

# PRODUCT LIST

## Structural core materials

Europe | Middle East | India | Africa  
**Airex AG**  
5643 Sins, Switzerland  
T +41 41 789 66 00 | F +41 41 789 66 60  
corematerials@3AComposites.com

North America | South America  
**Baltek Inc.**  
High Point, NC 27261, USA  
T +1 336 398 1900 | F +1 336 398 1901  
corematerials.americas@3AComposites.com

Asia | Australia | New Zealand  
**3A Composites (China) Ltd.**  
201201 Shanghai, China  
T +86 21 585 86 006 | F +86 21 338 27 298  
corematerials.asia@3AComposites.com

[www.3ACorematerials.com](http://www.3ACorematerials.com)



[www.3ACorematerials.com](http://www.3ACorematerials.com)



**CHARACTERISTICS**

**APPLICATIONS**

**PROCESSING**

All of our products are lightweight and offer fatigue resistance, low water absorption, sound and thermal insulation and positive flotation.

Specific superior features are listed below:

Contact moulding (hand/spray)	Vacuum infusion	Adhesive bonding	Pre-preg (vacuum, press, autoclave)	Resin injection (RTM, VARTM)	Molding compounds (SMC, GMT)	Thermoforming	Thermoplastic
-------------------------------	-----------------	------------------	-------------------------------------	------------------------------	------------------------------	---------------	---------------

- fulfills the most stringent fire requirements
- very low moisture absorption
- excellent dielectric properties (radar transparent)
- extremely wide operating temperature range
- remains ductile at cryogenic temperatures

Sandwich structures subjected to extreme environments (hot or cold), exposed to fire loads in service or that require very high process temperatures or low dielectric properties (radar transparent)

- exceeds FAR 25.853 requirements
- easily passes OSU heat release test
- very low moisture absorption
- exceptional impact resistance (non-brittle failure mode)
- very good chemical resistance against aerospace fluids
- easy CNC routing and thermoforming to complex shapes

Thermal insulation and sandwich structures subjected to demanding fire loads, in complex shapes and environmental demanding conditions.

- exceptional strength and stiffness
- outstanding homogeneity of density and cell structure
- compatible with all resins and processing methods
- high chemical and thermal resistance
- recycled and recyclable
- excellent total cost proposition

Sandwich structures subjected to static or dynamic loads which also require high service or processing temperatures

- fulfills high FST (flame, smoke, toxicity) requirements
- compatible with all resins and processing methods
- thermally stable with no outgassing
- very high chemical resistance
- recyclable

Sandwich structures subjected to static or dynamic loads, high service or processing temperatures or exposed to fire loads

- outstanding fatigue properties
- compatible with all resins and processing methods
- thermally stable with no outgassing
- very high chemical resistance
- recycled and recyclable
- best-in-class resin uptake; especially with SealX option

Sandwich structures subjected to static or dynamic loads which also require high service or processing temperatures

- very high strength and stiffness to weight ratio
- good impact strength
- good chemical resistance
- low resin absorption

Sandwich structures subjected to static or dynamic loads with a premium on weight reduction

- very high compression and shear properties (PXC)
- good flexural (bending) strength and stiffness (PXw)
- high temperature resistance
- very high chemical resistance
- high fastener pull-out strength

PXC for sandwich structures subjected to high static loads including point loads from hardware attachment. PXw ideally suited as a stand-alone panel replacing wood or plywood

- outstanding strength and stiffness to weight ratio
- fulfills most FST (flame, smoke, toxicity) requirements
- extremely wide operating temperature range
- excellent fatigue behavior
- ecological product

Sandwich structures subjected to high static or dynamic loads, exposed to fire loads in service or that require high operating or process temperatures

- grown on 3A Composites balsa wood plantations
- physical traceability of time to kiln (T2K)
- outstanding strength and stiffness to weight ratio
- fulfills most FST (flame, smoke, toxicity) requirements
- extremely wide operating temperature range
- excellent fatigue behavior

Sandwich structures subjected to high static or dynamic loads, exposed to fire loads in service or that require high operating or process temperatures

- grown on 3A Composites balsa wood plantations
- tailored structural core material
- homogenous density distribution
- high damage tolerance
- excellent fatigue behavior
- extremely wide operating temperature range
- easy processing to minimal thickness

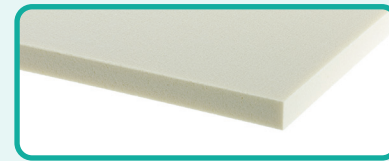
Sandwich structures with tailored, oriented properties that are subjected to high static or dynamic loads, exposed to fire or applications with high operating or processing temperatures.

