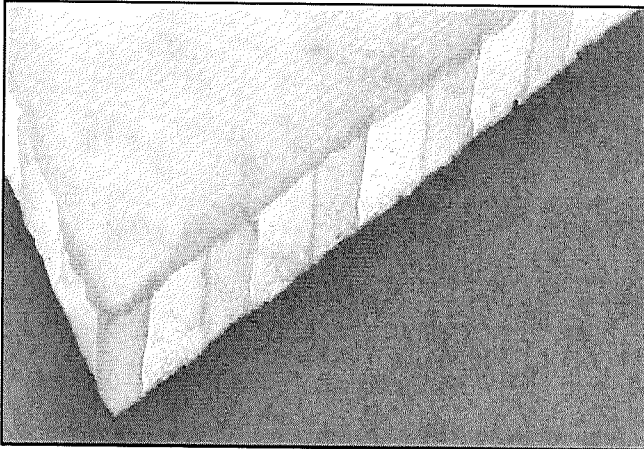


Product Data Sheet: Plastic Honeycomb



Carbon-Core Plastic Honeycomb sheets are made out of polypropylene and come in an open cell configuration or with a layer of non-woven polyester scrim for a one hundred percent bonding surface. Carbon-Core Plastic Honeycomb can be used for sandwich panel cores and energy absorption. Plastic Honeycomb has a high strength to weight ratio, is sound dampening, and can be recycled. Most importantly, Plastic Honeycomb sheets are corrosion, fungi, rot, chemical, and moisture resistant.

Carbon-Core Plastic Honeycomb panels are available as plain or scored (2x2,2x1,1x1) sheets. Standard sheets measure 48"x96" from 0.25" up to 2" thick. Special orders are available.

CHARACTERISTICS

- ◆ Self-extinguishing
- ◆ Low resin absorption
- ◆ Great impact strength
- ◆ Great strength to weight ratio
- ◆ High sound dampening properties
- ◆ Resistant to corrosion, fungi, rot, chemicals, and moisture
- ◆ Recyclable
- ◆ Lightweight

INDUSTRIES

- ◆ **Marine:** Stringers, decks, transoms, bulkheads
- ◆ **Industrial:** Tanks, covers, ductwork, tooling, container
- ◆ **Wind Power:** Nacelles, rotor blades
- ◆ **Road:** Cabs, sleeper floors, Trailer beds, walls
- ◆ **Rail:** 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 from use or misuse of data presented herein. Assessment of suitability is the responsibility of end user only.

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Tests		8mm Cell Size		10mm Cell Size	
		English Units	Metric Units	English Units	Metric Units
Compressive Strength	ISO 844	275psi	1.89 MPa	229psi	1.58 MPa
Compressive Modulus	ISO 844	6628psi	45.7 MPa	5976psi	41.2 MPa
Tensile Strength	ASTM 297	130psi	0.89 MPa	119psi	0.82 MPa
Shear Strength	ISO 1922	85psi	0.58 MPa	65psi	0.45 MPa
Shear Modulus	ISO 1922	2205psi	15.2 MPa	1686psi	11.6 MPa
Thermal Conductivity Y Fourier Law	N/A	k=0.03	k=0.03	k=0.03	k=0.03
Water Absorption in 24 hours	N/A	0.10%	0.10%	0.10%	0.10%
Dimensional Thermal Stability	N/A	-40°F to 230° F	-40°C to 110° C	-40°F to 230° F	-40°C to 110° C
Flammability	ASTM D776	Inflammable, Non-Toxic Smoke	Inflammable, Non-Toxic Smoke	Inflammable, Non-Toxic Smoke	Inflammable, Non-Toxic Smoke
Density	N/A	5.0 lb/ft ³	80 kg/m ³	4.6 lb/ft ³	75 kg/m ³
Peel Strength	N/A	Excellent	Excellent	Excellent	Excellent
Fatigue Re- sistance	N/A	Excellent	Excellent	Excellent	Excellent
Impact Re- sistance	N/A	Excellent	Excellent	Excellent	Excellent
Sound Attenua- tion	N/A	Greater than 22db	Greater than 22db	Greater than 22db	Greater than 22db

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