



PRODUCT DATA - CARBON FIBER AND ALUMINUM HONEYCOMB PANEL

PART NUMBER S1-F1-M1-C1-B1

Panel Areal Weight	120 g/ft ² +/-5 g/ft ²
Total Thickness	0.272" +/-0.007"
Flatness	+/-0.007"
Temperature Capability	300°F

SKIN

Total Thickness	0.011" +/-0.002"
Material	Aerospace Grade T700 12K Carbon Fiber Plain Weave 0.009" Thick Aerospace Grade E-Glass Fiberglass Plain Weave 0.002" Thick*
Resin Content	37% by weight
Surface Finish	Ra 9 µin
Skin Bond to Core Fillet Radius	0.015"

*A thin layer of fiberglass is incorporated in the panel construction to electrically isolate the aluminum core from the carbon fiber skin and prevent galvanic corrosion.

MATRIX

Material	Thermoset Epoxy
Tg	>300°F
Tensile Strength	12,600 psi
Compressive Strength	16,700 psi
Flexural Strength	16,100 psi
Tensile Elongation	4.1%
Flexural Elongation	6.3%
Hardness	90 Shore D
Density	0.041 lbs/in ³

CORE

Material	Aerospace Grade 5056 Aluminum
Thickness	0.250" +/-0.005"
Cell Size	0.125" +/-0.013"
Cell Wall Thickness	0.0007"
Density	3.1 +/-0.3 lbs/ft ³
Bare Compressive Strength	340 psi
Compressive Modulus	97,000 psi
L- Shear Strength	250 psi
L-shear modulus	45,000 psi
W- Shear Strength	155 psi
W-shear modulus	20,000 psi

PLEASE CONTACT US FOR FURTHER INFORMATION

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