SHOWA AIRCRAFT INDUSTRY CO., LTD.

SPAH-I®

Showa Para-Aramid Honeycomb

Description

SPAH-I[®] is produced with Para-aramid fiber sheets. These sheets are bonded by a thermosetting adhesive at the nodes. After expanded to the hexagonal cell configuration, it is dipped in a heat resistant phenolic resin and cured in an oven. SPAH-I® is available at the required core thickness since the cutting to thickness is done according to customer's request.

Features

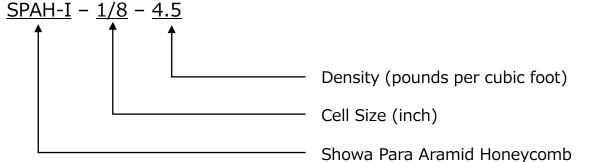
Example

- High strength-to-weight ratio
- Damage Resistant
- Fire Resistant (Self-Extinguishing)
- Water and Fungus Resistant
- Excellent Dielectric Properties
- Good Surface for Bonding

Type Designation

Applications

- Aircraft floor and interior
- Aircraft wing trailing and leading edges
- Aircraft flaps, access panels and doors
- Sports and leisure



Standard Dimensions

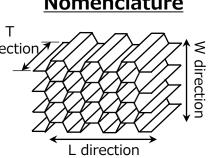
Standard Billi		Nomenclature		
L Direction	W Direction	T Direction (Min.)	T direction	
48 +2/-0 inch (1200 +50/-0 mm)	144 +4/-0 inch (3657 +100/-0 mm)	0.125 ±0.01 inch (3.2 ±0.25 mm)	direction	

<T Direction Tolerance>

 $0.12 \sim 2.00$ inch $(3.00 \sim 50.00 \text{ mm})$: ± 0.006 inch $(\pm 0.15 \text{ mm})$ $2.01 \sim 4.00$ inch (50.01 ~ 100.00 mm) : ± 0.01 inch (± 0.25 mm) More than 4.01 inch (101.854mm) ± 0.12 inch (± 3.00 mm)

NOTE: For more information, please contact our Sales Office

Dimensional





Mechanical Properties at Room Temperature

	Compressive		Plate Shear			
Designation	Strength		L Direction		W Direction	
	Bare (psi)	Stabilized (psi)	Strength (psi)	Modulus (ksi)	Strength (psi)	Modulus (ksi)
SPAH-I-1/8-4.5	842	928	326	27.7	191	15.7
SPAH-I-1/8-5.0	1085	1195	385	30.4	225	16.5
SPAH-I-1/8-6.5	1518	1679	418	29.5	296	20.8
SPAH-I-1/8-8.5	2670	2819	674	52.1	458	24.3
SPAH-I-1/8-11.0	2974	3313	687	54.2	509	29.1
SPAH-I-5/32-4.5	710	792	326	27.7	191	15.7

NOTE:

- Bare compression is a compression test of honeycomb core.
 Stabilized compression is a compression test of a honeycomb panel.
- The above data are the properties when tested per SAÉ-AMS-STD-401 at room temperature using 0.500 inch core thickness.
- The typical values represent the mean average of relatively large number of test values from many blocks of honeycomb, and are not guaranteed.
- Tolerance of the density is 10%± of nominal density.

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