SIZE IN INCHES	CORNERS	WALL THICKNESS	WEIGHT P/FT.	PART NUMBER	PRICE P//FT
1/2" x 1/2"	round	.058	.116	**SQ1/2x058-T6**	**3.65**
3/4" x 3/4"	round	.049	.161	**SQ3/4x049-T6**	**4.24**
3/4" x 3/4"	round	.065	.216	**SQ3/4x065-T6**	**2.96**
1" x 1"	round	.065	.273	**SQ1x065-T6**	**3.76**
1" x 1"	square	.125	.525	**SQ1x125-T6**	**2.58**
1-1/4" x 1-1/4"	round	.065	.356	**SQ1-1/4x065-T6**	**6.70**
2 "x 2"	square	.125	1.103	**SQ2x125-T6**	**4.79**

4130 RECTANGULAR STEEL TUBING

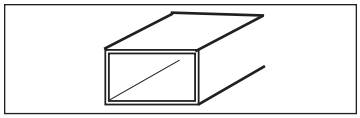
Square cornered. Purchased random lengths.



SIZE IN INCHES	WALL THICKNESS	WEIGHT P/FT	PART NUMBER	PRICE P/FT.
3/4"x1-1/2"	.049	.9057	**RC3/4x1-1/2x049**	**8.65**
1"x1-1/2"	.065		**RC1x1-1/2x065-41**	**8.92**
1"x1-3/4"	.065	1.158	**RC1x1-3/4x065-41**	**9.92**
1" x 2"	.065	1.269	**RC1x2x065-41**	**9.92**
1" x 2"	.083	1.60	**RC1x2x083-41**	**13.79**

6061-T6 & 6063-T5 RECTANGULAR ALUMINUM TUBING

Purchased in random lengths.



SIZE IN INCHES	WALL THICKNESS	WEIGHT P/FT	PART NUMBER	PRICE P/FT.
6061-T6				
1" x 2"	.125	.821	**RC1x2x125-T6**	**4.36**
6063-T5				
1" x 2"	.125	.825	**RC1x2x125-T5**	
1-1/2" x 2"	.125	.975	**RC1-1/2x2x125-T5**	
2" x 3"	.125	1.425	**RC2x3x125-T5**	**6.50**

ROLLED PIANO HINGE

Anodized Aluminum:Anodized finished 5050-H34 aluminum hinge, consisting of two half hinges which mate and are held together by a .090 diameter hinge pin with hinge spacing ½". The 2" open width pin diameter is .050. Hinge pin is included. Additional pins available MS20253-. Hinge can be cut to save shipping cost. Hinge is sold by the foot. Enter quantity required in foot increments. Full length of 6ft is discounted. **Stainless Steel**:Corrosion resistant steel(type 304) piano hinge consisting on two half hinges which mate and are held together by a hinge pin. Hinge spacing 1/2" Includes hinge pin. Hinge thickness is .060 6' lengths can be cut smaller to save shipping cost. Hinge is sold by the foot. Enter quantity required in foot increments. Full length of 6ft is discounted.

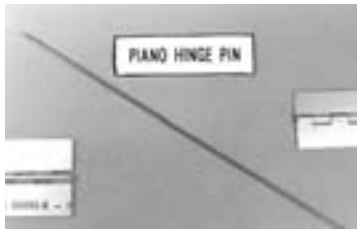
OPEN WIDTH	THICKNESS	PIN DIA.	PART#	PER FOOT
ANODIZED ALUMINUM				
1-1/16"	.040	.090	**MS20257-P2**	**3.93**
1-1/4"	.040	.090	**MS20257-P3**	**2.50**
1-1/2"	.040	.090	**MS20257-P4**	**3.72**
2"	.051	.050	**MS20257-P5**	**3.80**
STAINLESS STEEL				
1-1/4"	.118	.118	**MS20257-C3**	**3.10**
1-1/2"	.180	.180	**MS20257-C4**	**3.40**
2"	.062	.180	**MS20257-C5**	**4.60**

EXTRUDED PIANO HINGE

Anodized finish, aluminum extruded, the closed hinge pin loops cannot be pulled apart. Includes hinge pin. Thickness .050. Hinge spacing 1/2", 2024-T3511 Pin Dia .090. Hinge is sold by the foot. Enter quantity required in foot increments. Full length of 6ft is discounted.

OPEN WIDTH	THICKNESS	PIN DIA.	PART#	PER FOOT
1-1/16"	.044-.056	.090	**MS20001-P2**	**8.99**
1-1/4"	.040-.056	.090	**MS20001-P3**	**10.00**
1-1/2"	.040-.056	.090	**MS20001-P4**	**11.84**
1-3/4"	.040-.056	.090	**MS20001-P5**	**14.25**
2"	.040-.056	.090	**MS20001-P6**	**12.62**

PIANO PIN



Corrosion resistant steel, QQ-W-423, composition FS302, FS304, or FS316. Diameter .089. Sold in 6 ft lengths only. Use corrosion resistant steel passivated pin with stainless steel hinge. Dia .089 for MS20257-C2 Dia .117 for MS20257-C3 & C4 Dia .179 for MS20257-C5. Hinge pin can be cut to save shipping cost.

PIN DIAMETER	FITS	PART NUMBER	PRICE
.189 CAD PLATED		**MS20253-P2**	**3.99**
.089	MS20257-C2	**MS20253-2**	**4.25**
.117	MS20257-C3 & C4	**MS20253-3**	**4.60**
.179	MS20257-C5	**MS20253-4**	**6.40**

METALS

FIBERGLASS ARROW SHAFT

G-10 x 30-1/2" arrow stock (as used in Long Eze) 5/16" x .030

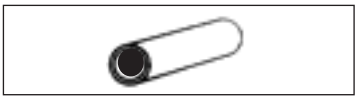
SIZE	PART NUMBER	PRICE EACH
5/16" x .030	G-10	1.75

CARBON FIBER ROD

8 times stronger than aluminum, yet half the weight, this carbon fiber rod has a compression strength of 275,000 psi and a tensile strength of 320,000 psi. Modulus is 21 msi Cleaning or sanding of the rod prior to laminating is not required. Its' characteristics make it an ideal material for fabricating spars, etc. May be rolled for shipping.

