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ALUMINIUM AND THERMOPLASTIC HONEYCOMBS, LAMINATES, SANDWICH PANELS

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ALUSTEP® 500 SL

Panel's composition

SKIN IN GLASSFIBRE

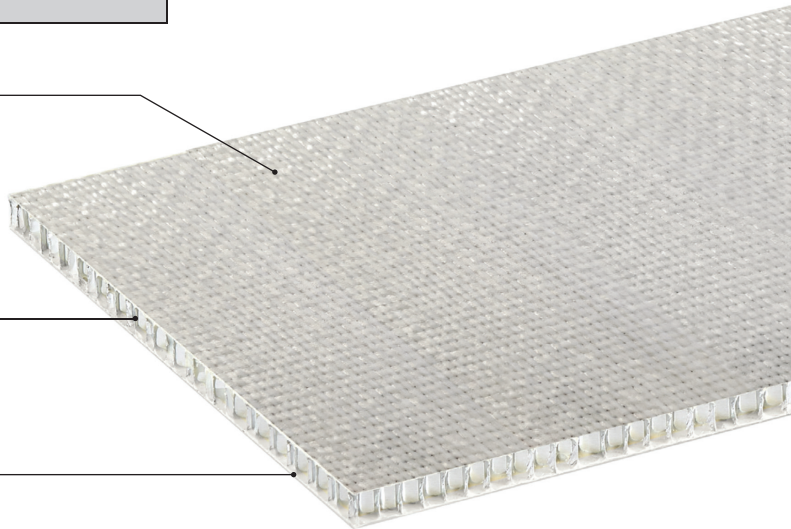
490g/m² impregnated with epoxy resin

CORE

Aluminium honeycomb (Alloy series 3000*) with hexagonal cells

Diameter: Ø1/4", Ø3/8" **

Thickness Foil: from 50 to 70 microns



Thickness starting from 3,5 mm to 50 mm

* Serie 5000 on demand

** Ø3/8" on request

Technical data sheet for standard panels (dimensions, materials and special finishes on request)

TECHNICAL CHARACTERISTICS OF PANEL	Panel thickness	mm	from 3,5 to 50							
	Panel size	mm	Standard 1250 x 2500 / 1500 x 3000 On request up to 1550 x 3050							
	Thickness tolerance	mm	±0,3							
	Dimension tolerance	mm	± 30							
	Skins thickness	mm	0,4							
	Skin		Glassfibre 500 gr/m²							
	Honeycomb alluminium alloy		3000 series / 5000 series							
	Thickness of honeycomb foil	µm	50 and 70							
	Honeycomb diameter	Ø = mm	from 3 to 19							
	Honeycomb density	Kg/m³	from 20 to 116							
	Adhesive		Epoxy Resin							
PANEL PHISIC AND MECHANIC PERFORMANCES	Panel Thickness (some examples)	mm	5	10	15	20	25	30	35	
	Panel weight ‡	Kg/m²	1,9±0,2	2,2±0,2	2,5±0,2	2,8±0,2	3,1±0,2	3,3±0,2	3,5±0,2	
	Compressive stabilised strength MPa ** ‡	ASTM C 365-365 M	Mpa	2,9±0,3						
	Maximum load ‡	ASTM C 393†	N	130	270	420	570	720	850	1000
	Deflection at maximum load ‡	ASTM C 393†	mm	42±6	20±3	14±2	11±2	8±1	7±1	6±1
	Skins E Elastic Modulus **		Mpa	26'000±2'000						
	Moment of inertia I **		mm⁴/m	4'200	18'400	42'600	76'800	121'000	175'400	239'940
	Middle resistance to peeling ** ‡	ASTM D1781-98 (2012)		> 500 N/76 mm or >55 Nmm/mm						
	Maximum service temperature **		°C	- 50/ +90						
	Thermal expansion coefficient ***		°C ⁻¹	1,5 * 10 ⁻⁵ / 1,5 mm for ΔT 100 °C for 1 meter length						

* Tested by Internal Laboratory

** Tested by external Laboratory

‡ All values refer to a panel made of aluminum honeycomb with a cell diameter 6 mm 56 kg/m³ and epoxy adhesive

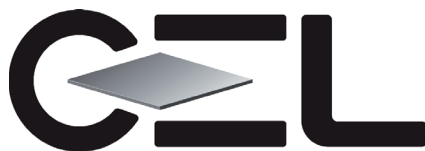
† Sample dimension with 4 support points (L, W) 540x540 ; distance among the lower points 500mm.



LIABILITY DISCLAIMER: The above data are to the best of our knowledge correct and are intended to give information about our products and their potential applications. No warranty is given or implied in respect of certain properties of the products or their suitability for a particular application. We reserve the right for technical changes without further notice. We guarantee impeccable product quality under our terms of sale.

Sandwich Panel ALUSTEP® 500 SL

Last Revised: 10/23_Rev.13

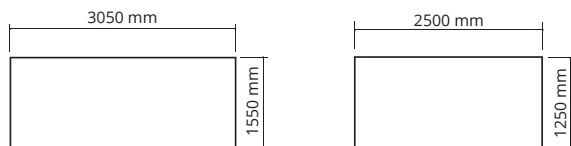


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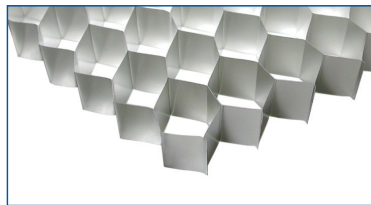
ENG

Standard dimensions (other dimensions available on request) - Dimension tolerance ± 30 mm



Honeycomb core's properties		50 Microns
Type	ALUMINIUM ALLOY 3003/3005/3103/3104	
Ø honeycomb in mm	6	9
Ø honeycomb in inches	1/4"	3/8"
Density Kg/m ³	56 - 59	39 - 40
Compressive stabilised strength MPa	3,0 - 3,5	1,4 - 1,95

Honeycomb core's properties		70 Microns
Type	ALUMINIUM ALLOY 3003/3005/3103/3104	
Ø honeycomb in mm	6	9
Ø honeycomb in inches	1/4"	3/8"
Density Kg/m ³	80 - 83	54
Compressive stabilised strength MPa	4,3 - 4,6	2,5 - 2,6



Aluminium honeycomb

CONFORM TO AMERICAN STANDARDS				
ASTM C67-M18 Water Absorption	ASTM E72-15 Strength-Transverse load	ASTM C297 M-16 Flatwise tensile strength	ASTM E84-17 Flamespread	TAS 201 TAS 203 Impact and Cyclic Wind Pressure