

# TECHNICAL DATASHEET

## Cormaster C2

Nomex® commercial grade honeycombs are non metallic structures made from nomex® T722 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 to cost ratios of our commercial grade nomex® honeycombs, offer a real attractive interest in many industrial applications.

| Type (ACH) | Compressive Strength (MPa) |            | Shear Strength (MPa) |      | Shear Modulus (MPa) |    |
|------------|----------------------------|------------|----------------------|------|---------------------|----|
|            | bare                       | stabilized | L                    | W    | L                   | W  |
| 3,2 - 48   | 1,8                        | 2          | 1,2                  | 0,7  | 36                  | 24 |
| 3,2 - 64   | 3,2                        | 3,4        | 1,6                  | 0,95 | 50                  | 35 |
| 3,2 - 80   | 4,4                        | 4,6        | 1,75                 | 1    | 56                  | 32 |
| 3,2 - 123  | 9,9                        | 10         | 3                    | 2    | 91                  | 65 |
| 4,8 - 32   | 0,8                        | 0,9        | 0,55                 | 0,32 | 18                  | 13 |
| 4,8 - 48   | 1,9                        | 2          | 1,12                 | 0,54 | 37                  | 23 |
| 4,8 - 64   | 3                          | 3,2        | 1,6                  | 0,85 | 50                  | 27 |
| 4,8 - 96   | 6,5                        | 6,8        | 2,35                 | 1,3  | 74                  | 36 |
| 6,4 - 32   | 0,6                        | 0,7        | 0,5                  | 0,32 | 17                  | 13 |
| 6,4 - 50   | 1,9                        | 2          | 1,1                  | 0,53 | 37                  | 16 |
| 6,4 - 64   | 3,2                        | 3,3        | 1,35                 | 0,72 | 46                  | 23 |
| 9,5 - 32   | 0,6                        | 0,7        | 0,6                  | 0,3  | 15                  | 12 |
| 9,5 - 48   | 1,8                        | 2          | 1,3                  | 0,85 | 40                  | 33 |
| 4,8 - 290X | 0,5                        | 0,6        | 0,3                  | 0,3  | 9                   | 14 |
| 4,8 - 480X | 1,7                        | 2          | 0,7                  | 0,7  | 25                  | 25 |
| 6,4 - 480X | 1,8                        | 2          | 0,65                 | 0,65 | 16                  | 23 |
| 6,4 - 560X | 2                          | 2,1        | 0,7                  | 0,7  | 19                  | 29 |

### Applications

- Automotive (motor sport)
- Marine
- Rail transport
- Leisure industries
- Ground Antennas

### 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
- Aluminum honeycomb in 5056 alloys
- Phenolic and polyisocyanate foams

### 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
- Fire and fungus resistant
- Broad range of cell sizes
- Easily machined and formed

### Availability

- Expanded sheets
- Pieces cut to size