DESCRIPTION	WT P/1000 FT	PART NUMBER	PRICE PER FT
.060 Solid round	1.9 lbs	RD060-CF	1.05
.080 Solid round	3.4 lbs	RD080-CF	1.20
.125 Solid round	8.8 lbs	RD125-CF	1.65
.092 x .220 Solid rectangular	14.4 lbs	BR092x220-CF	2.75

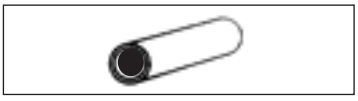
THREADED STEEL ROD - COMMON



Common 1/4" steel rod with 20 threads per inch , 6 inches long.

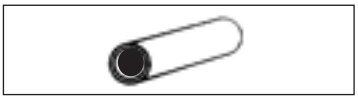
DESCRIPTION	PART NUMBER	PRICE EACH
6" threaded rod	TSR1/4-20x6	0.65

COMMON HOT ROLLED STEEL ROD



O.D.	WEIGHT P/FT	PART NUMBER	PRICE P/FT
3/8"	2.63	RD3/8-CMN	0.69

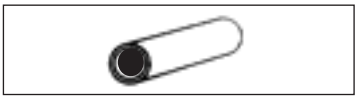
304 STAINLESS ROD



Combines excellent mechanical properties with remarkable resistance to many corrosive agents. Easily welded by all the commercial processes except forge or hammer welding. The resulting weld has good toughness and ductility. Annealing is recommended after welding to maintain maximum corrosion resistance. Purchased in 12 ft lengths.

OUTSIDE	WEIGHT P/FT	PART NUMBER	PRICE P/FT
3/16"	.0940	RD3/16-304	0.65
1/4"	.1671	RD1/4-304	0.89
3/8"	.3759	RD3/8-304	1.64

1018 COLD ROLLED ROD



Cold rolled is a low-carbon steel, having higher manganese content than certain other low-carbon steels. Being richer in manganese, 1018 is a better steel for carburized parts, since it produces a harder and more uniform case. Also has higher mechanical properties and better machining characteristics. Purchased 12 ft lengths.

O.D.	WEIGHTP/FT	PART NUMBER	PRICE P/FT
1/4"	.1671	RD1/4-1018	0.55
5/16"	.2610	RD5/16-1018	0.65
3/8"	.3759	RD3/8-1018	1.45
7/16"	.5116	RD7/16-1018	1.11
1/2"	.6682	RD1/2-1018	1.40

TIG WELDING ROD (4130 Steel)

Best for TIG welding. Copper coated to protect the rods from corrosion. Does not effect the quality of the weld. Sold separately or one pound. Three sizes available.

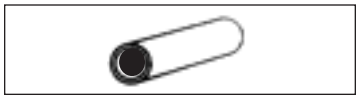
SIZE	PART NO.	PRICE EA	QTY P/LB	PRICE P/LB
1/16"	WR-1/16	0.85	32	
3/32"	WR-3/32	1.35	15	
1/32"	WR-035	0.45	106	

SOLAR FLUX WELDING FLUX

A backup flux for use on stainless and chromoly steel that quickly and easily produces x-ray quality welds, without the need of gas purging. Brushing it on back of joint shields it from oxygen, dissipates heat, cleans the metal and prevents re-oxidation and heat scale. (Failure to purge or protect the joint back results in porous welds and bourn through). Mix with 100% methyl alcohol (ie 'Heet', etc) for best results. Four use with any gas or arc welding method. Meets MIL-F-7516B cls 2 & 4. Sold in1 lb can.

DESCRIPTION	PART NUMBER	PRICE EACH
1 lb can	FLUXB	29.95

4130 STEEL ROD



Maximum length - 12 ft
C D "N" Mil-S6758 - 2" & 2-1/2"

DIAMETER	WEIGHT P/FT	PART NO.	PRICE P/FT
1/8"	.042	RD1/8-41	0.72
3/16"	.092	RD3/16-41	1.40
1/4"	.167	RD1/4-41	1.82
5/16"	.261	RD5/16-41	2.35
3/8"	.376	RD3/8-41	3.00
7/16"	.511	RD7/16-41	2.85
1/2"	.668	RD1/2-41	1.99
5/8"	1.043	RD5/8-41	1.99
3/4"	1.502	RD3/4-41	2.99
7/8"	2.044	RD7/8-41	4.99
1"	2.670	RD1-41	4.96
1-1/4"	4.170	RD1-1/4-41	9.32
1-3/8"	5.053	RD1-3/8-41	9.00
1-1/2"	6.008	RD1-1/2-41	12.26

DRY ALUMINUM WELDING KIT

Dry aluminum welding kit - unique do-it-yourself kit gives the homebuilder the opportunity to do small aluminum welding projects using only a propane torch. (also MAPP gas or acetylene) The alumipro rods included offer excellent corrosion resistance, low working tempertures (732 F) super strength and low cost. Works on aluminum, galvanized, zinc-based and pot metals 1/32" to 3/8" thick. Kit includes approximately 1/2 lb of rods, brush and instructions.

DESCRIPTION	PART NUMBER	PRICE EACH
1/32" - 3/8"	AP-201	12.50

OXYGEN/ACETYLENE WELDING RODS

Copper coated mild steel.
Best for use with oxygen/acetylene welding on 4130 steel.

SIZE	PART NUMBER	PRICE EA	QTY P/LB	PRICE P/LB
1/16"	GWR-1/16	0.45	32	
3/32"	GWR-3/32	0.80	15	

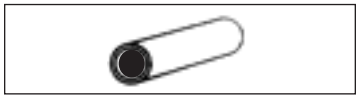
METALS

2024-T3 & 2024-T4 ALUMINUM ROD

Maximum lengths 12 ft.

