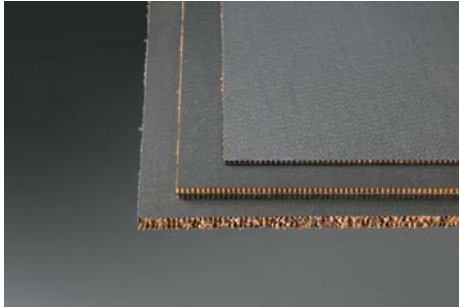


Carbon Fiber/Honeycomb Panel



ACP's Carbon Fiber Plain Weave/Honeycomb Sandwich Panels are manufactured by bonding layers of 3K plain weave carbon fiber prepreg to each side of a 3/16" cell, 2 PCF aramid honeycomb core. They are cured with high temperature and under pressure, resulting in fully consolidated carbon fiber skins that are completely bonded to the aramid honeycomb core. They are ideal for applications requiring flat, lightweight and rigid specifications.

Physical Properties

Core Material	3/16" Cell, 2 PCF Standard Cell Aramid Honeycomb
Skin Material	Carbon Fiber Plain Weave Style 282
Prepreg Resin Content	44%

The below technical information is for the stand alone raw materials, not the constructed panel.

Prepreg Neat Resin Properties

Specific Gravity	1.286
Tg dry	171°F
Moisture Absorption	7%
Linear CTE	4.75×10^{-5} in/in/°F
Tensile Strength	7.2 ksi
Tensile Modulus	0.42 msi
Tensile Strain	>9.5%
Fracture Toughness	4.50 ksi $\sqrt{\text{in}}$
Strain Energy Release Rate	34.5 in-lb/in ²

Standard Cell Aramid Honeycomb Properties

Cell Size	3/16"
Density	2 PCF
Compression	Bear-117 psi, Stabilized 130 psi
L-Shear Strength	72 psi
W-Shear Strength	40 psi

All the information contained in these properties is believed to be reliable. It is intended for comparison purposes only as each manufactured lot will exhibit variations. The user should evaluate the suitability of each product for their application. We cannot anticipate the variations in all end use and we make no warranties and assume no liability in connection with the use of this information.