ALUMINIO EN-AW 6060

The EN AW 6060 aluminum alloy is widely used due to its high thermal deformation capacity, extrusion speed and the possibility of obtaining an excellent level of aesthetic finish, especially through the anodization process. It also has an excellent corrosion resistance, excellent weldability and good cold formability, all aspects that make it the ideal material for the creation of complex shapes and design objects.

Alloy	Forms	Characteristics - Properties	Applications
EN - AW 6060	• Extruded round rod/bar	• Very good corrosion resistance • Medium strength • Comlex sections • Anodising quality	Architectural sections, frames, lightings, railling, ladders, furniture, fences, flooring

Alloy	Tempers	Temper designation (EN 515)
EN - AW 6060	O	Annealed wrought alloys
	T4	Solution heat treated & natural aged
	T5	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened)
	T6	Solution heat treated & artificially aged (precipitation hardened) Press quenching required
	T64	Solution heat treated & artificially aged (precipitation hardened) Under aged to improve formability (bending temper)
	T66	Cooled from an elevated temperature forming operation & artificially aged (precipitation hardened) to a higher level of mechanical properties through special control of manufacturing processes. Press quenching requierd.

Aluminium & aluminium alloys
Extruded rod/bar,
tubes and precision profiles

EN 755-1	Technical conditions for inspection & delivery
EN 755-2	Mechanical properties
EN 755-3	Round bars, tolerances on dimen sion & form
EN 755-4	Square bars, tolerances on dimen sion & form
EN 755-5	Rectangular bars, tolerances on dimension & form
EN 755-6	Hexagonal bars, tolerances on dimension & form
EN 755-7	Seamless tubes, tolerances on dimension & form
EN 755-9	Profiles, tolerances on dimension & form
EN- 12020-1	Technical conditions for inspection & delivery (precision profiles)
EN- 12020-2	Tolerances on dimension & form (precision profiles)

Physical properties	
Alloys EN - AW	6060
Metalic range °C	585-650
Density g/cm³	2,70
Electrical conductivity MS/m	34-38
Thermal conductivity W/(m K)	200-220
Specific Heat J/(Kg K)	898
Thermal expansion values	
-50 to 20 °C (10^{-6} K)	21,8
20 to 100 °C (10^{-6} K)	23,4
20 to 200 °C (10^{-6} K)	24,5
20 to 300 °C (10^{-6} K)	25,6
YoungsModulusMpa	69500
Shear ModulusMpa	26100

Chemical composition according to EN573-3 (EN - AW %)

Alloy	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Others		Al
									Each	Total	
6060	0,30-0,60	0,10-0,30	0,10	0,10	0,35-0,60	0,05	0,15	0,10	0,05	0,15	Rest

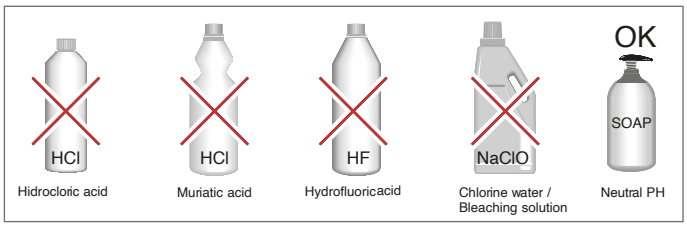
Mechanical properties according to EN 755-2 extruded profiles

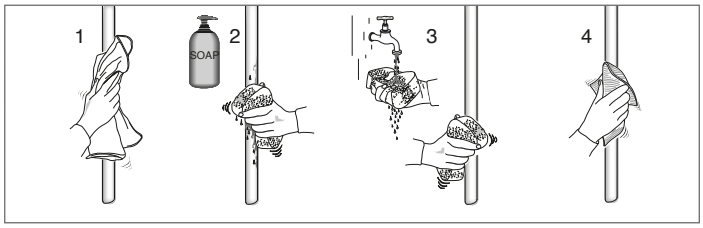
Alloy	Temper	Wall Thickness e mm*	Tensile strength Rm Mpa min	Proof stress Rpo,2 Mpa min	Elongation		Brinell Hardness HB**
					A50mm % min	A % min	
EN -AW 6060	T4	e ≤ 25	120	60	14	16	45
	T5	e ≤ 5	160	120	6	8	55
	T6	e ≤ 3	190	150	6	8	65
		3 < e ≤ 25	170	140	6	8	60
	T66	e ≤ 3	215	160	6	8	70
		3 < e ≤ 25	195	150	6	8	65

* For different wall thicknesses of a given profile, the lowest specified values of properties shall be considered as valid for the whole profile cross-section.

** The values for the HB hardness are indicative only.

LIMPIEZA





MATERIALES Y ACABADOS

MATERIAL	ACABADO		.XX	* colores indicativos
ALUMINIO	Estándar: **ANODIZADO MATE**	Plata	**.69**	
		Bronce	**.67**	
		Negro	**.68**	
	Estándar: **PINTADO**	Negro Ral 9005 Mate	**.40**	
		Negro Ral 9005 Brillo	**.26**	
		Blanco Ral 9010	**.31**	
		Gris	**.32**	
		Champagne	**.38**	
		Bronce	**.39**	
		Architectural Bronze	**.36**	
		Medium Bronze	**.56**	
		Plata	**.41**	
		Or	**.55**	