

PEI Tubular Honeycomb Datasheet



**CORETEX
GROUP**

High performance thermoplastic polymers are making more and more inroads in the aircraft industry and a possible replacement for Nomex Honeycomb. Tubular PEI Polyetherimide Honeycomb Core meets all FST / Heat Release and mechanical requirements.

Key Features:

- Water absorption less than 1 %
- Can be thermally shaped and recycled
- Densities from 48 kg/m³ to 170 kg/m³
- Cell size of 4.2mm (option of 6 mm)
- Multi-density cores available
- Core sheets can be fused together
- Out-of-Autoclave fast manufacturing process
- Isotropic mechanical properties



	Unit	Test Method	PEI 4,0-48 C	PEI 4,0-75 C	PEI 4,0-100 C	PEI 4,0-120 C	PEI 4,0-144 C
Tube diameter	mm	+/- 0,2	4,2	4,2	4,2	4,2	4,2
Density	kg/m ³ pcf		55 3,43	75 4,68	100 6,24	120 7,49	144 8,99
Compression strength	Mpa psi	DIN 53 421	0,83 120	3,00 435	4,16 603	6,34 919	10,67 1547
Compression modules	MPa ksi	DIN 53 421	105 15,22	179 25,9	223 32,3	276 40	336 48,7
Shear strength	MPa psi	DIN 53 294	0,63 91	1,35 195	1,60 232	2,10 304	3,30 478
Shear modulus	MPa ksi	DIN 53 294	12,2 1,76	25,2 3,65	26,4 3,82	32,0 4,64	40,0 5,79
Temperature range	°C °F		-40 +170 -40 +338				

Flammability Low Self-Extinguishing

Material Polyetherimide

Standard colour Amber

Dimensions	1. Standard	2. Standard	max.
Length	2000 mm	2440 mm	3000 mm
Width	1000 mm	1220 mm	1350 mm
Thickness	5 - 300 mm possible		

Other dimensions, cell diameters, densities, colours and special orders: upon request.
Contact information: see address

Liability disclaimer:

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UK and Ireland Sales
The Coretex Group
PO Box 2, Cheltenham, GL54 5YR
Tel: +44 (0)871 918 1525
info@CoretexGroup.co.uk
www.CoretexGroup.co.uk