



**ANODALL
EXTRUSION**
estrusione e lavorazione alluminio

ALLOY EN AW – 6005/A

CHEMICAL CHARACTERISTICS	Numerical designation	EN AW – 6005 A
	Chemical description	EN AW – AlSiMg (A)
	Aluminium Association	AA 6005/A

CHEMICAL COMPOSITION % in weight, reference UNI EN 573-3	Silicon Si	0,50 – 0,90
	Iron Fe	0,35 max
	Copper Cu	0,30 max
	Manganese Mn	0,50 max
	Magnesium Mg	0,40 – 0,70
	Chromium Cr	0,30 max
	Zinc Zn	0,20 max
	Titanium Ti	0,10 max
	Notes	0,12 – 0,50 Mn+Cr
	Others	Each 0,05
	Total 0,15	
Aluminium	REST	

		Open profile	Open profile	Tubular profile	Tubular profile
MECHANICAL CHARACTERISTICS reference UNI EN 755-2*	Hardening	T4	T6	T4	T6
	Thickness (mm)	≤ 25	≤ 5	≤ 10	≤ 5
	Rm (MPa) min.	180	270	180	255
	Rp0,2 (MPa) min.	90	225	90	215
	A % min.	15	8	15	8
	A50 mm % min.	13	6	13	6
	HBW (Brinell) - typical	50	90	50	85

*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)	23,2
	Thermal conductivity at 20°C (W/cm x K)	2,09
	Specific Heat from 0 to 100°C [j/kg x K]	897

TECHNICOLOGICAL 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

Direct extrusion alloy with good mechanical characteristics, corrosion resistance and high weldability. It's typically used for buildings and automotive for the extrusion of highly complex profiles with a structural function. Products extruded with this alloy are suited for different surface treatments like powder coating and anodizing, this last one with good quality esthetical results.