AIREXBALTEKBANOVA

DATA SHEET 07.2011 (replaces 08.2010)

AIREX[®] PXc

Fiber-Reinforced Structural Foam

CHARACTERISTIC

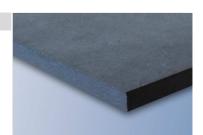
- High shear and compression properties
- Replacement for wood and plywood
- Good fastener pull-out strength
- High heat resistance
- Compatible with a wide range of resins and adhesives
- Dimensionally stable
- High styrene resistance
- Very low water absorption
- Non biodegradable
- Excellent chemical resistance

APPLICATIONS

- Marine Transoms, bulkheads, stringers, engine beds, floors, interiors, local reinforcements, tooling and molds
- Road and Rail
 Floors, sidewalls, roofs, engine covers, interior panels
- Industrial Covers, tanks, containers, tooling and molds, local reinforcements, architectural panels, sporting goods

PROCESSING

- Contact molding (hand/spray)
- Resin infusion / injection (VARTM / RTM)
- Adhesive bonding
- Pre-preg processing
- Processing molding (GMT, SMC)



AIREX[®] PXc is a closed-cell, fiber reinforced polymer foam with very high mechanical properties ideally suited as core material for structurally loaded sandwich applications.

The sophisticated manufacturing process evenly distributes continuous glass fibers throughout the foam generating a very consistent foam with enhanced mechanical properties especially in compression and shear.

AIREX[®] PXc is dimensionally stable, has very low water absorption, and is resistant to chemicals and high temperatures.

It is ideally suited as a core material for highly loaded sandwich structures or as a replacement for wood and plywood.

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Typical properties for AIREX [®] PXc		Unit (metrical)	PXc.245	PXc.320	PXc.385	PXc.420
Density	ASTM C-271	kg/m³	240	320	385	420
Compressive strength perpendicular to the plane*	ASTM C-365	N/mm²	2.6	5.1	7.8	9.5
Compressive modulus perpendicular to the plane*	ASTM C-365	N/mm²	56	179	277	326
Shear strength	ASTM C-273	N/mm²	2.1	3.5	4.8	5.5
Shear modulus	ASTM C-273	N/mm²	63	122	170	193
Flexural strength*	ASTM D-790	N/mm²	5.3	8.8	11.5	12.9
Flexural modulus*	ASTM D-790	N/mm²	280	447	581	648
	Width	mm	1219	1219	1219	1219
Standard sheet	Length	mm	2438	2438	2438	2438
	Thickness	mm	12 to 50	12 to 50	12 to 45	12 to 45

Finishing Optioons, other dimensions and closer tolerances upon request

* Evaluated on ¾" (20 mm) rigid sheet

The data provided gives approximate values for the nominal density. Due to density variations these values can be lower than indicated above. Minimum values to calculate sandwich constructions can be provided upon request. The information contained herein is believed to be correct and to correspond to the latest state of scientific and technical knowledge. However, no warranty is made, either expressed or implied, regarding its accuracy or the results to be obtained from the use of such information. No statement is intended or should be construed as a recommendation to infringe any existing patent.

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Typical properties for AIREX [®] PXc		PXc.245	PXc.320	PXc.385	PXc.420
ASTM C-271	lb/ft ³	15	20	24	26
ASTM C-365	psi	373	738	1136	1373
ASTM C-365	psi	8'044	25'882	40'153	47'288
ASTM C-273	psi	312	511	699	802
ASTM C-273	psi	9'099	17'697	24'575	28'015
ASTM D-790	psi	773	1'272	1'672	1'871
ASTM D-790	psi	40'608	64'827	84'203	93'890
Width	in	48	48	48	48
Length	in	96	96	96	96
Thickness	in	½ to 2	½ to 2	½ to 1 ¾	½ to 1 ¾
	ASTM C-271 ASTM C-365 ASTM C-365 ASTM C-273 ASTM C-273 ASTM D-790 ASTM D-790 Width Length	ASTM C-271Ib/ft3ASTM C-365psiASTM C-365psiASTM C-273psiASTM C-273psiASTM C-273psiASTM D-790psiASTM D-790psiWidthinLengthin	C PXc (imperial) PXc.245 ASTM C-271 lb/ft³ 15 ASTM C-365 psi 373 ASTM C-365 psi 8'044 ASTM C-273 psi 312 ASTM C-273 psi 312 ASTM C-273 psi 9'099 ASTM D-790 psi 773 ASTM D-790 psi 40'608 Width in 48 Length in 96	C PXc (imperial) PXc.245 PXc.320 ASTM C-271 lb/ft³ 15 20 ASTM C-365 psi 373 738 ASTM C-365 psi 373 25'882 ASTM C-273 psi 312 511 ASTM C-273 psi 312 511 ASTM C-273 psi 9'099 17'697 ASTM D-790 psi 773 1'272 ASTM D-790 psi 40'608 64'827 Width in 48 48 Length in 96 96	C PXc (imperial) PXc.245 PXc.320 PXc.385 ASTM C-271 lb/ft ³ 15 20 24 ASTM C-365 psi 373 738 1136 ASTM C-365 psi 373 738 40'153 ASTM C-365 psi 8'044 25'882 40'153 ASTM C-273 psi 312 511 699 ASTM C-273 psi 9'099 17'697 24'575 ASTM D-790 psi 773 1'272 1'672 ASTM D-790 psi 40'608 64'827 84'203 Width in 48 48 48 Length in 96 96 96

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