



PROFILES

# AW 6063 (AL Mg0,7Si)

6063 alloy is one of the most popular in the 6000 series, which provides good extrusion capacity and a high-quality surface. Excellent welding properties, corrosion resistance and electrical conductivity



## CHEMICAL COMPOSITION (WEIGHT %) (EN 573 - 3)

ELEMENTS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al
Minimum	0.2	-	-	-	0.45	-	-	-	-
Maximum	0.6	0.35	0.1	0.1	0.9	0.1	0.1	0.1	Rest

## MECHANICAL PROPERTIES (EN 755 - 2)

### ROUND RODS

DIAMETERS (de...até)	TEMPER	Rm* (MPa)	Rp0.2* (MPa)	A* (%)	A50* (%)	HB - BRINELL HARDNESS
≤ 150	T6	215	170	10	8	75

\*Minimal values.

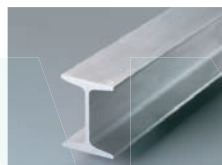
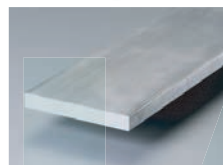
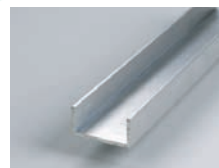
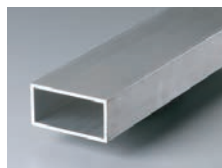
### PROFILES

WALL THICKNESS	TEMPER	Rm* (MPa)	Rp0.2* (MPa)	A* (%)	A50* (%)	HB - BRINELL HARDNESS
≤ 10	T6	215	170	8	6	75
10 - ≤ 25	T6	195	160	8	6	75

### TUBES

≤ 25	T6	215	170	10	8	75
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\*Minimal values.

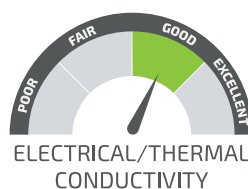


## MAIN CHARACTERISTICS

- Good robustness
- Very good resistance to corrosion
- Suitable for decorative anodizing

## APPLICATIONS

- Architecture and construction
- Handrails and furniture
- Door and window frames
- Pipes and tubes for irrigation systems
- Electrical components
- Truck and trailer flooring
- Heat sinks
- Stairs





# PHYSICAL PROPERTIES

DENSITY	2.70 g/cm <sup>3</sup>
MODULUS OF ELASTICITY	69 000 MPa
LINEAR EXPANSION COEFFICIENT	23.5 x 10 <sup>-6</sup> K <sup>-1</sup>
THERMAL CONDUCTIVITY	201 W/mK
ELECTRICAL CONDUCTIVITY	28 - 34 MS/m

PROPERTIES	O	T1/T4	T5/T52	T53	T54/T6/T65
MACHINABILITY	POOR	POOR	FAIR	FAIR	FAIR
FORMABILITY	EXCELLENT	GOOD	GOOD	GOOD	FAIR
RESISTANCE TO CORROSION (GENERAL)	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
WELDABILITY	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
BRAZING	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT	EXCELLENT
ANODIZING REACTION	GOOD	GOOD	EXCELLENT	EXCELLENT	EXCELLENT

POLY

LANEWA