



ALUMINUM ALLOY GUIDE

11 Industry Drive Bedford, Oh. 44146 Toll Free Number: 888-539-5602

ALUMINUM								
ALLOY NUMBER	1050	1100	1145	1235	1350	3003	5052	6061
ASTM		B479	B479	B479				
QQA		1876	1876	1876				

CHEMICAL PROPERTIES								
Aluminum	99.50	99.50	99.45	99.35	99.50	Remainder	Remainder	Remainder
Iron	.40				0.40	0.7	0.40	0.7
Copper	0.05	0.05-0.20	0.05	0.05	0.05	0.05-0.20	0.40	0.7
Manganese	0.05	0.05	0.05	0.05	0.01	1.0-1.5	0.10	0.15
Magnesium	0.05		0.05	0.05			2.2-2.8	0.8-1.2
Chromium					0.01		0.15-0.35	0.04-0.35
Nickel								
Zinc	0.05	0.10	0.05	0.10	0.05	0.10	0.10	0.25
Titanium	0.03		0.03	0.06				0.15
Silicon	.25	.95 Si+Fe	.55 Si+Fe	.65 Si+Fe	0.10	0.6	0.25	0.40-0.8
Other Total		0.15			0.10	0.15	0.15	0.15

MECHANICAL PROPERTIES									
ANNEALED	TENSILE	11	13	13	13	12	16	28	13
	YIELD	4	5	5	5	4	6	13	8
	ELONG.	39	35	35	35	23% @ 10IN	30	25	25

H32									
H12	TENSILE	14	16	16	16	14	19	33	
	YIELD	12	15	15	15	12	18	28	
	ELONG.	12	12	12	12		10	12	

H34 T4									
H14	TENSILE	16	18	18	18	16	22	38	35
	YIELD	15	17	17	17	14	21	31	21
	ELONG.	10	9	9	9		8	10	22

H36 T6									
H16	TENSILE	19	21	21	21	18	26	40	45
	YIELD	18	20	20	20	16	25	35	40
	ELONG.	8	6	6	6		5	8	12

H38									
H18	TENSILE	23	24	24	24		29	42	
	YIELD	21	22	22	22		27	37	
	ELONG.	7	5	5	5		4	7	

H19	TENSILE					27			
	YIELD					24			
	ELONG.					1.5% @ 10IN			

The above properties are not guaranteed, since in most cases they are averages for various sizes, product forms and methods of manufacture and may not be exactly representative of any particular product or size. This data is intended only for the basis for comparing alloys and tempers and should not be specified as engineering requirements or used for desing purposes.