DIAMETER	WEIGHT P/FT	PART NO.	PRICE P/FT
1/8"	.0149	RD1/8-T4	0.27
3/16"	.0335	RD3/16-T4	1.06
1/4"	.0595	RD1/4-T4	0.84
5/16"	.0930	RD5/16-T4	2.65
3/8"	.1339	RD3/8-T4	1.30
7/16"	.1822	RD7/16-T4	1.87
1/2"	.1380	RD1/2-T4	3.85
5/8"	.3718	RD5/8-T4	3.75
3/4"	.5354	RD3/4-T3	4.85
7/8"	.7288	RD7/8-T3	9.40
1"	.9519	RD1-T3	6.42
1-1/8"	1.205	RD1-1/8-T3	6.99
1-1/4"	1.1487	RD1-1/4-T3	9.10
1-3/8"	1.800	RD1-3/8-T3	12.87
1-1/2"	2.142	RD1-1/2-T3	13.87
2"	3.81	RD2-T3	27.00

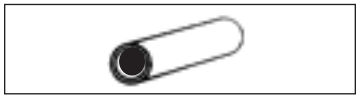
6061-T6 ALUMINUM ROD



Maximum length 12 ft.

DIAMETER	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1/8"	.0144	RD1/8-T6	1.30
3/16"	.0325	RD3/16-T6	0.40
1/4"	.0577	RD1/4-T6	0.55
5/16"	.0902	RD5/16-T6	1.58
3/8"	.1300	RD3/8-T6	0.63
1/2"	.2309	RD1/2-T6	0.99
5/8"	.361	RD5/8-T6	2.54
3/4"	.5195	RD3/4-T6	2.22
7/8"	.7071	RD7/8-T6	2.45
1"	.9236	RD1-T6	3.88
1-1/8"	1.169	RD1-1/8-T6	4.46
1-1/4"	1.443	RD1-1/4-T6	7.50
1-3/8"	1.746	RD1-3/8-T6	12.61
1-1/2"	2.078	RD1-1/2-T6	8.26
1-5/8"	2.439	RD1-5/8-T6	8.87

7075-T6 ROD



One of the highest strength aluminum alloys available; its strength-to-weight ratio is excellent, and it is ideally used for highly stressed parts. May be formed in the annealed condition and subsequently heat treated. Spot or flash welding can be used, although arc and gas welding are not recommended. Maximum length 12 ft.

SIZE INCHES	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1-1/4"	1.49	RD1-1/4-7075-T6	10.89

4130 STEEL BAR (STRAP)

1/8" - AMS6345, 1/4 - MILS6758.
Maximum length - 6 ft

THICKNESS	WIDTH	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1/8"	1"	.4250	BR1/8x1-41	1.99
1/8"	1-1/4"	.5313	BR1/8x1-1/4-41	2.34
1/8"	1-1/2"	.6375	BR1/8x1-1/2-41	2.73
1/4"	1-1/2"	1.276	BR1/4x1-1/2-41	6.50
1/4"	2"	1.702	BR1/4x2-41	9.65

4130 STEEL BAR

Sold in 6 ft lengths only; these bars may be cut in half to save shipping Mils 6345.

THICKNESS	WIDTH	WEIGHT P/FT	PART NUMBER	PRICE EACH
.050	5/8"	.	BR050x5/8-41-6	7.00
.063	5/8"	.	BR063x5/8-41-6	6.36
.032	1"	.	BR032x1-41-6	4.84
.063	1"		BR063x1-41-6	7.00
.090	1"		BR090x1-41-6	7.98
.125	1"	.4250	BR1/8X1-41	1.99
.125	1-1/2"	.6375	BR1/8X1-1/2-41	2.73
.125	1-1/4"	.5313	BR1/8X1-1/4-41	2.34
.250	1-1/2"	1.276	BR1/4X1-1/2-41	6.50
.250	2"	1.702	BR1/4X2-41	9.65

2024-T3 & 2024-T4 ALUMINUM BAR STOCK

Maximum length 12 ft.

THICKNESS	WIDTH	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1/8 "	1"	.1515	BR1/8x1-T4	4.93
1/8"	1-1/4"	.1894	BR1/8x1-1/4-T4	3.85
1/8 "	1-1/2"	.2273	BR1/8x1-1/2-T4	4.98
1/8 "	2"	.3030	BR1/8x2-T4	3.49
3/16 "	3/4"	.1704	BR3/16x3/4-T4	2.80
3/16 "	1"	.2273	BR3/16x1-T4	4.00
3/16 "	1-1/4"	.2841	BR3/16x1-1/4-T4	3.72
3/16"	1-1/2"	.3420	BR3/16x1-1/2-T4	4.50
3/16"	1-1/2"	.3409	BR3/16x2-T4	7.73
1/4"	1"	.3030	BR1/4x1-T4	6.55
1/4"	1-1/2"	.4545	BR1/4x1-1/2-T4	6.84
1/4"	2"	.6060	BR1/4x2-T4	6.47
3/8"	1"	.4545	BR3/8x1-T4	4.74
3/8"	1-1/2"	.6818	BR3/8x1-1/2-T4	6.64
3/8"	2"	.911	BR3/8x2-T4	7.90
1/2"	1/2"	.3030	BR1/2x1/2-T3	3.41
1/2"	1"	.6060	BR1/2x1-T3	5.53
1/2"	1-1/4"	.7575	BR1/2x1-1/4-T4	6.50
1/2"	1-1/2"	.9090	BR1/2x1-1/2-T3	7.75
1/2 "	2"	1.212	BR1/2x2-T3	11.50
5/8"	1"	.7575	BR5/8x1-T4	10.07
3/4"	3/4"	.6818	BR3/4x3/4-T4	5.55
3/4"	1-3/4"	1.59	BR3/4x1-3/4-T3	14.80
3/4"	2"	1.818	BR3/4x2-T3	14.20
3/4"	2-1/2"	2.273	BR3/4x2-1/2-T3	16.52
3/4"	4"	3.636	BR3/4x4-T3	27.87
1"	2"	2.424	BR1x2-T3	18.60
1"	2-1/2"	3.030	BR1x2-1/2-T3	23.29
1-1/2"	1-1/2"	2.72	BR1-1/2x1-1/2-T3	20.41

