



SAH[®] Commercial Grade

Aramid Fiber/Phenolic Resin Honeycomb

Description

SAH[®] (CG) is a commercial grade aramid fiber/phenolic resin honeycomb for non-aerospace applications, which is manufactured from Nomex[®] aramid fiber sheets. These sheets are bonded by a thermosetting adhesive at the nodes. After expanded to the hexagonal cell or over-expanded cell configuration, it is dipped in a heat resistant phenolic resin and cured in an oven. The excellent property of SAH[®] has been widely applied in a variety of areas as core material for sandwich panels.



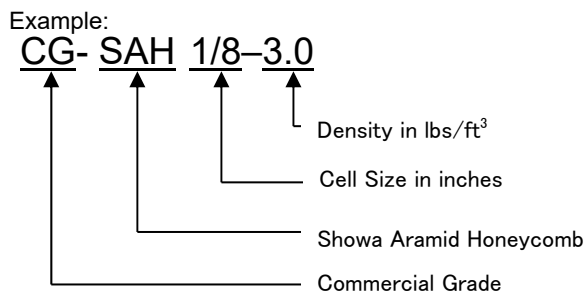
Features

- Small cell size at low densities
- Damage resistant under normal shop use
- Fire resistant (self-extinguishing)
- Water resistant
- Excellent dielectric properties
- Good thermal and electrical insulator

Applications

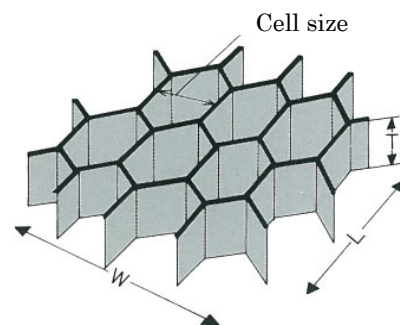
- Sports and leisure goods
- Racing car components
- Train car panels
- Antennas panels
- Speaker panels

Type Designation



Dimensional Nomenclatures

L=Ribbon direction
 W=Long direction, or direction perpendicular to the ribbon
 T=Core thickness, or cell depth



Standard Dimensions

- L: 1115 ±50 mm
- W: 2400 ±150 mm
- T : 3mm~ 500 mm

Standard tolerances on cut thickness are as follows:

- 3.00mm to 50.00mm tolerance will be ±0.15mm
- 50.01mm to 100.00mm tolerance will be ±0.25mm
- 100.01mm and over tolerance will be ±3.00mm

NOTE: For more information, please contact our Sales Office.

Mechanical Properties of SAH® Commercial Grade

Designation	Nominal Density kg/m ³	Compressive Strength (TYP)				Plate Shear (TYP)			
		Bare		Stabilized		L Direction		W Direction	
		Strength MPa	Modulus MPa	Strength MPa	Modulus MPa	Strength MPa	Modulus MPa	Strength MPa	Modulus MPa
CG-SAH1/8-1.8	29	0.8	47	0.9	—	0.6	25	0.3	14
CG-SAH1/8-3.0	48	2.1	75	2.3	140	1.2	48	0.7	24
CG-SAH3/16-3.0	48	2.1	130	2.3	140	1.0	34	0.7	24
CG-SAH3/16OX-3.0	48	2.5	110	2.8	—	0.8	8.2	0.9	41
CG-SAH1/4-1.5	24	0.6	43	0.7	41	0.5	21	0.3	10

NOTE:

- 1) The above data are the properties when tested per SAE-AMS-STD-401 at room temperature using 0.500" core thickness.
- 2) The typical values represent the mean average of relatively large number of test values from many blocks of honeycomb, and are not guaranteed.
- 3) Tolerance of the cell size is 10%± of nominal cell size.
- 4) Tolerance of the density is 10%± of nominal density.
- 5) "OX" is an over-expanded hexagonal cell in the W direction, providing a rectangular cell shapes that facilitates curving or form in the L direction.
- 6) The core type shown in bold type (CG-SAH-1/8-3.0) is standard.
- 7) The core type shown in small type will be produced on order. One block minimum buy may apply.

CONTACT for MORE INFORMATION

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