

Polypropylene Honeycomb core

Polypropylene honeycomb is mainly used as core in composite panels, in energy absorption and filtration media. Polypropylene honeycomb exhibits a unique cell structure. The core has 3 orientations vs. the 2 orientations common with other honeycomb, making its properties more uniform. Each cell has a tubular form and is inherently stable.

Honeycomb has the following characteristics:

- high strength to weight ratio
- corrosion, fungi, rot, chemical and moisture resistant
- sound and vibration dampening
- temperature use to 180°F
- recyclable

Polypropylene honeycomb is supplied with or without a non-woven polyester veil for better bonding. It is also supplied with or without a film barrier under the polyester veil to limit the amount of resin consumption.

Polypropylene honeycomb is also used to support filters for corrosive gas emissions.



| Honeycomb core's properties | | |
|-------------------------------------|---------------------------------|----------|
| Type | PP 8-80 | PP 10-64 |
| Cell size mm [D] | 8.0 | 10.0 |
| Colour | white | white |
| Density kg/m ³ | 80 | 64 |
| Compressive strength MPa DIN 53421 | 2.0 | 1.0 |
| Compressive modulus MPa DIN 53421 | 97 | 50 |
| Shear strength MPa DIN 53294 | 0.55 | 0.3 |
| Shear modulus MPa DIN 53294 | 12.8 | 9 |
| Effective temperature range °C | from - 30 to + 80 | |
| Thermal conductivity W/mK 10° | 0.102 | |
| Sound reduction factor 50 - 4000 Hz | 22 dB | |
| Water absorption max | 0.10% | |
| Water absorption 24H | 0.10% | |
| Flammability | normal | |
| Thickness mm | from 4 to 500 (tolerance ± 0.2) | |

Standard dimensions (other dimensions available on request)

