

# TECHNICAL DATASHEET

## Cormaster N636

Cormaster N636 grade honeycombs are non metallic structures made from nomex<sup>®</sup> N636 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.

Due to the excellent strength and stiffness characteristics of this honeycomb lower density cores may be utilised in structural sandwich applications.

Honeycomb Designation	N636 weight	Bare Compressive Strength	L-Shear		W-Shear	
			strength (MPa)	modulus (MPa)	strength (MPa)	modulus (MPa)
	osy	(MPa)				
3,2 - 40	0,9	1,74	1,34	135	0,74	48
3,2 - 48	0,9	2,67	1,95	132	0,93	59
3,2 - 64	0,9	3,84	2,48	136	1,43	67
3,2 - 96	1,2	8,82	3,11	192	2,23	96
4,0 - 72	1,2	5,23	2,6	144	1,9	88
4,0 - 96	1,8	8,3	4,45	222	2,83	119
4,8 - 28	0,9	0,94	0,72	72	0,46	36
4,8 - 32	0,9	0,98	0,84	80	0,52	39
4,8 - 37	0,9	1,45	1,28	89	0,63	41
4,8 - 48	1,2	2,2	1,63	114	0,91	59
9,6 - 40	1,2	1,14	1,19	82	0,75	43

### Applications

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

### Other Products

- If you need different performance to your application, CML offers many other products including;
- Commercial grade aluminium honeycomb
- Thermoplastic honeycomb
- Aluminium honeycomb in 5052 alloys
- Aluminium honeycomb in 5056 alloys
- Phenolic and polyisocyanate foams

### Features

- Superior compressive properties 20% higher than other nomex<sup>®</sup> honeycombs.
- 1.5 – 3 times higher shear modulus
- Low moisture absorption
- Excellent fatigue properties
- High dimensional stability under heat and moisture
- High temperature capabilities, service temperature up to 180°C.
- Product uniformity and exceptional resin to paper cohesion.
- Easily machined and formed
- **Availability**
- Expanded sheets
- Pieces cut to size