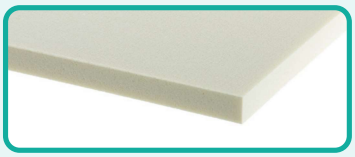
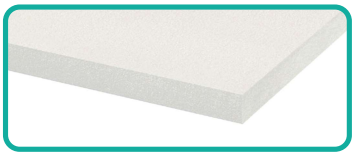
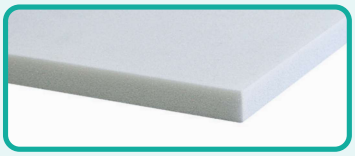
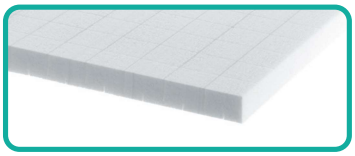
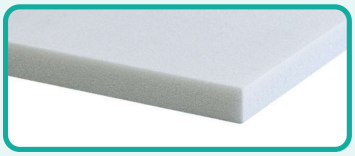
PRODUCT LIST

Structural core materials

3A COMPOSITES CORE MATERIALS

www.3ACcorematerials.com

		Marine	Renewable Energy	Building & Construction	Rail	Automotive	Aerospace	Industrial
AIREX® R82 Radar transparent with fire and high temperature performance (60 – 110 kg/m³) (3.7 – 6.9 lb/ft³)		•			••	•	•••	•
AIREX® TegraCore™ Lowest density with fire performance (50 kg/m³) (3.3 lb/ft³)		•		•		•	•••	•
AIREX® T10 Premium surface with high specific properties (100 – 110 kg/m³) (6.2 – 6.9 lb/ft³)		•••	•••	•••	•	•••		•••
AIREX® T90 Economic and fire retardant (60 – 210 kg/m³) (3.8 – 13.1 lb/ft³)		•		•••	•••	••	•	••
AIREX® T92 Structural and sustainable (60 – 320 kg/m³) (3.8 – 20.0 lb/ft³)		••	•••	•••	•	••		••
AIREX® C70 High specific properties (60 – 130 kg/m³) (3.7 – 8.1 lb/ft³)		•••	•••	••	•	••	•	••
AIREX® PXc/PXw Fiber-reinforced non-rotting board (245 – 420 kg/m³) (15 – 26 lb/ft³)		•••	•	••	•	••		••
BALTEK® SB Select grade structural Balsa (109 – 285 kg/m³) (6.8 – 17.8 lb/ft³)		•••	•••	••	•••	•••	•	••
BALTEK® SBC FSC plantation controlled structural Balsa (109 – 148 kg/m³) (6.8 – 9.3 lb/ft³)		•••	•••	••	•••	•••	•	••
BALTEK® VBC Engineered structural Balsa (156 kg/m³) (9.7 lb/ft³)		••	•••	•••	•••	••	•	•••

