

# Product Data Sheet: CarbonFoam FRP



CarbonFoam Fiber Reinforce Panels® is a unique closed cell, lightweight composite product manufactured with cross-linked polymer foam and fiberglass, offering high specific strength and toughness. The non-absorbent material is extremely durable and dimensionally stable, provides an excellent bonding surface, has good impact strength, sound and thermal insulation, and is resistant to contamination and high temperatures.

Our CarbonFoam Fiber Reinforced Panel® is manufactured in a thicknesses from .25" to 2", dimensions up to 60" wide and 170"

long, and a density range of 10-40 lbs/ft³, depending upon the product line. CarbonFoam Fiber Reinforce Panels are Ideally suited as core material for a variety of lightweight sandwich structures, and compatible with a wide range of resins and adhesive processes.

## **CHARACTERISTICS**

- Self-extinguishing
- Low resin absorption
- Great impact strength
- Good styrene resistance
- Great strength/stiffness to weight ratio
- High insulation properties (sound an thermal)
- High heat distortion temperature
- Rot free

#### **INDUSTIRES**

- Marine: Superstructures, decks, hulls, bulkheads
- Industrial: Tanks, covers, portable shelters, container
- Wind Power: Nacelles, rotor blades
- Recreational: Kayaks, canoes, snowboards, skis, surf/wakeboards
- **Road:** Floors, doors, side skirts, roof panels, partition walls

### **PROCESSING**

- Adhesive bonding
- Compression Molding
- **♦** Thermoforming
- Contact molding
- Vacuum Infusion
- Resin Injection

All tests carried out by independent laboratory. This information is provided in good faith and is subject to modifications without prior notification. It does not constitute a commitment, neither a contractual document. Carbon-Core Corp will not assume any liability form use or misuse of data presented herein. Assessment of suitability is the responsibility of end user only.

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Tests		Imperial Units	Metric Units
Compressive Strength	ISO 844	473psi	3.2 MPa
Compressive Modulus	ISO 844	19700psi	135 MPa
Tensile Strength	ASTM D1623	1730psi	12 MPa
Tensile Modulus	ASTM D1623	86300psi	595 MPa
Shear Strength	C273	393psi	2.7 MPa
Shear Modulus	C273	1466psi	10.1 MPa
Flammability	ASTM D776	Non-Flammable	Non-Flammable
Density	N/A	20 lb/ft³	320 lb/ft³

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