METALS

6061-T6 ALUMINUM BAR

QQA-200/8 extruded. Maximum length 12 ft, except 1/8 x 3/4 stock 14 ft

THICKNESS	WIDTH	WEIGHT P/FT	PART NUMBER	PRICP/FT
1/8"	1/2"	.074	**BR1/8x1/2-T6**	**0.65**
1/8"	3/4"	.110	**BR1/8x3/4-T6**	**0.65**
1/8"	1"	.147	**BR1/8x1-T6**	**0.90**
3/16"	3/4"	.166	**BR3/16x3/4-T6**	**0.89**
1/4"	1/2"	.147	**BR1/4x1/2-T6**	**0.85**
1/4	2	.589	**BR1/4x2-T6**	**2.50**
1/2"	1/2"	.295	**BR1/2x1/2-T6**	**2.70**
1/2"	1"		**BR1/2X1-T6**	**1.93**
1/2"	1-1/4"		**BR1/2X1-1/4-T6**	**3.99**
1/2"	2"	1.18	**BR1/2x2-T6**	**4.65**
3/4"	3/4"	.574	**BR3/4x3/4-T6**	**3.14**
3/4"	1"	.883	**BR3/4x1-T6**	**2.76**
1"	1"	1.18	**BR1x1-T6**	**4.00**
1"	1-1/4"	1.47	**BR1x1-1/4-T6**	**5.99**

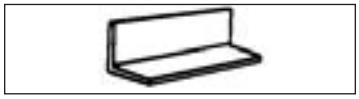
2024-T3 ALUMINUM ANGLE

Purchased in 12 ft or 24 ft lengths.

SIZE IN INCHES	WALL THICK	INSIDE RADIUS	WEIGHT P/FT	PART NUMBER	PRICE P/FT
3/4" x 3/4"	.062	.094		**A3/4x062-T3**	**5.07**
3/4" x 3/4"	.125	.094	.200	**A3/4x125-T3**	**5.71**
7/8" x 7/8"	.125	.094	.238	**A7/8x125-T3**	**8.15**
1" x 1"	.062	.188	.140	**A1x062-T3**	**7.01**
1" x 1"	.125	.188	.281	**A1x125-T3**	**5.55**
1" x 1-1/4"	.125	.125	.310	**A1x1-1/4x125-T3**	**10.52**
1" x 1-1/2"	.125	.156	.354	**A1x1-1/2x125-T3**	**12.99**
1-1/2" x 1-1/2"	.063	.188	.210	**A1-1/2x063-T3**	**12.88**
1-1/2" x 1-1/2"	.125	.187	.432	**A1-1/2x125-T3**	**9.48**
2" x 2"	.125	.250	.581	**A2x125-T3**	**16.89**
2-1/2" x 2-1/2"	.125	.250	.739	**A2-1/2x125-T3**	

6061-T6 ALUMINUM ANGLE

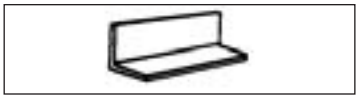
Purchased in 12 ft or 24 ft lengths.



SIZE IN INCHES	WALL THICK.	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1/2" x 1/2"	.063	.070	**A1/2x062-T6**	**2.70**
3/4" x 3/4"	.062	.106	**A3/4x062-T6**	**2.75**
3/4" x 3/4"	.125	.200	**A3/4x125-T6**	**1.04**
1" x 1"	.062	.150	**A1x062-T6**	**2.50**
1" x 1"	.125	.270	**A1x125-T6**	**2.10**
1" x 3"	.125	.581	**A1x3x125-T6**	**10.00**
1-1/4" x 1-1/4"	.125	.350	**A1-1/4x125-T6**	**5.60**
1-1/2" x 1-1/4"	.125	.390	**A1-1/2x1-1/4x125**	
1-1/2" x 1-1/2"	.125	.430	**A1-1/2x125-T6**	**3.72**
1-1/2 "x 1-1/2"	.187	.625	**A1-1/2x187-T6**	**3.89**
1-1/2 "x 2"	.125	.506	**A1-1/2x2x125-T6**	**3.99**
1-1/2" x2"	.187	.730	**A1-1/2x2x187-T6**	**3.88**
1-3/4" x1-3/4"	.125	.490	**A1-3/4x125-T6**	
2" x 2"	.125	.470	**A2x125-T6**	**2.92**
2 "x 2"	.188	.850	**A2x188-T6**	**3.50**
2" x 2"	.250	1.110	**A2x250-T6**	**4.20**
2-1/2" x 2-1/2"	.125	.720	**A2-1/2x125-T6**	**4.88**
2-1/2" x 2-1/2"	.187	1.07	**A2-1/2x187-T6**	**6.10**
2" x 3"	.250	1.400	**A2x3x250-T6**	**7.20**
2-1/2" x 4"	.125	.960	**A2-1/2x4x125-T6**	
4 "x 4"	.250	2.28	**A4x250-T6**	**9.25**

UPS charges additional handling on lengths longer than 5 ft.
LARGE Tubing orders requiring wooden crates
Crate fees: 6 ft or less $4.00 6 ft or longer $12.00

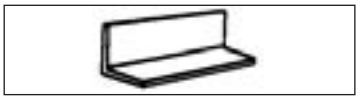
6063-T52 ALUMINUM ANGLE



No inside radius. Purchased 12 ft or 24 ft lengths

SIZE IN INCHES	WALL THICK.	WEIGHT P/FT	PART NUMBER	PRICE P/FT
3/4 "x 1"	.125	.317	**A3/4x1x125-T52**	**3.52**

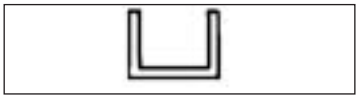
ATSM-A36 STRUCTURAL STEEL ANGLE



Hot rolled mild steel bars are used for general purpose applications. Steel is low carbon grade, having good over-all mechanical properties. Easy to fabricate by the usual structural methods, such as mild cold and hot forming and welding. Tensile strength - 58,000-80,000 psi, Yield 36,000 min psi, % Elongations in 8" - 20% min. a. Purchased in 12 ft or 24 ft lengths.

