

The high performance PET sandwich core

Divinycell PX is based on PET, which makes it to a recyclable, thermoplastic sandwich core material. Divinycell PX provides excellent FST (fire, smoke & toxicity) properties, high temperature performance, very good fatigue properties, good mechanical characteristics and chemical resistance. It also offers excellent acoustic/thermal insulation properties and low water absorption. Divinycell PX is particularly ideal for public transportation and industrial applications.

The energy efficiency of a Divinycell PX sandwich makes it ideal for transport applications such as interior panelling, floors and exterior panels for trains, trams, buses and coaches. In the industrial/construction market, the good mechanical and FST properties of Divinycell PX allows it to be used for a wide variety of applications such as domes, architectural claddings and industrial housings.

Mechanical properties Divinycell® PX - Imperial units

Property	Test Procedure	Unit		PX60	PX100	PX150
Compressive Strength ¹	ASTM D 1621	psi	Nominal	29	116	203
Tensile Strength	ASTM D 1623	psi	Nominal	78	189	218
Shear Strength	ISO 1922	psi	Nominal	35	102	145
Shear Modulus	ISO 1922	psi	Nominal	957	2,756	4,641
Shear Strain	ISO 1922	%	Nominal	9.5	8.5	8.5
Density	ISO 845	lb/ft ³	Nominal	4.1	6.9	9.4

All values measured at +73.4°F. Testing is done on foam without welding lines.

1. Properties measured perpendicular to the plane

Nominal value is an average value of a mechanical property at a nominal density

Product Characteristics

- High temperature resistance
- Thermo formable
- Low water absorption
- Good chemical resistance
- Very good FST properties
- Recyclable
- Excellent thermal conductivity properties
- Consistent and homogeneous material

Technical Characteristics

Technical characteristics Divynycell® PX

Characteristics ¹	Unit	PX60	PX100	PX150	Test method
Density variation	%	± 7	± 6	± 5	-
Thermal conductivity ²	Btu x in / (ft ² x h x °F)	0.187	0.208	TBD	ASTM C 518
Fire Resistance class ³	-	S4 ST2 SR2	-	-	DIN 5510*
	-	-	M1 F1	-	AFNOR NF F 16-101*

1. Typical values are approximate
2. Thermal conductivity at +68°F
3. Measured at different thicknesses, contact Diab for more information

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

Physical characteristics

Format		Unit	PX60	PX100	PX150
Plain sheets	Length	inch	96.06	96.06	96.06
	Width	inch	48.03	48.03	48.03
GS sheet	Length	inch	48.03	48.03	48.03
	Width	inch	48.03	48.03	48.03

Other dimensions are available on request.

Disclaimer:

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