



KUIPER
HOLLAND

PRODUCT DATA SHEET



AIREX[®] T90

Easy Processing Structural FST Foam

CHARACTERISTIC

- Superior fire resistance (FAR 25.853; NF 16-101; DIN 5510)
- 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
- Highly consistent material properties
- Easy to process with all types of resin and lamination processes
- Good adhesion (skin-to-core bond)
- Very high chemical stability
- No water absorption, no after-expansion, no outgassing

APPLICATIONS

- **Road and Rail**
Floors, sidewalls, font ends, interiors, roofs, engine covers
- **Marine**
Decks, interiors, superstructures
- **Industrial**
Covers, containers, x-ray tables, sporting goods
- **Architecture and Construction**
Roofs, claddings, domes, portable building

PROCESSING

- Contact molding (hand/spray)
- Vacuum infusion
- Resin infusion / injection (VARTM / RTM)
- Adhesive bonding
- Pre-preg processing
- Compression molding (GMT, SMC)
- Very easy to thermoform

KUIPER AIR XT-90 LIGHTWEIGHT PANELS

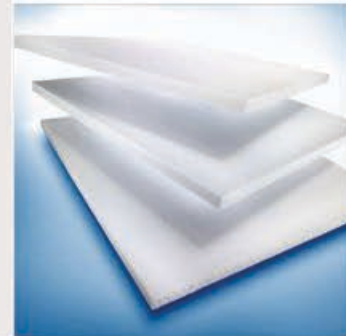
DIMENSION: 244 X 122 CM
WEIGHT CORE: AIREX[®] T90 - 60 KG/M³
THICKNESS CORE: 6 - 40 MM

AIREX[®] T90 is a closed-cell, thermoplastic and recyclable polymer foam with excellent fire, smoke & toxicity (FST) properties.

It has very good mechanical properties and an extraordinary resistance to fatigue, is chemically stable, UV-resistant and has negligible water absorption.

It is thermally stable during high temperature processing and post curing. T90 is designed for easy use with all resin systems and processing technologies.

AIREX[®] T90 is the ideal core material for structural sandwich applications requiring high fire resistance.



Typical properties for AIREX [®] T90		Unit (metrical)	Value ¹⁾	T90.60
Density	ISO 845	kg/m ³	Average <i>Typ. range</i>	65 60 - 70
Compressive strength perpendicular to the plane	ISO 844	N/mm ²	Average <i>Minimum</i>	0.80 0.7
Compressive modulus perpendicular to the plane	DIN 53421	N/mm ²	Average <i>Minimum</i>	50 35
Tensile strength perpendicular to the plane	ASTM C297	N/mm ²	Average <i>Minimum</i>	1.5 1.2
Tensile modulus perpendicular to the plane	ASTM C297	N/mm ²	Average <i>Minimum</i>	85 70
Shear strength	ISO 1922	N/mm ²	Average <i>Minimum</i>	0.46 0.4
Shear modulus	ISO 1922	N/mm ²	Average <i>Minimum</i>	12 10.5
Shear elongation at break	ISO 1922	%	Average <i>Minimum</i>	12 8
Thermal conductivity at room temperature	ISO 8301	W/m.K	Average	0.033