SIZE IN INCHES	WALL THICK.	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1" x 1"	.125		**A1x125-A36**	**1.10**
1-1/2" x 1-1/2"	.125		**A1-1/2x125-A36**	**1.30**
1-3/4 "x 1-3/4"	.125		**A1-3/4x125-A36**	**1.40**
2 "x 2"	.250		**A2x250-A36**	**2.55**

MILD STEEL CHANNEL

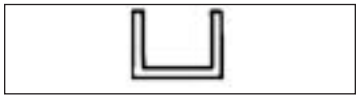


Used in the construction of fins, rudders, horizontal stabilizers and elevators. Welds easily. Available only in 6 foot lengths. Two sizes both .020 thickness.

NOT CERTIFIED

SIZE	WALL THICKNESS	WEIGHT P / 6 FT	PART NUMBER	PRICE P/6 FT
1/4 "x 1/4"	.020	3.6	**CH1/4x020x6**	**5.50**
3/8 "x 3/8"	.020	7.5	**CH3/8x020x6**	**8.99**

6061-T6 ALUMINUM "C" CHANNEL



3/4" & 1-1/4" channel has squared corners, not angled. 1" has inside radius of .125 - not square cornered. Maximum length 12 ft.

SIZE IN INCHES	WALL THICK.	WEIGHT P/FT	PART NO.	PRICE P/FT
3/4" x 3/4"	**.125**	**.387**	**CH3/4x125-T6**	**7.58**
1" x 1"	**.125**	**.417**	**CH1x125-T6**	**6.35**
1-1/4" x 1-1/4"	**.125**	**.693**	**CH1-1/4x125-T6**	**9.25**

6063-T52 CHANNEL NO RADIUS

SIZE	WALL THICKNESS	PART NUMBER	PRICE P/FT
1" X 1"	.125	**CH1X125-T5**	**1.88**

METALS

HAT SECTION STRINGERS

Fabricated from .016 - 2024T3 aluminum. Weight 5 oz, per 8 ft. length. May be spliced to form longer stringers.
Width 1-1/4", Height 3/4".

DESCRIPTION	PART NUMBER	PRICE EACH
8- ft length	**HSS-8**	**19.48**

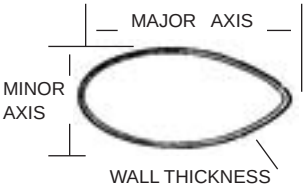
TRAILING EDGE

TE-8 is fabricated from .025 - 5052H34 aluminum ,TE-10 is fabricated from 5052H34 aluminum -3/16" x 1-1/4" size. Weight .69 oz. per 8 ft length. Must be purchased in 8 ft or 10 ft sections; however, no charge for cutting sections shorter than 8 ft UPS maximum length to ship by UPS.

DESCRIPTION	PART NUMBER	PRICE EACH
8 ft length	**TE-8**	**13.35**
10 ft length	**TE-10**	**16.80**

4130 STREAMLINE TUBING MIL-T-6736

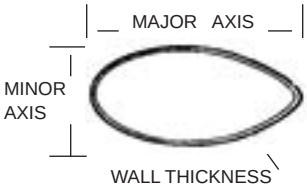
Random lengths are 15' to 24' depending on stock. Sold by the foot.



MAJOR AXIS	MINOR AXIS	WALL THICKNESS	EQUIV. RD. WALL	WEIGHT P/FT	PART NUMBER	PRICE P/FT
1.012	.428	.035	3/4"	.2687	**SL10-42-3**	**17.13**
1.180	.500	.035	7/8"	.3140	**SL11-50-3**	**14.45**
1.349	.571	.035	1"	.3607	**SL13-57-3**	**11.50**
1.349	.571	.049	1"	.4977	**SL13-57-4**	**17.45**
1.685	.714	.049	1-1/4"	.6285	**SL16-71-4**	**27.00**
2.023	.857	.049	1-1/2"	.7593	**SL20-85-4**	**24.72**
2.360	1.00	.058	1-3/4"	1.0470	**SL23-10-5**	**35.07**
2.360	1.00	.049	1-3/4"	.8902	**SL23-10-4**	**20.61**
2.697	1.143	.049	2"	1.0210	**SL26-11-4**	**40.00**
3.372	1.429	.049	2-1/2"	1.2830	**SL33-14-4**	**39.16**

6061-T6 ALUMINUM STREAMLINE TUBING

Drawn, WW-T-700/6. Stocked in 12 ft lengths.

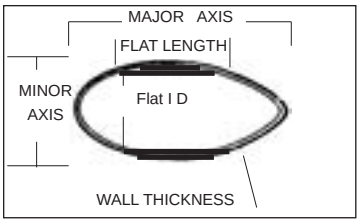


MAJOR AXIS	MINOR AXIS	WALL THICKNESS	EQUIV. RD. WALL	WEIGHT P/FT	PART NUMBER	PRICE P/FT
2.023	.857	.049	1-1/2	.268	**SL20-85-4-T6**	**10.45**
2.095	.747	.058	1--1/2	.328	**SL20-74-5-T6**	**6.95**
2.360	1.00	.058	1-3/4	.413	**SL23-10-5-T6**	**7.63**
2.360	1.00	.049	1-3/4	.348	**SL23-10-4-T6**	**6.70**
3.375	1.43	.049	2-1/2	.454`	**SL33-14-4-T6**	**9.98**

UPS charges additional handling on lengths longer than 5 ft.

