

CORMASTER C1

The ideal lightweight material from SCHÜTZ for aeronautical applications.



CORMASTER
ADVANCED COMPOSITES



ADVANTAGES

- 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
- Self extinguishing and low fumes toxicity
- Corrosion resistance against water, oils and fuel

DELIVERY TIME

- A lot of CORMASTER honeycomb types are available on stock. Delivery time on request.

MATERIAL

- Non metallic structures made from NOMEX® T412 paper sheets
- Bonded together and coated with a phenolic resin



APPLICATION

- Main structural sandwich applications of the aeronautical industry
- CORMASTER C1 honeycombs types follow the requirements of the aeronautical specifications

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Technical data



CORMASTER TYPE		Compressive strength (MPa)		Shear strength (MPa)		Shear modulus (MPa)	
		bare	stabilized	L	W	L	W
HEXAGONAL CONFIGURATION							
	C1 - 3,2	- 29	0,56	0,75	0,45	0,3	15,0
		- 48	1,8	2,1	1,35	0,8	42,0
		- 56	1,9	2,55	1,45	0,9	46,0
		- 64	3,1	3,4	1,75	1,0	55,0
		- 80	4,4	4,9	1,95	1,08	62,0
		- 96	5,9	6,4	2,15	1,2	77,6
		- 123	9,9	10,0	3,0	2,0	95,0
		- 128	8,3	9,2	3,1	2,0	107,0
		- 144	10,5	11,9	3,1	2,2	108,0
	C1 - 4,0	- 123	7,5	8,0	3,0	1,9	100,0
	C1 - 4,8	- 32	0,8	0,9	0,6	0,35	20,0
		- 48	2,0	2,3	1,25	0,6	41,0
		- 56	2,2	2,5	1,3	0,65	45,0
		- 64	3,0	3,5	1,8	0,95	55,0
		- 96	6,5	7,0	2,6	1,45	82,0
	C1 - 6,4	- 24	0,4	0,45	0,35	0,23	13,5
		- 32	0,65	0,8	0,55	0,35	19,0
		- 50	2,1	2,3	1,2	0,59	41,4
		- 64	3,2	3,5	1,5	0,8	51,0
		- 80	3,5	3,9	1,9	1,05	53,85
	C1 - 9,6	- 24	0,4	0,47	0,34	0,22	13,3
		- 32	0,68	0,77	0,65	0,32	16,3
		- 48	1,3	1,57	0,82	0,4	28,8
OVEREXPANDED CONFIGURATION							
	C1 - 4,8	- 29 OX	0,6	0,68	0,45	0,32	9,5
		- 48 OX	2,2	2,7	0,79	0,79	30,0
	C1 - 6,4	- 48 OX	1,8	2,0	0,74	0,74	18,0
		- 56 OX	2,0	2,3	0,9	0,9	21,0

Honeycombs density: the allowable tolerance is +/- 10% from the nominal density. Exceptions from this are the qualities 3.2-29, 4.8-29 OX and 6.4-24, which are tolerated at +/- 13 % of the density. These mechanical properties are only representative. If required, specification minima must be confirmed by SCHÜTZ in writing.

To submit an offer we need the CORMASTER type with cell size and density together with the dimensions (width, length and thickness) of the required honeycomb product. Please notice, that it is very important to consider the different properties for L- and W-Shear. Do not hesitate to contact us, if you have particular requirements.

C1 - 6,4		- 24
meta-aramid C1 paper sheets coated with resin	Cell size in mm	Density in kg/m ³

