

G.AL® C210 DYNAMIC

Plate's Characteristics	
Alloy	EN AW 5083
Type of Alloy	non heat treatable
Temper	O3
Surface	6-sides sawn, < 0.000591 in

Mechanical Properties ¹⁾		Typical values
Yield strength R _{p0,2}	[ksi]	17 - 19
Ultimate tensile strength R _m	[ksi]	36 - 41
Elongation A	[%]	18 - 25
Hardness HBW	[2.5/62.5]	75 - 80

Physical Properties ¹⁾		Typical values
Density	[lbs/cu in.]	0.096
Module of elasticity	[ksi·10 ³]	10.2
Electrical conductivity	[% IACS]	29 - 32
Coefficient of thermal expansion	[10 ⁻⁶ /°F]	13.1
Thermal conductivity	[BTU in/ft ² hr°F]	760 - 900
Specific heat capacity	[BTU/lb°F]	0.214

Processing Characteristics ²⁾	
Dimensional stability	1
Machinability	1 - 2
Weldability (Gas / TIG / MIG / Resistance / EB)	4 / 2 / 2 / 2 / 1
Corrosion resistance (seawater / weather/ stress cracking)	1 / 1 / 3
Use at temperatures (max°F / long / short / terms) ³⁾	356 / 536
Anodising (technical / decorative / hard-) ⁴⁾	2 / 4 / 2
Polishability	2
Etching	3 - 4
Contact with food (according to EN 602)	yes

Tolerances			
Thickness in [in]	Flatness [in] ⁵⁾	Thickness [in]	Width & Length [in]
< 5.90		-0/ +0.1	DIN ISO 2768-1m
> 5.90		-0/ +0.2	-0 / + 0.2

Standard Stock Sizes
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.

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