

TECHNICAL DATASHEET

Cormaster C1

Nomex® aerospace grade honeycombs are non metallic structures made from nomex® T412 paper sheets bonded together with a thermosetting adhesive and coated with a phenolic resin after expanding the block. Once the resin is cured the slices are cut to the desired thickness.

Using this process, a broad range of cell sizes, paper thicknesses and densities can be produced, ensuring that the correct product will be available for your application. When combined with our ability to custom-manufacture specific core types, plus our precision processing capabilities, we can supply core in any shape, size, density, or contour that you need. Additionally over expanded honeycomb featuring enhanced formability is also available within this range of product.

The mechanical properties of T412 grade nomex® honeycombs, follow the requirements of the aeronautical specification.

AAH Type	Compressive Strength (MPa)		Shear Strength (MPa)		Shear Modulus (MPa)	
	bare	stabilized	L	W	L	W
3,2 - 29	0,6	0,75	0,45	0,3	15	11
3,2 - 48	1,8	2,1	1,35	0,8	42	25
3,2 - 56	1,9	2,55	1,45	0,9	46	27
3,2 - 64	3,1	3,4	1,75	1	55	35
3,2 - 80	4,4	4,9	1,95	1,08	62	35
3,2 - 96	5,9	6,4	2,15	1,2	77,6	45
3,2 - 123	9,9	10	3	2	95	65
3,2 - 128	8,3	9,2	3,1	2	107	51
3,2 - 144	10,5	11,9	3,1	2,2	108	58,7
4,0 - 123	7,5	8	3	1,9	100	62
4,8 - 32	0,8	0,9	0,6	0,35	20	14
4,8 - 48	2	2,3	1,25	0,6	41	25
4,8 - 56	2,2	2,5	1,3	0,65	45	29
4,8 - 64	3	3,5	1,8	0,95	55	30
4,8 - 96	6,5	7	2,6	1,45	82	40
6,4 - 24	0,4	0,45	0,35	0,23	13,5	9
6,4 - 32	0,65	0,8	0,55	0,35	19	14
6,4 - 50	2,1	2,3	1,2	0,59	41,4	17,7
6,4 - 64	3,2	3,5	1,5	0,8	51	25
6,4 - 80	3,5	3,9	1,9	1,05	53,85	29,5
9,5 - 24	0,4	0,47	0,34	0,22	13,3	9,63
9,5 - 32	0,68	0,77	0,65	0,32	16,3	13,4
9,5 - 48	1,3	1,57	0,82	0,4	28,8	18,5
4,8 - 29 OX	0,6	0,68	0,45	0,32	9,5	14,1
4,8 - 48 OX	2,5	2,7	0,79	0,79	30	30
6,4 - 48 OX	1,8	2	0,74	0,74	18	25
6,4 - 56 OX	2	2,3	0,9	0,9	21	32

Features

- Superior mechanical properties with high strength to weight ratios
- High dimensional stability under heat and moisture
- High temperature capabilities, service temperature up to 180°C.
- Product uniformity and exceptional resin to paper cohesion.
- Good Thermal & electrical insulator
- Self extinguishing & low fumes toxicity
- Broad range of cell sizes
- Easily machined and formed

Applications

- Aeronautical & space industry
- Automotive (motor sport)
- High performance marine
- Aircraft control surfaces

Other Products

If you need different performance to your application, CML offers many other products including;

- Commercial grade aluminum honeycomb
- Thermoplastic honeycomb
- Aluminum honeycomb in 5052 alloys
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