6061-T6 ALUMINUM EXTRUDED STRUTS

Aluminum streamline strut tubing. Wall thickness .065 **except** STR38-13-9 which is .090 Used for Struts in Pietenpol , Fisher, CGS Hawk, floats, Light Minature aircraft. **SOLD IN FULL LENGTHS ONLY**



AXIS MAJOR	AXIS MINOR	FLAT I.D.	FLAT LGTH	WGHT P/FT	STRUT LENGTH	PART NUMBER	PRICE PER LENGTH
2.44	1.00	.754-.762	.75	.517	10'6"	**STR24-10-6**	**69.26**
3.13	1.25	1.006-1.014	.88	.604	10"6"	**STR31-12-6**	**94.50**
3.88	1.38	1.006-1.014	1.00	1.05	11'	**STR38-13-9**	**169.00**
1.125	.375	.063	.75	.227	6'	**STR11-37-6**	**65.00**

INSTALLATION CONVERSION KIT

Kits include instructions, hardwares and strut material needed to install as listed below.

KIT CONTENTS AND QUANTITY REQUIRED			KIT PART NUMBER	PRICE EACH KIT
STR24-10-6		1 ea		
STR11-37-6		1 ea		
SH040-3003H14	6" x 6" sheet	3 ea		
SH050-T6	6" x 6" sheet	1 ea		
BR3/4x1-T6	6" bar	1 ea		
AN3-14A	bolts	4 ea		
AN3-6A	bolts	8 ea		
AN960-10	washers	12 ea		
MS20365-1032	nuts	12 ea	**STRK-S**	**159.07**
STR31-12-6		1 ea		
STR11-37-6		1 ea		
SH040-3003H14	6" x 6" sheet	3 ea		
SH050-T6	6" x 6" sheet	1 ea		
BR1x1-T6	6" bar	1 ea		
AN3-16A	bolts	4 ea		
AN3-6A	bolts	8 ea		
AN960-10	washers	12 ea		
MS20365-1032	nuts	12 ea	**STRK-L**	**169.53**
STR38-13-9		1 ea		
STR11-37-6		1 ea		
SH040-3003H14	6" x 6" sheet	3 ea		
SH050-T6	6" x 6" sheet	1 ea		
BR1x1-T6	6" bar	1 ea		
AN4-20A	bolts	4 ea		
AN3-6A	bolts	8 ea		
AN960-416	washers	4 ea		
AN960-10	washers	8 ea		
MS20365-428	nuts	4 ea		
MS20365-1032	nuts	8 ea	**STRK-HD**	**368.68**

CRATING FEES
Rolled sheet $7.00
2' x4' pack $2.00
3' x4' pack $4.00
4' x 4' pack $6.00
4' x 6' pack $7.00
4' x 8' pack $9.00
4' x 12' pack $16.00
Material requiring crate (over 80 lbs) $25.00

METALS

BARGAIN BOXES

Assorted tubing & sheet. Most tubing under 1 ft, sheet under 6" x 6". Sold in 10 lb boxes only, no choice of sizes.

DESCRIPTION	PART NUMBER	PRICE EACH
4130 tubing - 10# box	BOX-ST	25.00
Aluminum tubing - 10# box	BOX-AT	15.85
Aluminum sheet - 10# box	BOX-AS	21.15
Streamline tubing-10# box	BOX-SL	31.80

304 STAINLESS SHEET

Meets MIL-S-5059, grade of chromium-nickel stainless sheet, manufactured by the electrica-furnace process. Sufficient discard is taken from each ingot to insure sound steel required to meet the exacting requirements of the aircraft industry. Type 304 is not hardened by heat treatment, and the high tensile properties of the sheets are the result of cold working. It is easily welded by all commercial processes except forge or hammer welding. The resulting weld has good toughness and ductility. Annealing is recommended after welding to maintain maximum corrosion resistance. 26 gauge, 2B finish. May be rolled for UPS shipping. (Oversize rate) Rolled sheet - not returnable.**ORDER: SH** then **THICKNESS & SIZE-304 SH018x4x4-304** Please note crating fees

THICKNESS	WEIGHT P/SQFT	PRICE SQFT	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 10'
.018	.756	8.79	39.06	78.11	105.48	140.63	155.77

4130 STEEL FLAT SHEET - AMS 6345

Sheets are made from quality steel melted to meet the rigid standards of the aircraft industry. Carefully rolled and inspected to be free from laminations, tears, pits, blisters, and grooves. Specify grain direction on 9 x 18 sheet. All other sizes run length of sheet. We can custom cut up to and including .125 for a nominal charge. ($5.00 minimum). Rolled sheet - not returnable. Please note crating fees

ORDER: SH then **THICKNESS & SIZE-41 Example: SH025x9x9-41**

THICKNESS	WGHT SQFT	PRICE 9"x9"	PRICE 9"x18"	PRICE 18"x18"	PRICE 18"x24"	PRICE 6"x36"	PRICE 6"x72"	PRICE 18"x 72"
.025	1.020	2.34	4.24	7.64	9.17	5.25	9.17	49.99
.032	1.306	2.92	5.75	10.25	13.25	6.63	13.25	38.50
.040	1.632	3.75	6.99	12.25	16.85	8.55	15.22	59.66
.050	2.040	6.64	12.16	22.45	27.79	13.91	29.00	58.19
.063	2.570	6.89	13.52	25.97	35.92	17.49	33.92	79.00
.071	2.897	5.57	11.72	24.00	30.48	15.85	30.48	95.00
.080	3.264	5.99	10.71	19.30	26.62	12.88	26.00	73.67
.090	3.672	6.60	14.56	25.00	29.00	15.00	29.90	99.00
.100	4.080	8.00	15.00	25.00	37.00	17.00	30.16	130.00
.125	5.100	15.00	28.32	56.64	49.00	37.77	62.93	150.00
.190	7.752	20.00	37.00	78.00	79.00	43.00	75.00	250.00
.250	10.21	31.50	46.63	94.00	120.00	57.00	100.70	285.00

