

Technical datasheet - Extruded products

Alloy EN AW-6060 [AlMgSi]

Alloy 6060 offers good strength, slightly lower than 6063, very good corrosion resistance and is suitable for decorative anodizing. Used primarily for structures requiring good strength, very good surface finish and good anodising response, such as profiles for windows, doors, entrance lots, ceilings and furniture. This is also a commonly used alloy for thermal applications such as heat sinks.

Typical Applications

- Architectural and building products
- Door and window frames
- Electrical components and conduit
- Heat sinks
- Railings and furniture
- Pipe and tube for irrigation systems
- Truck and trailer flooring
- Ladders

Chemical Composition ¹

Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Sn	Others
Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Min Max	Max	Max	Each Tot
0.30 0.60	0.35	0.10	0.10	0.35 0.60	0.05	0.15	0.10				0.05 0.15

¹ Chemical composition in weight-% according to EN-573-3:2019

Mechanical Properties ^{2,3}

Temper	Wall thickness t [mm]	R _{p0,2} [MPa]	R _m [MPa]	A [%]	A _{50mm} [%]	HBW ^c TYPICAL VALUE	Vickers ^c TYPICAL VALUE
T4 ^a	t ≤ 25	60	120	16	14	50	56
T5	t ≤ 5	120	160	8	6	60	68
	5 < t ≤ 25	100	140	8	6	60	68
T6 ^a	t ≤ 5	150	190	8	6	70	80
	5 < t ≤ 25	140	170	8	6	70	80
T64 ^{a,b}	t ≤ 15	120	180	12	10	60	68
T66 ^a	t ≤ 5	160	215	8	6	75	86
	5 < t ≤ 25	150	195	8	6	75	86

² Properties according to EN 755-2:2016 for extruded profile, minimum values unless else specified

³ If a profile cross section comprises different thickness which fall in more than one set of specified mechanical property values, the lowest specified value shall be considered as valid for the whole profile section

^a Properties may be obtained by press quenching

^b Bending quality

^c Brinell hardness values for information only. Vickers converted from Brinell value and should be considered approximate

Temper Designations ⁴

T4	Solution heat treated and naturally aged
T5	Cooled from an elevated temperature shaping process and then artificially aged
T6	Solution heat treated and then artificially aged
T64	Solution heat treated and then artificially aged in underageing conditions (between T6 and T61) to improve formability
T66	Solution heat treated and then artificially aged – mechanical property level higher than T6 achieved through special control of the process

⁴ Temper designations according to EN 515:2017

Physical Properties ⁵

Temper	Modulus of Elasticity [GPa]	Modulus of Rigidity [GPa]	Melting Range [°C]	Density [g/cm ³]	Thermal Conductivity [W/m·K]	Specific Heat Capacity [J/kg·K]	Electrical Resistivity [nΩm]	Coefficient of linear expansion [10 ⁻⁶ K ⁻¹]
	69	26	615 - 655	2.70		901		23.4
T6					200		32	

⁵ Reference: MNC Handbok nr 12, version 2, SIS, 1989. Typical properties at room temperature 20°C

Comparative Characteristics of Related Alloys ⁶

Property	6060	6063	6005	6005A	6082
Tensile strength	1	2	3	3	4
Impact strength	2	2	1	3	4
Surface finish	5	4	3	3	2
Suitability for decorative anodizing	5	5	4	3	2
Corrosion resistance	5	5	4	4	4
Machinability	2	3	4	4	5
Coldforming	5	5	4	4	3
Weldability	5	5	5	5	4

⁶ Relative grading, 5 = top grade

About Asistal Aluminum

Asistal Aluminum has a widespread sales network in the Marmara and Aegean Region and has been serving its customers since 1994. Our plant is located in Kırklareli Organized Industrial Zone, operating on a 44,500 m² outdoor area and a 22,500 m² indoor area. Following the latest technological developments, our plant has 5 inch, 6 inch, and 7 inch presses, anodic oxidation unit, electrostatic powder coating unit, wood transfer coating unit, insulation barrier assembly line, and mechanical processing unit. We are able to produce 15 m³/hour (360 m³/day) reusable water thanks to our chemical treatment unit in our environment-friendly facility. Asistal Aluminum exports to 40 countries in Europe, Middle East, Central America, and the Balkans in particular. We continue our services with our main sales points in Corlu, Tekirdag, Edirne, Istanbul, Izmir, Ankara, and Sofia, the capital of Bulgaria.

IATF16949:2016



ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



EN 15088

