



**ANODALL
EXTRUSION**

estrusione e lavorazione alluminio

ALLOY EN AW – 6060

CHEMICAL CHARACTERISTICS	Numerical designation	EN AW – 6060
	Chemical description	EN AW – AlMgSi
	Aluminium Association	AA 6060

CHEMICAL COMPOSITION % in weight, reference UNI EN 573-3	Silicon Si	0,30 – 0,60
	Iron Fe	0,10 – 0,30
	Copper Cu	0,10 max
	Manganese Mn	0,10 max
	Magnesium Mg	0,35 – 0,60
	Chromium Cr	0,05 max
	Zinc Zn	0,15 max
	Titanium Ti	0,10 max
	Others	Each 0,05
		Total 0,15
	Aluminium	REST

MECHANICAL CHARACTERISTICS reference UNI EN 755-2*	Hardening	T4	T5	T6	T64	T66
	Thickness (mm)	≤ 25	≤ 5	≤ 3	≤ 15	≤ 3
	Rm (MPa) min.	120	160	190	180	215
	Rp0,2 (MPa) min.	60	120	150	120	160
	A % min.	16	8	8	12	8
	A50 mm % min.	14	6	6	10	6
	HBW (Brinell) - typical	50	60	70	60	75

*These values are intended for extruded profiles

PHYSICAL CHARACTERISTICS	Density (kg/dm ³)	2,7
	Melting point (°C)	600/655
	Coefficient of Poisson	0,33
	Modulus of elasticity (MPa)	69.000
	Modulus of tangential elasticity (MPa)	26.000
	Coeff. of linear thermal expansion from 20-100°C (10 ⁻⁶ K ⁻¹)	23
	Thermal conductivity at 20°C (W/cm x K)	2,09
	Specific Heat from 0 to 100°C [j/kg x °K]	890

TECHNOLOGICAL CHARACTERISTICS	Hardening	T4	T5	T6	T64	T66
	Attitude to anodization	E	E	E	E	E
	Resistance to corrosion	G	G	G	G	G
	Cold plastic workability	G	S	S	G	U
	Machinability	U	S	G	S	G
	Weldability	G	G	G	G	G
	Mouldability	E	E	E	E	E

U = unsatisfying, S = satisfying, G = good, E = excellent

Mostly used direct extrusion alloy (nearly 85% of production). It's typically used for buildings, furnishing, automotive and for electrical-mechanical pieces like heat wasters or engine frameworks.

Sections made of this alloy can also be complex and with thin thicknesses and they normally haven't high mechanical characteristics.

Products extruded with this alloy are suited for different surface treatments like powder coating and anodizing, this last one with excellent quality results.