2024-0 ALUMINUM SHEET

2024-0 Alclad aluminum sheet, has high strength and excellent fatigue resistance, with same characertistics as tubing. Tensile strength 27,000 psi, Yield strength 11,000 psi. .125 is BARE Any rolled sheet is not returnable. **ORDER: SH** then **THICKNESS & SIZE-2024-0** Example: **SH025x4x4-2024-0** Please note crating fees

THICKNESS	WEIGHT P/SQFT	PRICE P/SF	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.020	.291	5.50	26.19	55.50	76.00	104.74	141.41
.025	.364	5.99	28.38	56.76	81.94	99.00	153.25
.032		6.40	39.50	74.31	112.56	148.40	222.60
.125*	.182	28.57	145.08	290.14	418.89	530.00	790.00

***.125 is bare**

NOTE: ALL SHEETS CUT 2' x 4'
GRAIN WILL RUN IN 2 FT DIRECTION

3003-H14 ALUMINUM SHEET

Most commonly used, has all the excellent characteristics of 1100 with higher strength. Excellent corrosion resistance and workability, it may be deep drawn or spun, welded or brazed. This alloy in non-heat treatable. Bare, QQ-A-250/2, tensile strength 22,000 psi, Yield strength 21,000 psi. Any rolled sheet is not returnable.**ORDER: SH** then **THICKNESS & SIZE-3003** Example: **SH025x4x4-3003** Has PVC covering on one side

THICKNESS	WEIGHT P/SF	PRICE P/SF	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.020	.285	2.45	11.23	24.50	32.45	48.00	60.67
.025	.356	3.47	17.58	35.17	50.77	60.00	98.93
.032	.456	2.58	13.60	26.99	39.00	55.00	106.75
.040	.570	3.60	18.25	36.17	52.22	79.99	123.60
.050	.713	3.96	22.00	42.00	60.00	83.00	126.45
.125	1.78	9.96	53.00	120.00	145.87	202.08	280.00

BEND RADIUS TABLE 2024-T3 & 6061-T6 ALUMINUM

ALL BENDS SHOULD BE VERTICAL TO THE LABELING

Fractions shown are approximations of the indicated decimal value. Absolute minimum bend radius. Difficult to achieve without cracking or tearing the metal. Use the normal value unless tighter radius strongly justified. Please note crating fees

Metal Thickness	2024-T3 Normal	Fraction	Minimum	6061-T6 Normal	Fraction	Minimum
.016	.050		.025	.016		0
.020	.064	1/16	.032	.022		.002
.025	.094	3/32	.044	.031		.006
.032	.128	1/8	.064	.048		.016
.040	.168	3/16	.088	.064	1/16	.024
.050	.227	1/4	.128	.089	3/32	.039
.063	.315	5/16	.189	.126	1/8	.063
.071	.362	3/8	.220	.150	5/32	.075
.080	.420	7/16	.257	.178	3/16	.090
.090	.486	1/2	.306	.216	1/4	.108
.125	.750	3/4	.500	.375	3/8	.188

2024-T3 ALUMINUM SHEET

Sheet has same characteristics as tubing; however, the sheet is alclad for corrosion resistance. Alclad is a metallurgically bonded aluminum or aluminum alloy coating that is anodic to the core, thus electrolytically protecting the core against corrosion. Tensile strength:70,000 psi, yield strength: 50,000 psi.nSheets .032 and under may be rolled for UPS shipping. Any rolled sheet is not returnable. Has PVC covering on one side !

ORDER: SH then **THICKNESS & SIZE-T3 Example: SH012x2x4-T3**

THICKNESS	WEIGHT P/SQFT	PRICE P/SF	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.016	.232	5.54	22.47	47.86	60.16	102.41	125.50
.020	.291	6.60	27.61	49.86	77.00	109.90	138.27
.025	.364	7.44	35.50	56.99	85.00	108.01	158.64
.032	.466	9.50	31.69	59.22	89.99	126.72	178.00
.040	.582	10.22	38.09	71.19	106.78	155.00	235.00
.050	.727	14.88	59.75	115.00	161.90	159.90	257.00
.063	.916	8.00	63.36	118.43	177.65	253.43	342.16
.071	1.03	15.21	70.00	135.00	199.00	248.83	335.94
.080	1.16	17.10	66.36	140.00	195.00	275.00	375.00
.090	1.31	19.46	85.00	160.00	225.00	330.00	475.00
.100	1.45	22.00	95.00	195.00	250.00	330.00	475.00
.125	1.82	29.00	120.00	220.00	330.00	440.00	599.00
.190	2.77	38.00	170.00	330.00	430.00	625.00	850.00
.250	3.64	55.41	450.00	850.00	1255.52	1677.32	2550.00
.375	5.45	59.30	(BARE)				
.500	7.27	125.00	(BARE)	-	-	-	-

METALS

5052-H32 ALUMINUM SHEET

This is the highest strength alloy of the more common non-heat treatable grades. Fatigue strength is higher than most aluminum alloys. In addition, this grade has particularly good resistance to marine atmosphere and salt water corrosion. It has excellent workability. It may be drawn or formed into intricate shapes, and its slightly greater strength in the annealed condition minimizes tearing that occurs in 1100 or 3003. The resistance welding characteristics are equal to those of 1100 and 3003. It has excellent finishing characteristics, and anodic coatings are bright and clear. Tensile strength 33,000 psi, Yield strength 28,000 psi. 5052-H32 /14 Hard QQ-A-250/8, AMS 4016. Any rolled sheet is not returnable.**ORDER**: **SH** then **THICKNESS & SIZE -5052H** Example: **SH040x2x4-5052H** Has PVC covering on one side ! Please note crating fees

THICK-NESS	WEIGHT P/SQFT	PRICE P/SF	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.032	.0447	**6.30**	**35.00**	**62.99**	**91.00**	**124.36**	**167.91**
.040	.559	**3.75**	**28.86**	**57.00**	**85.00**	**109.00**	**145.00**
.050	.698	**6.21**	**35.12**	**66.24**	**99.36**	**132.48**	**170.42**

