

EN AW 7075

Alloy's Characteristics	
Alloy	EN AW 7075
Type of Alloy	heat treatable
Temper	T6 / T651
Surface	rolled skin

Mechanical Properties ¹⁾		Typical values
Yield strength R _{p0,2}	[MPa]	240 – 460
Ultimate tensile strength R _m	[MPa]	360 – 540
Elongation A ₅₀	[%]	2 – 8
Hardness HBW	[2,5/62,5]	104 – 160

Physical Properties ¹⁾		Typical values
Density	[g/cm ³]	2.80
Module of elasticity	[GPa]	71
Electrical conductivity	[m/Ω · mm ²]	19 – 23
Coefficient of thermal expansion	[K ⁻¹ · 10 ⁻⁶]	23.4
Thermal conductivity	[W/m · K]	130 – 160
Specific heat capacity	[J/kg · K]	862

Processing Characteristics ²⁾		Typical values
Dimensional stability		5 – 6
Machinability		1
Erodability		1
Weldability (Gas / TIG / MIG / Resistance / EB)		6 / 6 / 6 / 2 / 5
Corrosion resistance (seawater / weather/ stress cracking)		5 / 5 / 3
Use at temperatures (max °C long/short terms) ³⁾		90 / 120
Anodising (technical / decorative / hard-) ⁴⁾		4/ 6/ 2
Polishability		1
Etching		1
Contact with food (according to EN 602)		no

Tolerances			
Thickness in [mm]	Flatness [mm] ⁵⁾	Thickness [mm]	Width & Length [mm]
10 – 200	EN 485-3	EN 485-3	EN 485-3
cuts < 150			DIN ISO 2768-1m
cuts > 150			- 0 / + 5 mm

Standard Stock Sizes		
Plate Dimension [mm]	1,520 × 3,020	in thickness of 10 – 120 mm
Plate Thickness [mm]	10 ; 12 ; 15 ; 20 ; 25 ; 30 ; 35 ; 40 ; 45 ; 50	
	55 ; 60 ; 70 ; 80 ; 90 ; 100 ; 120	
Other dimension upon request		

Date: 12.07.2016

- 1) Typical values at room temperature.
- 2) Ratings evaluation rating from 1 (very good) to 6 (inapplicable).
- 3) Without loss of strength after cooling down.
- 4) Technical anodising only - no warranty towards optical demands.
- 5) Surface flatness for whole plates is measured with a special, 1 meter long, digital flatness ruler.