



TECHNICAL DATA

Divinycell MC

THE NEXT LEVEL OF LIGHTER SANDWICH CORE

Divinycell MC is the innovative next generation structural core with best in class mechanical properties to low weight. Divinycell MC's unique microcell structure renders substantial weight reduction of the laminate, thanks to lower core density in combination with exceptional low level of resin uptake. The very small cell size has proven to give 80% reduction of resin uptake.

Divinycell MC is a premium structural core, suitable for weight critical applications in marine, industry and aerospace. Other key features include excellent adhesion/peel strength, low water absorption and good thermal and acoustic insulation. The material is compatible with virtually all commonly used resins and manufacturing methods.

MECHANICAL PROPERTIES DIVINYCELL® MC

Property	Test Procedure	Unit		MC60	MC80
Compressive strength ¹	ASTM D 1621	MPa	Nominal	1.19	1.7
			Minimum	0.9	1.4
Compressive Modulus ¹	ASTM D1621-B-73	MPa	Nominal	87	125
			Minimum	65	95
Tensile Strength ²	ASTM D 1623	MPa	Nominal	1.8	2.3
			Minimum	1.2	1.6
Tensile Modulus ²	ASTM D 1623	MPa	Nominal	128	155
			Minimum	90	110
Shear Strength	ASTM C 273	MPa	Nominal	0.79	1.15
			Minimum	0.63	0.95
Shear Modulus	ASTM C 273	MPa	Nominal	21	29
			Minimum	17	24
Shear Strain	ASTM C 273	%	Typical	20	20
Density	ISO 845	kg/m ³	Nominal	53	73
			Maximum	64	84
			Minimum	48	65

All values measured at +23°C

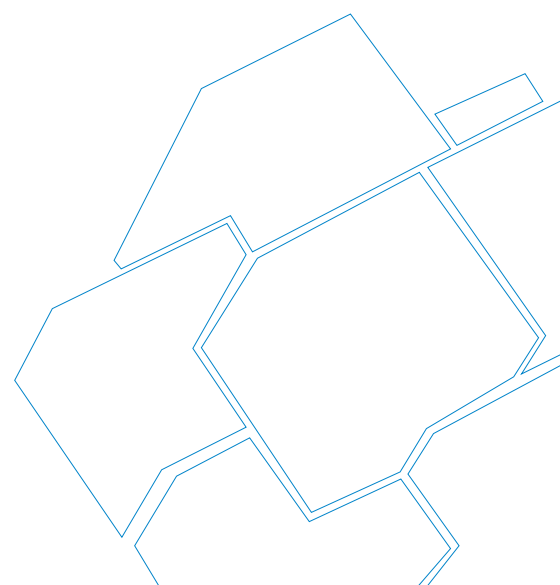
1. Properties measured perpendicular to the plane.

2. Properties measured perpendicular to the plane, ASTM D1623, sample geometri B due to limited thickness.

Nominal value is an average value of a mechanical property at a nominal density.
Minimum value is a minimum guaranteed mechanical property a material has independently of density.

PRODUCT CHARACTERISTICS

- Small cell size allowing for minimal resin uptake
- Good chemical resistance
- Provides superior mechanical properties to a low weight



TECHNICAL CHARACTERISTICS

PHYSICAL CHARACTERISTICS DIVINYCELL® MC

Format		Unit	MC60	MC80
Plain sheets	Length	mm	2440	2200
	Width	mm	1220	1100
GS sheet	Length	mm	1220	TBD
	Width	mm	813	TBD
GS sheet	Length	mm	1220	TBD
	Width	mm	1220	TBD

Divinycell MC60 (MC80 pending) is type approved by:



Disclaimer:

This data sheet may be subject to revision and changes due to development and changes of the material. The data is derived from tests and experience. If not stated as minimum values, the data is average data and should be treated as such. Calculations should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use. The company reserves the right to release new data sheets in replacement.

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