

The high performance PET sandwich core

Divinycell PX300 is a recyclable, thermoplastic foam core with high density, high mechanical properties and good fatigue characteristics. With its excellent screw retention and compressive strength, Divinycell PX300 is particularly suited in sandwich applications for local inserts in the way of fittings, either tapped or bolted through.

It is an excellent substitute to high density structural foam cores and natural materials such as plywood. PX300 has a closed cell structure and is insensitive to moisture or decay/rot.

Mechanical properties Divinycell® PX300

Property	Test Procedure	Unit		PX300
Compressive Strength ¹	ASTM D 1621	MPa	Nominal	4.2
		MPa	Minimum	3.3
Compressive Modulus ¹	ASTM D 1621-B-73	MPa	Nominal	180
		MPa	Minimum	135
Shear Strength	ISO 1922	MPa	Nominal	2.0
		MPa	Minimum	1.5
Shear Modulus	ISO 1922	MPa	Nominal	85
		MPa	Minimum	60
Density	ISO 845	kg/m ³	Nominal	300

All values measured at +23°C.

1. Properties measured perpendicular to the plane

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

Divinycell PX300 is compatible with most commonly used resin systems (polyester, vinyl ester, epoxy and phenolics) including those with high styrene contents. Due to its closed cell structure Divinycell PX300 can be readily used with vacuum infusion process. For optimal design of applications used in high operating temperatures in combination with continuous load, please contact Diab Technical Services for detailed design instructions.

Product Characteristics

- Closed cell structure
- High compression strength
- Very low water absorption
- Good thermal and sound insulation
- Insensitive to rot or decay
- Easy cutting and machining
- High temperature resistance
- Recyclable

Technical Characteristics

Technical characteristics Divinycell® PX300

Characteristics ¹	Unit	PX300	Test method
Density variation	%	± 5	ISO 845
Thermal conductivity ²	W/(m-K)	0.032	ISO 12667

1. Typical values are approximate
2. Thermal conductivity at +20°C

Maximum processing temperature is dependent on time, pressure and process conditions. Therefore users are advised to contact Diab Technical Services to confirm that Divinycell PX300 is compatible with their particular processing parameters.

Physical characteristics

Format		Unit	PX300
Plain sheets	Length	mm	2440
	Width	mm	610

Other dimensions are available on request.

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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Diab Group
Box 201
312 22 Laholm, Sweden
Phone: +46 (0)430 163 00
E-mail: info@se.diabgroup.com

