

# G.AL® 7075GF

Plate's Characteristics	
Alloy	EN AW 7075
Type of Alloy	heat treatable
Temper	T651
Surface	two surfaces precision milled, roughness $R_a$ 0.4 $\mu\text{m}$ , foiled on both sides

Mechanical Properties <sup>1)</sup>		Typical values
Yield strength $R_{p0,2}$	[ksi]	460 – 470
Ultimate tensile strength $R_m$	[ksi]	530 – 540
Elongation $A_{50}$	[%]	5 – 8
Hardness HBW	[2.5/62.5]	158 – 161

Physical Properties <sup>1)</sup>		Typical values
Density	[lbs/cu in.]	2,80
Module of elasticity	[ksi·10 <sup>3</sup> ]	71
Electrical conductivity	[% IACS]	19 – 23
Coefficient of thermal expansion	[10 <sup>-6</sup> /°F]	23,4
Thermal conductivity	[BTU in/ft <sup>2</sup> hr°F]	130 – 160
Specific heat capacity	[BTU/lb°F]	862

Processing Characteristics <sup>2)</sup>		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°F / long / short / terms) <sup>3)</sup>		90 / 120
Anodising (technical / decorative / hard-) <sup>4)</sup>		4 / 6 / 2
Polishability		1
Etching		1
Contact with food (according to EN 602)		nein

Tolerances			
Thickness in [in]	Flatness [in] <sup>5)</sup>	Thickness [in]	Width & Length [in]
12 – 15	< 0,8	+/- 0,10	
> 15	≤ 0,50	+/- 0,10	
Zuschnitte			DIN ISO 2768-1m

Standard Stock Sizes		
Plate Dimension [mm]	1.520 × 3.020	in thickness of 12 – 40 mm
Plate Thickness [mm]	12, 15, 20, 25, 30, 40	
Other dimension upon request		

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- 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.

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