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

CHARACTERISTICS	APPLICATIONS	PROCESSING							
		Contact moulding (hand/spray)	Vacuum infusion	Adhesive bonding	Pre-preg (vacuum, press, autoclave)	Resin injection (RTM, VARTM)	Compression molding (SMC, GMT)	Thermoforming	Thermoplastic
All of our products are sustainable, lightweight and offer low water absorption, sound and thermal insulation and positive flotation. Specific superior features are listed below:									
- fulfills most stringent fire requirements - operating temperature from -194 °C to +160 °C (-317 °F to +320 °F) - remains ductile at cryogenic temperatures - excellent dielectric properties (radar outstanding transparency) - very low moisture absorption	**Aerospace:** Interiors, doors, tanks, radomes, rotor blades **Automotive & Rail:** Front-ends, side skirts, roof panels, interiors **Marine:** Fire resistant interiors, radomes **Defense:** Naval superstructures, antennas, **Industrial:** High temp. tooling, x-ray tables	✓	(✓)	✓	✓	(✓)		✓	✓
- low total cost fabrication - exceeds FAR 25.853 requirements: nearly zero smoke evolution, easily passes OSU heat release test - processing temperature up to 180 °C (355 °F) - very low moisture absorption - excellent hot-wet performance - available thickness from 1 mm+	**Aerospace:** Interiors, luggage bins, side walls, seat covers, galleys, trolleys **Defense:** Naval joiner work, radomes, antennas, ballistic spacers **Marine:** Fire retardant interiors, cladding **Railway:** Interiors, side skirts, roof panels **Industrial:** High temp. tooling, radomes	✓	✓	✓	✓	(✓)	✓	✓	✓
- very high compression and shear properties - outstanding fatigue strength - homogeneous cell structure - easy to process with all types of resin and lamination processes - high process temperature up to 150 °C - available thickness from 1 mm+	**Automotive:** Structural and semi-structural parts of cars; sidewalls, floors, of trucks **Renewable Energy:** Blades (shear webs & shells), nacelles **Marine:** Hulls, decks, superstructures, bulk-heads, stringers, interiors **Industrial:** Covers, containers, sporting goods	✓	✓	✓	✓	✓	✓	✓	✓
- superior fire retardancy (FAR 25.853; EN 45545, EN 13501) - outstanding fatigue strength - excellent long term thermal stability up to 100 °C (212 °F) - best thermal stability in process up to 150 °C (302 °F) - good thermal insulation - available thickness from 1 mm+	**Aerospace:** Interiors, galleys, trolleys **Automotive & Rail:** Floors, sidewalls, front ends, interiors, roofs, engine covers **Marine:** Decks, interiors, superstructures **Industrial:** Covers, containers, sporting goods **Building & Construction:** Roofs, claddings, domes, portable building	✓	✓	✓	✓	(✓)	✓	✓	✓
- easy to process with all types of resin and lamination processes - high process temperature up to 150 °C (302 °F) - outstanding fatigue strength - best-in-class resin uptake - very high chemical stability - available thickness from 1 mm+	**Renewable Energy:** Blades (shear webs & shells), nacelles **Marine:** Decks, hull sides, superstructures, bulkheads, transoms, interiors **Industrial:** Covers, containers, local reinforce-ments, x-ray tables, sporting goods **Automotive:** Truck body parts, floors	✓	✓	✓	✓	(✓)	✓	✓	✓
- outstanding strength and stiffness to weight ratios - good impact strength - low resin absorption - high fatigue resistance - good fire performance (self-extinguishing) - high sound and thermal insulation - good styrene resistance	**Marine:** Hulls, decks, bulkheads, interiors **Automotive & Rail:** Roof panels, interiors, floors, doors, partition walls, side skirts **Renewable Eenergy:** Rotor blades, nacelles, turbine generator housings **Aerospace:** Interiors, general aviation **Industrial:** Skis, snowboards, surfboards	✓	✓	✓	(✓)	✓		✓	(✓)
- 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	**Marine:** Transoms, bulkheads, stringers, engine beds, floors, interiors, tooling **Automotive & Rail:** Floors, sidewalls, roofs, engine covers, interior panels **Industrial:** Covers, tanks, containers, tooling and molds, local reinforcements	✓	✓	✓	(✓)	✓	(✓)	✓	(✓)
- outstanding strength and stiffness to weight ratios - first-class, select grade lumber - ecological product - broadest range of available balsa densities worldwide - certified for a range of applications by DNV, Germani-scher Lloyd, Lloyd's Register, American Bureau of Shipping and Korean Register	**Marine:** Hulls, decks, superstructures **Automotive & Rail:** Floors, roofs, doors **Renewable Energy:** Rotor blades (shear webs and shells), nacelles, spinners **Industrial:** Tanks, containers, sporting goods **Aerospace:** Floors, cargo pallets / containers **Defense:** Naval vessels, containers, shelters	✓	✓	✓	✓	✓	✓		✓
- ecological product from controlled 3A Composites Core Materials plantations - controlled time from harvesting to kiln-drying: Optimized for vacuum infusion processes - full traceability and highest lumber quality due to strict process control from seedling to final product - broadest range of available balsa densities worldwide	**Renewable Energy:** Rotor blades (shear webs & shells), nacelles, spinners **Marine:** Hulls, decks, bulkheads, interiors **Automotive & Rail:** Floors, roofs, side skirts, front-ends, doors, interiors, covers **Industrial:** Tanks, containers, sporting goods **Aerospace:** Floors, cargo pallets / containers	✓	✓	✓	✓	✓	✓		✓
- optimized mechanical properties - excellent fatigue resistance - improved density distribution - homogeneous structure, easy to machine - excellent damping pro perties - ecological product from controlled 3A Composites Core Materials plantations	**Marine:** Hulls, bulkheads, superstructures **Automotive & Rail:** Floors, roofs, side skirts **Renewable Energy:** Shear webs **Building & Construction:** Composite bridge **Industrial:** Sporting goods, ski & Snowboard **Aerospace:** Floors, general aviation **Defense:** Blast protection	✓	✓	✓	✓	✓	✓		✓

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