



AL-X® Sandwich Panel

Aluminum Honeycomb / Carbon Fiber

PRODUCT DATA SHEET

AL-X® Aluminum Honeycomb Carbon Fiber Sandwich Panel

ACP Composites AL-X® Carbon Fiber Aluminum Honeycomb sandwich panels are ideal panels for a wide range of aerospace-grade applications requiring low outgassing structural functions.

PANEL MATERIALS

MATERIAL	VALUE
Core Material	5052, 5056 HexWeb® CR III Aluminum Honeycomb
Skin Material	Carbon Fiber CFRP, Standard Modulus, Woven 2x2 3K Twill
Film Adhesive	Self-Adhesive Epoxy Matrix, Supported, 0.030 psf weight

CORE PHYSICAL PROPERTIES

MATERIAL	STRUCTURE	GRADE	FEATURE
.460" Thck	1/8" Cell, 3.1 PCF	5052/5056 HexWeb® CR III	Perforated
.960" Thck	3/16" Cell, 5.7 PCF	5052/5056 HexWeb® CR III	Perforated

Download Aluminum Honeycomb Core Datasheet here.

FACESHEET (SKIN) PHYSICAL PROPERTIES

MATERIAL	VALUE
Prepreg	2x2 3K Twill Weave Carbon Fiber, Standard Modulus
Resin	275F Cure Epoxy
Resin Content	42%
Thickness	.020" (2 Plies)

TECHNICAL PROPERTIES

PROPERTY	SAE	TEST METHOD
Flatwise Tensile Strength	904 psi	ASTM C297-24

Test data obtained at .500 inch thickness.

POST-PROCESSING OPTIONS

- Potted Inserts
- Edge Closeouts
- 3-axis CNC Machining
- Core only machining
- Multi-layer insulation (MLI)
- Doubler Application
- Cleco or Rivnut Assembly
- MIL-Spec Industry Standard Surface Finishes
- Custom packaging
- Customer-owned materials accepted

FEATURES/BENEFITS

- Compliant with NASA outgassing TVL % & CVCM % exposure requirements
- Custom core thicknesses, cell diameters, and densities available
- High-volume processing capabilities
- Customer-owned materials accepted
- Co-curing capability
- 60" x 120" max footprint processing
- Core splicing capability



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