



Aluminum Alloy Characteristics

ALUMINUM PRODUCTS NON-HEAT TREATABLE GRADES

ALUMINUM PRODUCTS NON-HEAT TREATABLE GRADES													
GRADE & NOMINAL COMPOSITION	ALLOY DESCRIPTION	APPLICATIONS	TEMPER	TYPICAL PROPERTIES				CORROSION RESISTANCE*	FORM-ABILITY*	MACHIN-ABILITY*	WELDABILITY		
				TENSILE STRENGTH KSI	YIELD STRENGTH KSI	% ELONGATION					GAS	INERT ARC	RESISTANCE
						SHEET	ROD						
5052 2.5% Mg. .25% Cr.	High strength, good workability and toughness. Good salt water corrosion resistance and other marine applications Anodic-coating bright and clear.	Truck parts, fencing, bus bodies, kitchen cabinets, marine applications, home appliances, chemical drums, boat hulls.	0	28	13	25	30	1	1	4	1	1	2
			H32	33	28	12	18	1	2	3	1	1	1
			H34	38	31	10	14	1	2	3	1	1	1
			H36	40	35	8	10	1	3	3	1	1	1
			H38	42	37	7	8	1	3	3	1	1	1
5086 4.0% Mg. .25% Cr.	Good formability combined with excellent welding characteristics and corrosion resistance	cranes, boats, military applications high welding strength characteristics pressure vessels	H112	38	17	22	-	1	1	4	3	1	2
			H32	39	19	14	-	1	2	3	3	1	1
			H34	42	30	10	-	1	2	4	3	1	1
				47	37	12	-	2	2	3	3	1	1

* 1 - Superior

* 4 - Poor

ALUMINUM PRODUCTS NON-HEAT TREATABLE GRADES

GRADE & NOMINAL COMPOSITION	ALLOY DESCRIPTION	APPLICATIONS	TEMPER	TYPICAL PROPERTIES				CORROSION RESISTANCE*	FORM-ABILITY*	MACHIN-ABILITY*	WELDABILITY		
				TENSILE STRENGTH KSI	YIELD STRENGTH KSI	% ELONGATION					GAS	INERT ARC	RESISTANCE
						SHEET	ROD						
2024 4.5% Cu. .6% Mn. 1.5%Mg.	Strength exceeding 2017. Arc and gas welding 2024 not generally recommended	Aircraft alloy, hinges, scientific instruments, ortho-pedic equipmet, most cold headed fasteners.	0	27	11	20	22	3	2	2	4	3	3
			T3	70	50	18	-	3	3	3	4	3	2
			T4	68	47	20	-	3	3	2	4	3	2
			T351	72	57	19	-	3	4	3	4	3	2
			T36			13							
6061 1.0%Mg. .25% Cu. &Cr. .6% Si	Combines relatively high-strength, good workability and corrosion; widely available in most forms, structurals.	Chemical equipment, fire ladders, truck and bus bodies, scaffolding mine skips, furniture, marine equipment, molding, transmission towers, awnings.	0	18	8	25	30	1	1	2	1	1	2
			T4	34	21	22	25	1	3	3	1	1	1
			T451	45	40	12	17	1	3	3	1	1	1
			T6										
7075 5.6% Zn. 2.5% Mg. 1.6% Cu. .3% Cr.	Very high strength. Used for highly stressed structural parts.	Aircraft	T0	33	15	17	16	2	2	4	4	4	2
			T6	83	13	11	11	3	4	2	4	4	2
			T651										

* 1 - Superior

* 4 - Poor

1248 - 6 th AVENUE SOUTH * SEATTLE* WA * 98134 - 1308 (206) 382 - 0305 PHONE * TOLL FREE (800) 785 - 9778 *(206) 382 -9204 FAX