Marine	Wind energy	Rail	Road	Aerospace	Industrial
--------	-------------	------	------	-----------	------------

**AIREX® R82**

High performance structural foam

(60 – 110 kg/m³) (3.7 – 6.9 lb/ft³)

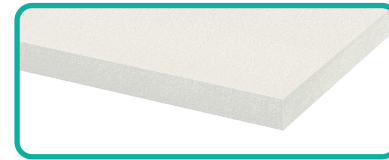


•		••	•	•••	•
---	--	----	---	-----	---

**AIREX® TegraCore™**

Fire performance structural lightweight foam

(50 kg/m³) (3.3 lb/ft³)

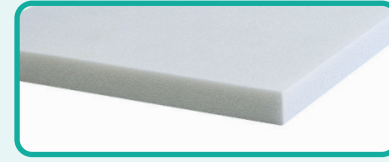


•		••	•	•••	•
---	--	----	---	-----	---

**AIREX® T10**

Premium structural foam core

(60 – 110 kg/m³) (3.7 – 6.9 lb/ft³)

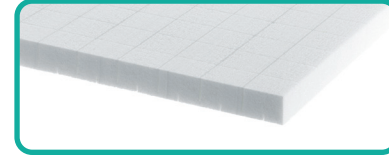


•••	•••	•	•••	•••	•••
-----	-----	---	-----	-----	-----

**AIREX® T90**

Fire retardant structural foam

(60 – 210 kg/m³) (3.8 – 13.1 lb/ft³)

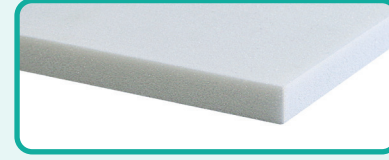


•		•••	••	•	••
---	--	-----	----	---	----

**AIREX® T92**

Easy processing structural foam

(60 – 320 kg/m³) (3.8 – 20.0 lb/ft³)



••	•••	•	••		••
----	-----	---	----	--	----

**AIREX® C70**

Universal structural foam

(60 - 130 kg/m³) (3.7 - 8.1 lb/ft³)

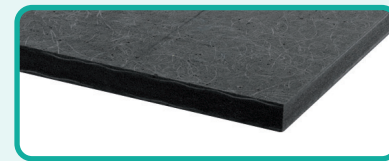


•••	•••	•	••	•	••
-----	-----	---	----	---	----

**AIREX® PXC/PXw**

Fiber-reinforced structural foam

(245 – 420 kg/m³) (15 – 26 lb/ft³)



•••	•	•	••		••
-----	---	---	----	--	----

**BALTEK® SB**

Select grade structural Balsa

(94 – 247 kg/m³) (5.9 – 15.4 lb/ft³)



•••	•••	•••	•••	•	••
-----	-----	-----	-----	---	----

**BALTEK® SBC**

Plantation controlled structural Balsa

(96 – 153 kg/m³) (6 – 9.5 lb/ft³)

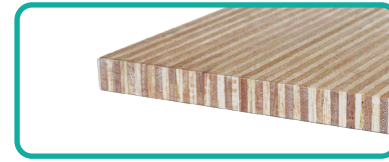


•••	•••	•••	•••	•	••
-----	-----	-----	-----	---	----

**BALTEK® VBC**

Engineered structural Balsa

(180 – 240 kg/m³) (11.2 – 15 lb/ft³)



••	•••	•••	••	•	•••
----	-----	-----	----	---	-----

••• = best choice •• = most suitable • = suitable