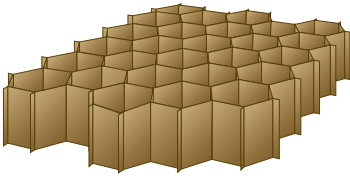


# PK2 Kevlar® N636 Para-Aramid Fiber Honeycomb



## Description:

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PK2 Kevlar® N636 para-aramid fiber honeycomb is an extremely lightweight, high strength, non-metallic honeycomb manufactured with para-aramid fiber paper (DuPont Kevlar® N636 or equivalent) impregnated with a heat resistant phenolic resin. This core material exhibits improved performance characteristics over Nomex® and Korex® in the areas of weight, strength, stiffness and fatigue.

## Applications:

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PK2 honeycomb is a high performance non-metallic core which can replace fiberglass and Nomex® honeycomb core materials to achieve significant weight reductions without sacrificing performance in most applications. PK2 honeycomb uses include boat decks, aircraft galleys, flooring, partitions, aircraft leading and trailing edges, radomes, flaps, access panels and doors.

## Features:

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- Up to 40% higher properties than comparable density Nomex® honeycomb
- Extremely high strength to weight ratio
- Excellent thermal and moisture stability
- Improved shear strength and modulus
- Conforms to stringent smoke, toxicity and flammability standards
- High toughness
- Long shelf life. The mechanical properties referenced are maintained for 10 years minimum if not exposed to moisture, weather or any normal hazard.

## Availability:

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PK2 honeycomb is available in sheets, blocks or cut to size pieces in regular hexagonal cell configurations. Selected densities available in high shear (HS) configuration for higher stiffness.

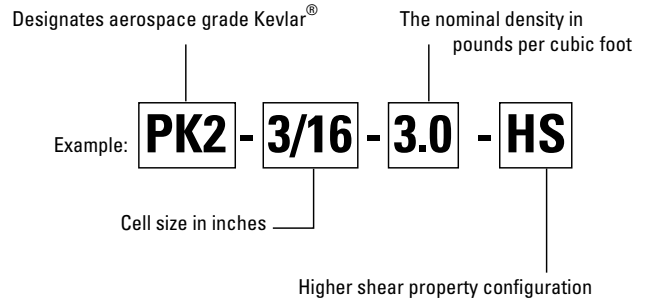
<b>Cell Sizes:</b>	1/8" - 3/16"
<b>Densities:</b>	2.0 pcf - 6.0 pcf
<b>Sheet "Ribbon" (L):</b>	48" typical
<b>Sheet "Transverse" (W):</b>	96" typical
<b>Tolerances:</b>	Length: + 3", - 0"
	Width: + 6", - 0"
	Thickness: ± .006" (under 2" thick)
	Density: ± 10%
	Cell Size: ± 10%

**NOTE:** Special dimensions, sizes, tolerances and specifications can be provided upon request.

# PK2 Kevlar® honeycomb is specified as follows:

## Material - Cell Size - Density - Cell Configuration

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## PK2 Mechanical Properties\*

PLASCORE® Honeycomb Designation	DENSITY		COMPRESSIVE (BARE STRENGTH)		PLATE SHEAR "L" DIRECTION				PLATE SHEAR "W" DIRECTION			
					STRENGTH		MODULUS		STRENGTH		MODULUS	
	lb/ft <sup>3</sup>	kg/m <sup>3</sup>	psi	MPa	psi	MPa	ksi	GPa	psi	MPa	ksi	GPa
PK2-1/8-2.5	2.5	40.0	225	1.55	190	1.31	15.0	0.104	115	0.79	8.1	0.056
PK2-1/8-3.0	3.0	48.1	315	2.17	235	1.62	15.6	0.107	140	0.97	9.0	0.062
PK2-1/8-3.0 HS	3.0	48.1	305	2.10	270	1.86	21.0	0.145	160	1.10	12.7	0.088
PK2-1/8-4.5	4.5	72.1	600	4.14	345	2.38	17.2	0.118	215	1.48	9.6	0.066
PK2-1/8-4.5 HS	4.5	72.1	610	4.21	410	2.82	22.3	0.153	235	1.62	13.3	0.092
PK2-1/8-6.0	6.0	96.1	925	6.38	465	3.21	18.7	0.129	290	2.00	10.9	0.075
PK2-1/8-6.0 HS	6.0	96.1	1000	6.89	560	3.86	23.6	0.162	315	2.17	14.6	0.100
PK2-5/32-2.5	2.5	40.0	215	1.48	190	1.31	12.7	0.088	130	0.90	8.7	0.060
PK2-3/16-2.0	2.0	32.0	150	1.03	145	1.00	10.2	0.070	90	0.62	6.0	0.042
PK2-3/16-3.0	3.0	48.1	320	2.21	230	1.58	15.2	0.105	160	1.10	9.0	0.062

\* Preliminary or estimated values based on limited testing per MIL-STD-401 at room temperature.



Plascore, Inc., employs a quality management system that is Nadcap, AS9100, ISO 9001 and ISO 14001 certified.

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