6061-0 ALUMINUM SHEET

6061-0 Bare aluminum sheet is soft and annealed with good formability. The least expensive and most versatile of the heat treatable, has the good qualities of the 6061 characteristics. Tensile strength 18,000 psi, Yield strength 8,000 psi. Rolled sheet is not returnable.**ORDER: SH** then **THICKNESS & SIZE-60-0** Example: **SH040x2x4-60-0** Has PVC covering on one side

THICK-NESS	WEIGHT P/SQFT	PRICE SQ/FT	PRICE 2 ' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.025	.353	5.41	**27.10**	**54.20**	**72.14**	**96.19**	**168.54**
.032	.452	5.50	**23.19**	**46.38**	**71.00**	**92.75**	**125.21**
.040	.564	4.75	**22.75**	**40.57**	**63.85**	**84.00**	
.050	.706	5.72	**25.40**	**55.50**	**77.00**	**105.00**	**137.13**

6061-T6 ALUMINUM SHEET

Bare aluminum sheet has tensile strenght 42,000 yield strength 37,000.
This grade is used for a wide variety of products and applications from truck bodies and frames to screw machine parts and structural components. Sheet .032 and under may be rolled for UPS shipping. Rolled sheet is not returnableO**RDER: SH** then **THICKNESS & SIZE-T6** Example: **SH020x2x4-T6**Has PVC covering on one side !

THICK NESS	WEIGHT P/SQFT	PRICE SQ/FT	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
.016	.228	**3.37**	**15.86**	**31.72**	**47.57**	**63.42**	**89.95**
.020	.282	3.83	**17.01**	**35.00**	**51.01**	**73.01**	**110.70**
.025	.353	3.85	**17.90**	**37.50**	**53.00**	**70.00**	**98.00**
.032	.452	3.90	**18.99**	**38.63**	**56.94**	**75.00**	**119.00**
.040	.564	5.27	**23.99**	**48.92**	**77.80**	**97.64**	**145.00**
.050	.706	6.73	**29.85**	**62.00**	**89.53**	**120.00**	**167.00**
.063	.889	8.45	**47.53**	**75.00**	**112.58**	**150.11**	**210.12**
.080	1.13	10.65	**47.32**	**94.64**	**141.96**	**189.28**	**255.55**
.090	1.27	11.08	**54.00**	**110.00**	**155.00**	**199.00**	**280.00**
.100	1.41	15.00	**62.00**	**118.67**	**178.00**	**237.33**	**335.00**
.125	1.76	17.00	**70.00**	**140.00**	**190.00**	**260.00**	**380.00**
.160	2.25	25.00	**105.00**	**200.00**	**294.80**	**320.00**	**550.00**
.190	2.69	27.50	**120.00**	**225.21**	**340.00**	**450.42**	**620.00**

7075 ALUMINUM SHEET

This is one of the highest strength aluminum alloys available. Its strength-to-weight ratio is excellent, and it is ideally used for highly stressed parts. Available in the alclad form to provide corrosion resistance with the over-all high strength being only moderately affected. 7075 conforms to Federal specification QQ-A-225/9C. Rolled sheet is not returnable.
7075-0: Tensile strength 32,000 Yield strength 14,000
7075-T6: Tensile strength 76,000 Yield strength 67,000
Has PVC covering on one side ! Please note crating fees
ORDER: SH then **THICKNESS & SIZE**- Example: **SH020x2x4-**

THICK-NESS	WEIGHT P/SQFT	PRICE P/SF	PRICE 2' x 4'	PRICE 4' x 4'	PRICE 4' x 6'	PRICE 4' x 8'	PRICE 4' x 12'
7075-0	**ALCLAD**						
.025	.364	**8.14**	**31.53**	**63.03**	**94.55**	**110.00**	**159.07**
.032	.466	**6.98**	**28.50**				
.040	.582	**12.15**	**46.89**				
.063	.916	**12.92**	**57.00**	**105.00**	**150.36**	**220.00**	**252.95**
7075-T6	**ALCLAD**						
.025	.364	**7.74**	**26.70**				
.032	.466		**30.98**				
.040	.582	**12.36**	**48.85**	**99.99**	**146.54**	**195.37**	**246.53**
.050	.727	**12.19**	**56.61**	**113.21**	**170.00**	**230.00**	**285.70**
.063	.916	**15.07**	**61.00**	**130.00**	**185.00**	**233.75**	**395.51**
.125	1.82	**29.00**	**120.00**	**230.00**	**340.00**	**440.00**	**730.00**

TUBING SADDLE CROSS

Double sided saddle used for crossing 2 tubes at right angle. Made of reinforced nylon. For 1" tubing. Order separately 1 each AN4-24A bolt and nut required.

DESCRIPTION	PART NUMBER	PRICE EACH
1" TUBING	**TS6211**	**1.85**

SADDLES

Molded from Bayer Durathan 50% glass reinforced nylon, providing excellent tensile, yield, impact strength, and high dynamic load capacity. Other properties include high thermal, chemical and moisture stability. Mount by means of 1/4" bolt hole. 1-

FITS TUBE	O.D.	HEIGHT	PARTNUMBER	PRICE
1/2"	1.00	.190	**TS6204**	**1.20**
1"	1.00	.125	**TS6205**	**1.25**
1-1/4"	1.250	.190	**TS6206**	**1.25**
1"	1.00	.250	**TS6215**	**1.25**

CONNECTORS

Tubing connectors used for joining 2 aluminum tubes meeting at a right angle to each other. Two sizes available for use with .065 wall tubing. Made of black glass-reinforced nylon. Requires 2 each 3/16" pop rivets for mounting an 1 each 1/4" AN bolt with nut for joining tubes. Rivets, bolts and nuts are NOT included.

TUBING SIZE	RIVET SIZE	BOLT REQUIRED	PARTNUMBER	PRICE
1-1/4"	3/16 X 1/2	AN4-23A	**TS6207**	**2.95**
1"	3/16 X 3/8	AN4-21A	**TS6209**	**3.10**