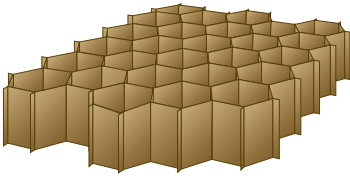


# PK2 Para-Aramid Fiber Honeycomb



## Description:

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PK2 para-aramid fiber honeycomb is an extremely lightweight, high strength, non-metallic honeycomb manufactured with para-aramid fiber paper impregnated with a heat resistant phenolic resin. This core material exhibits improved performance characteristics over Meta-Aramid 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 Meta-Aramid 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 Para-Aramid honeycomb is specified as follows:

Material - Cell Size - Density - Cell Configuration

Designates aerospace grade Para-Aramid

The nominal density in pounds per cubic foot

Example: **PK2 - 3/16 - 3.0 - HS**

Cell size in inches

Higher shear property configuration

## PK2 Para-Aramid Mechanical Properties

Cell Size		Nominal Density		Compressive Strength (Bare)				Plate Shear Strength "L" Direction				Plate Shear Modulus "L" Direction		Plate Shear Strength "W" Direction				Plate Shear Modulus "W" Direction			
				Typical		Minimum		Typical		Minimum		Typical		Typical		Minimum		Typical			
in	mm	Lb/Ft <sup>3</sup>	Kg/m <sup>3</sup>	psi	Mpa	psi	Mpa	psi	Mpa	psi	Mpa	ksi	Gpa	psi	Mpa	psi	Mpa	psi	Mpa	ksi	Gpa
1/8	3.2	2.5	40	278	1.92	156	1.08	214	1.48	164	1.13	17.6	0.12	122	0.84	81	0.56	8.2	0.06		
1/8	3.2	3.0	48	414	2.85	225	1.55	235	1.62	215	1.48	16.2	0.11	140	.97	105	0.72	9.6	0.07		
1/8*	3.2	3.0 HS	48	360	2.48	210	1.45	270	1.86	218	1.50	21.0	0.14	160	1.10	125	0.86	12.7	0.09		
1/8	3.2	4.0	64	720	4.96	330	2.28	420	2.90	360	2.48	31.3	0.22	221	1.52	180	1.24	13.1	0.09		
1/8	3.2	4.5	72	814	5.61	560	3.86	430	2.96	347	2.39	36.4	0.25	235	1.62	188	1.30	14.1	0.10		
1/8*	3.2	4.5 HS	72	790	5.45	500	3.45	467	3.21	330	2.28	40.5	0.28	258	1.78	185	1.28	16.1	0.11		
1/8	3.2	6.0	96	1320	9.10	840	5.79	536	3.70	430	2.96	39.6	0.27	310	2.14	300	2.07	16	0.11		
1/8*	3.2	6.0 HS	96	1100	7.58	800	5.52	560	3.86	450	3.10	44.0	0.30	376	2.59	270	1.86	19	0.13		
5/32*	4.0	2.5	40	218	1.50	170	1.17	190	1.31	150	1.03	12.7	0.09	100	0.69	80	0.55	8.7	0.06		
5.32*	4.0	4.0	64	720	4.96	190	1.31	359	2.47	290	2.00	22.9	0.16	255	1.76	205	1.41	14.8	0.10		
3/16*	4.8	2.0	32	150	1.03	110	0.76	145	1.00	115	0.79	10.2	0.07	90	0.62	72	0.50	6	0.04		
3/16*	4.8	3.0	48	320	2.21	233	1.61	230	1.59	185	1.28	15.2	0.10	160	1.10	125	0.86	9	0.06		
3/16 0V*	4.8	2.0	32	170	1.17	130	0.90	100	0.69	80	0.55	1.0	0.01	125	0.86	90	0.62	1.2	0.01		

Tested at 0.500" T per AMS STD 401 at room temperature.

The above data is based on various sample sizes and is for reference only.

Additional densities and configurations available upon request.

\* Limited Testing or predicted values.



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

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### Corporate Headquarters

**Plascore Incorporated**  
 615 N. Fairview St.  
 Zeeland, MI 49464-0170  
 Phone (616) 772-1220  
 Toll Free (800) 630-9257  
 Fax (616) 772-1289  
 Email sales@plascore.com  
 Web www.plascore.com

### Europe

**Plascore GmbH&CoKG**  
 Feldborn 6  
 D-55444 Waldlaubersheim  
 Germany  
 Phone +49(0) 6707-9143 0  
 Fax +49(0) 6707-9143 40  
 Email sales.europe@plascore.de  
 Web www.plascore.de