

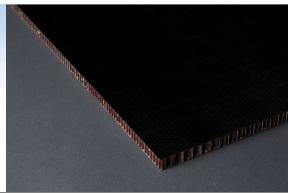
SHOWA AIRCRAFT INDUSTRY CO.,LTD.

SFPS[™] 42002,42003,42005

Composites Panel for Aircraft Floors

The SFPS[™]420 series is a sandwich panel made with facings of unidirectional carbon fiber epoxy laminate and SAH® which is Aramid honeycomb core, designed for use in aircraft floors.

SAH®: Showa Aramid Honeycomb



Features

- Qualified by aircraft manufacturer
- ·Light-weight, high-strength
- •Service temperature: up to 180°F

Applications

Designed for use in aircraft floors. As flooring in passenger compartments of commercial aircraft where weight, durability and strength.

Availability

Thickness: 0.400 inch Facing: 0.010 inch

Width : Standard 48 inch

Length : Standard 144 inch

Construction

Reinforcement: Unidirectional carbon fiber

with fiberglass overlay

Resin system : Epoxy

Core : Aramid honeycomb core

Typical Performance Properties

| DESCRIPTION | UNIT | SFPS42002 | SFPS42003, SFPS42005 |
|--|------------------------------|----------------|----------------------|
| Areal Weight | lb/sq ft | 0.58 | 0.44 |
| Thickness | inch | 0.4 | 0.4 |
| Long Beam Flexure | lbs | 341 | 320 |
| Deflection at 100 lbs | inch | 0.38 | 0.387 |
| Panel Shear | lbs | 1,171 | 861 |
| Drum Peel | in-lbs/3inch | 31 | 53 |
| In-Plane Shear | lbs/in | 499 | 475 |
| Insert Shear | lbs | 1,327 | 1301 |
| Impact Strength | in-lb | 13 | 17 |
| Stabilized Core Compression | lbs/sq in | 2,886 | 986 |
| Warpage | in/ft | 0 | 0 |
| Food Cart Roller Test | cycles without failure, min. | >120,000 cycle | > 80,000 cycle |
| Flammability – 60 second vertical | - | Pass | Pass |
| Flammability – 45 degree angle | - | | |
| Specific Optical Density, Ds after 4 min. | - | | |
| Toxic Gas Emission | - | | |

Note: The above figures reflect typical values and should not be used in design.

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