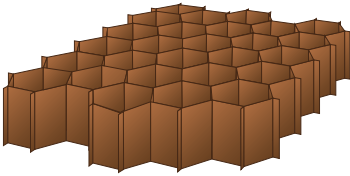


PN2 Aerospace Grade Aramid Fiber Honeycomb



Description:

PN2 aerospace grade aramid fiber honeycomb exhibits outstanding flammability properties. It is manufactured from DuPont Nomex® paper (or equivalent) and coated with a heat resistant phenolic resin.

Applications:

PN2 honeycomb uses include aircraft galleys, flooring, partitions, aircraft leading and trailing edges, missile wings, radomes, antennas, military shelters, fuel tanks, helicopter rotor blades and navy bulkhead joiner panels.

Features:

- Fire resistant (self extinguishing)
- High strength to weight ratio
- Corrosion resistant
- Excellent dielectric properties
- Thermally insulating
- High toughness
- Excellent creep and fatigue performance
- Good thermal stability
- Densities as low as 1.5 lb/ft³ (24 kg/m³)
- Over expanded cell configuration suitable for forming simple curves
- Compatible with most adhesives used in sandwich composites

Availability:

PN2 honeycomb is available in sheets, blocks or cut to size pieces in both regular hexagonal and over expanded (OV) cell configurations.

Cell Sizes: 1/8" - 1/4"

Densities: 1.8 pcf - 9.0 pcf

Sheet "Ribbon" (L): 48" typical

Sheet "Transverse" (W): 96" typical

Tolerances:

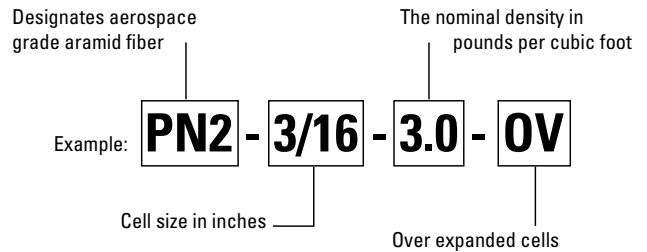
Length:	+ 3", - 0" (36" for OV)
Width:	+ 6", - 0"
Thickness:	± .006" (under 2" thick)
Density:	± 10%
Cell Size:	± 10%

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

PN2 aerospace grade aramid fiber honeycomb is specified as follows:

Material - Cell Size - Density - Cell Configuration

Note: 1/8" OV core can be over expanded only to a maximum of 20% over nominal cell size.
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PN2 Mechanical Properties																		
PLASCORE® Honeycomb Designation	DENSITY		COMPRESSIVE (BARE)				PLATE SHEAR "L" DIRECTION					PLATE SHEAR "W" DIRECTION						
			STRENGTH (psi/MPa)				STRENGTH (psi/MPa)				MODULUS (ksi/GPa)		STRENGTH (psi/MPa)				MODULUS (ksi/GPa)	
			TYP		MIN		TYP		MIN		TYP		TYP		MIN		TYP	
	lb/ft³	kg/m³	psi	MPa	psi	MPa	psi	MPa	psi	MPa	ksi	GPa	psi	MPa	psi	MPa	ksi	GPa
PN2-1/8-1.8	1.8	29	85	0.59	74	0.51	75	0.52	60	0.41	3.8	0.026	45	0.31	32	0.22	1.7	0.012
PN2-1/8-3.0	3.0	48	290	2.00	200	1.38	205	1.41	140	0.97	6.7	0.046	105	0.72	74	0.51	3.5	0.024
PN2-1/8-4.0	4.0	64	515	3.55	350	2.41	275	1.90	215	1.48	8.6	0.059	150	1.04	108	0.74	4.7	0.032
PN2-1/8-5.0	5.0	80	700	4.83	540	3.72	325	2.24	265	1.83	10.8	0.074	215	1.48	130	0.90	6.2	0.042
PN2-1/8-6.0	6.0	96	930	6.41	700	4.83	360	2.48	320	2.21	12.9	0.089	245	1.69	150	1.03	7.5	0.052
PN2-1/8-8.0	8.0	128	1700	11.72	1170	8.07	420	2.90	400	2.76	16.7	0.115	295	2.03	200	1.38	10.6	0.073
PN2-1/8-9.0	9.0	144	2145	14.79	1450	10.00	445	3.07	425	2.93	18.7	0.129	315	2.17	240	1.65	11.2	0.077
PN2-3/16-1.8	1.8	29	90	0.62	74	0.51	70	0.48	50	0.34	3.3	0.023	45	0.31	30	0.21	1.8	0.013
PN2-3/16-2.0	2.0	32	125	0.86	93	0.64	95	0.66	70	0.48	4.5	0.031	55	0.38	40	0.28	2.5	0.017
PN2-3/16-3.0	3.0	48	300	2.07	200	1.38	185	1.28	140	0.97	6.1	0.042	110	0.76	67	0.46	4.1	0.028
PN2-3/16-4.0	4.0	64	515	3.55	350	2.41	235	1.62	215	1.48	8.2	0.056	165	1.14	112	0.77	5.5	0.038
PN2-1/4-1.5	1.5	24	70	0.48	54	0.37	55	0.38	45	0.31	2.8	0.019	35	0.24	23	0.16	1.7	0.012
PN2-1/4-2.0	2.0	32	130	0.90	93	0.64	90	0.62	70	0.48	3.8	0.026	55	0.38	36	0.25	2.4	0.017
PN2-1/8-3.0-OV	3.0	48	270	1.86	200	1.38	165	1.14	100	0.69	5.0	0.035	115	0.79	80	0.55	4.0	0.027
PN2-3/16-1.8-OV	1.8	29	95	0.66	75	0.52	60	0.41	35	0.24	2.2	0.015	60	0.41	36	0.25	3.3	0.023
PN2-3/16-2.0-OV	2.0	32	115	0.79	90	0.62	70	0.48	50	0.34	2.4	0.016	70	0.48	40	0.28	3.9	0.027
PN2-3/16-3.0-OV	3.0	48	280	1.93	250	1.72	115	0.79	75	0.52	3.3	0.023	135	0.93	75	0.52	6.6	0.045
PN2-3/16-4.0-OV	4.0	64	495	3.41	350	2.41	160	1.10	100	0.69	4.1	0.028	195	1.34	120	0.83	9.4	0.065
PN2-3/8-3.0-OV	3.0	48	250	1.72	200	1.38	105	0.72	60	0.41	2.8	0.020	135	0.93	80	0.55	6.5	0.045

NOTE: The above data is based on variable sample sizes and is subject to change with continued manufacturing and testing of PN2 honeycomb core blocks per MIL-C-81986 at room temperature.

Plascore, Inc., employs a quality management system that is AS/EN/JISQ 9100, ISO 9001:2008 and ISO 14001:2004 certified.

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