

ALLUMINIO EN-AW 6060

La lega di alluminio EN AW 6060 trova largo impiego per l'elevata capacità di deformazione termica, velocità di estrusione e per la possibilità di ottenere un ottimo grado di finitura estetica, in particolare mediante anodizzazione. Ha inoltre un'ottima resistenza alla corrosione, un'ottima saldabilità e una buona formabilità a freddo, tutti aspetti che la rendono il materiale ideale per la realizzazione di forme complesse e oggetti di design.

Alloy	Forms	Characteristics - Properties	Applications
EN - AW 6060	• Extruded round rod/bar	<ul style="list-style-type: none"> • Very good corrosion resistance • Medium strength • Complex sections • Anodising quality 	Architectural sections, frames, lightings, railing, ladders, furniture, fences, flooring

Alloy	Temper	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 required.

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 dimension & form
EN 755-4	Square bars, tolerances on dimension & 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/cm ³	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
ShearModulusMpa	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

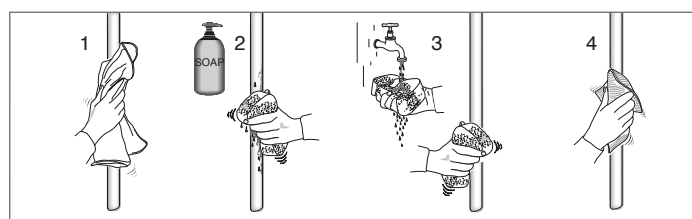
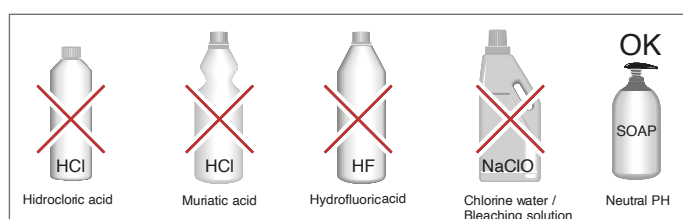
Mechanical properties according to EN 755-2 extruded profiles

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.

PULIZIA



MATERIALI E FINITURE

MATERIALE	FINITURE	.XX	* colori indicativi	
ALLUMINIO	Di produzione: ANODIZZATO SATINATO	Argento	.69	
		Bronzo	.67	
		Nero	.68	
	Di produzione: VERNICIATO	Nero Ral 9005 Opaco	.40	
		Nero Ral 9005 Lucido	.26	
		Bianco Ral 9010	.31	
		Grigio	.32	
		Champagne	.38	
		Bronzo	.39	
		Architectural Bronze	.36	
		Medium Bronze	.56	
		Argento	.41	
		Oro	.55	