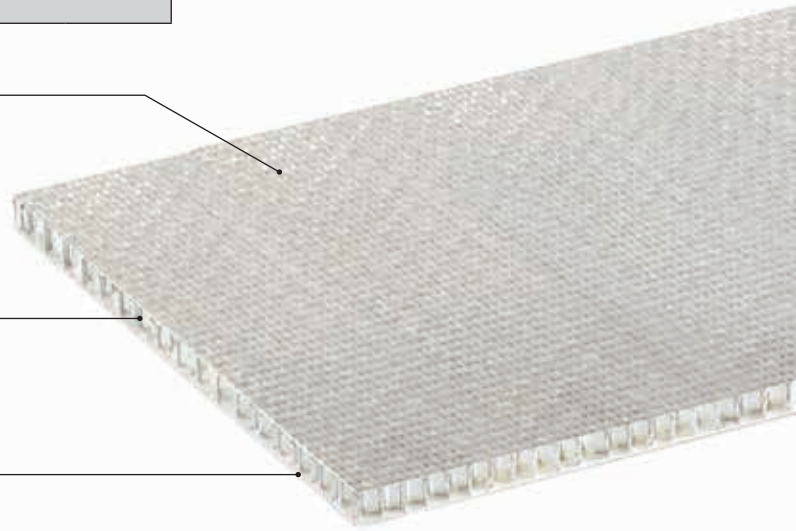


ALUSTEP® 500 SL

Panel's composition

SKINS IN BIDIRECTIONAL GLASSFIBER FABRIC
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 mm to 80 mm

* To Aluminium alloy series 3000 belong: Aluminium alloy 3003, Aluminium alloy 3005, Aluminium alloy 3103, Aluminium alloy 3104

** Ø3/8" on request

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

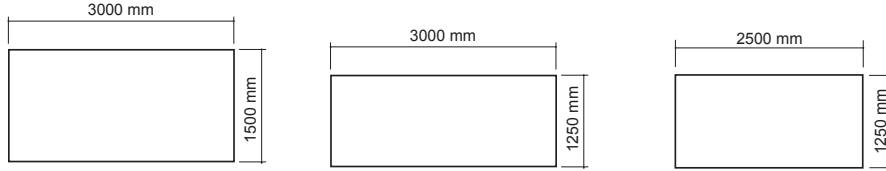
TECHNICAL CHARACTERISTICS OF PANEL		Technical data	
		Unit	Value
TECHNICAL CHARACTERISTICS OF PANEL	total thickness	mm	from 5 to 50
	panel size	mm	standard 1250 x 2500 / 1500 x 3000 On request up to 1500 x 4000
	thickness tolerance	mm	±0,3
	dimensions tolerance	mm	± 30
	skins thickness	mm	0,5
	glass fiber skin		Glass fiber Plain 500 gr/m ²
	honeycomb aluminium alloy		3000 series / 5000 series
	thickness of honeycomb foil	µm	50 and 70
	diameter of honeycomb	Ø = mm	from 3 to 19
	honeycomb density	Kg/m ³	from 20 to 116
adhesive for aluminum honeycomb		Epoxy Resin	
PANEL PHYSIC AND MECHANIC PERFORMANCES	type panel (some examples)	mm	5 10 15 20 25 30 35
	panel weight ‡	Kg/m ²	2,0 2,2 2,5 2,8 3,1 3,3 3,5
	compressive stabilised strength ** ‡	ASTM C 365-365 M Mpa	2,9
	moment of inertia **	mm ⁴ /m	4.000 18.400 40.000 76.000 120.000 174.000 240.000
	average 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	

** Tested by Internal Laboratory

*** Approximate value

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

Standard dimensions (other dimensions available on request) - Dimension tolerance $\pm 30\text{mm}$



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

Conforms to the Standard	ASTM C67-M18	ASTM E72-15	ASTM C297 M-16	ASTM E84-17a	TAS 201	TAS 203
--------------------------	--------------	-------------	----------------	--------------	---------	---------