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ALUMINIUM AND THERMOPLASTIC HONEYCOMBS, LAMINATES, SANDWICH PANELS

ENG

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Polypropylene honeycomb core PP8.80/PP8-80T30/PP8-80T30F75/PP8-120T30

Cel supplies different types of polypropylene honeycombs:

- Polypropylene honeycomb without TNT (PP 8.80)
- Polypropylene honeycomb with TNT (a thin thermowelded tissue on both sides; PP 8-80 T30, PP8-120 T30)
- Polypropylene honeycomb with TNT and a plastic film (thermowelded on both sides; PP 8-80 T30 F75)

Polypropylene without TNT is a good kinetic energy absorber, therefore it can be uses in crash tests. Polypropylene honeycomb can be thermo-welded or glued to a number of TNT or technical fabrics which make the production of sandwich and lightweight panels easier. In fact, polypropylene honeycomb with TNT is mainly used as core for sandwich, as reinforcement, as flat surface for cutting tools (waterjet cutting machines) and as means to lighten structures.

In addition, polypropylene honeycomb is used as support for filters and it is applied to diminish corrosive gas emissions thanks to the chemical-resistance of this product and it reliability in aggressive environments.

As core in sandwich panels, polypropylene honeycomb is faced with different materials, from aluminium sheets to laminated skins, from marine plywood to fiberglass.

Possible variant with the thickness: 3.5 mm

Honeycomb core's properties					
Туре	PP8.80	PP8.80T30	PPT30F75	PP8.120T30	
Cell size mm	8				
Colour	white				
Density kg/m³	80¹			120	
Compressive strength MPa	1,50	1,60	1,60	3,4	
Compressive modulus MPa	70			90	
Shear strength MPa	-	0,50	0,50	1	
Shear modulus MPa	-	12	13	18	
Effective temperature range °C	da -30 a +80				
Maximum width mm	1400	1500	1500	1500	
Minimum width mm	100 ² 600			600	
Maximum length mm	2950 ²	-	-	3000 ²	
Width tolerance mm	+/- 4				
Tolerance length mm	+/- 4				
CORE'S thickness mm	7 - 100	7 - 65	6 - 65	5 - 65	

Standard dimensions (other dimensions available on request)

2500 mm	ı
	1200 mm

- Other dimensions, core heights and types upon request.
- Minimum order quality for each type: 10 pallets.



PP8.80 / PP8-80T30

^{*}T30: - thermowelded foil 30gr/m³ for adhesion.

^{**} T30F75: thermo-welded tissue for wet lay-up

Density referred to the block dimension

² on request