STD-1015 Rev. A

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

Availability

Construction

Resin system

Thickness: 0.400 inchFacing: 0.010 inchWidth: Standard 48 inchLength: Standard 144 inch

Typical Performance Properties

Core

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.

SHOWA AIRCRAFT INDUSTRY CO., LTD.

Tokyo Sales Office 3-1-1 Daikanyama, Akishima-shi, Tokyo 196-8522, Japan Phone: +81-42-541-8883 Fax: +81-42-545-6909 e-mail: honeycombsales196@showa-aircraft.co.jp HP: https://www.showa-aircraft.co.jp/en/index.html

SHOWA AIRCRAFT USA INC.

14711 NE 29th PI Suite 118 - Bellevue, WA 98007, USA Phone: +1-425-202-7238 HP: https://showaaircraftusa.com/



Designed for use in aircraft floors. As flooring in

passenger compartments of commercial aircraft

Reinforcement : Unidirectional carbon fiber

: Epoxy

with fiberglass overlay

: Aramid honeycomb core

where weight, durability and strength.