

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 - Imperial units

Property	Test Procedure	Unit		PX300
Compressive Strength ¹	ASTM D 1621	psi	Nominal	609
		psi	Minimum	479
Compressive Modulus ¹	ASTM D 1621-B-73	psi	Nominal	26,107
		psi	Minimum	19,580
Shear Strength	ISO 1922	psi	Nominal	290
		psi	Minimum	218
Shear Modulus	ISO 1922	psi	Nominal	12,328
		psi	Minimum	8,702
Density	ISO 845	lb/ft ³	Nominal	18.7

All values measured at +73.4°F.

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 Divynycell® PX300

Characteristics ¹	Unit	PX300	Test method
Density variation	%	± 5	ISO 845
Thermal conductivity ²	Btu x in/(ft ² x h x °F)	0.032	ISO 12667

1. Typical values are approximate
2. Thermal conductivity at +68°F

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

Physical characteristics

Format		Unit	PX300
Plain sheets	Length	inch	96.06
	Width	inch	24.02

Other dimensions are available on request.

Disclaimer:

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

