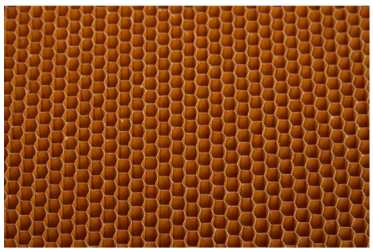
# ARAMID HONEYCOMB CORE

## PRODUCT DATA SHEET

## 01 PRODUCT OVERVIEW

Aramid honeycomb core is a lightweight, non-metallic cellular core for composite sandwich structures, helping reduce weight while maintaining stiffness, fatigue resistance, flame resistance, and stable mechanical performance.

Regular hexagonal and over-expanded (OX) configurations are available in multiple density grades, standard sheet sizes, and custom thicknesses.



### FEATURES

- Lightweight with high strength and good fatigue resistance
- Outstanding corrosion resistance and flame resistance
- Excellent environmental adaptability and electrical insulation
- Good dielectric properties and high stability

### TYPICAL APPLICATIONS

- Aerospace, Defense & Special Vehicles
- Rail & Automotive Transportation
- Marine & Shipbuilding
- Radomes & Antenna Systems

## 02 PRODUCT SPECIFICATIONS

| | |
|---|---|
| **Product** | Aramid Honeycomb Core |
| **Material basis** | Meta-aramid paper honeycomb |
| **Available grades** | Commercial Grade / Aerospace Grade |
| **Core configuration** | Regular hexagonal / Over-Expanded (OX) |
| **Cell size** | 3.2 / 4.8 / 6.4 / 9.5 mm |
| **Available nominal densities** | 32 / 48 / 56 / 64 / 80 / 96 / 128 kg/m³ |
| **Standard sheet sizes** | 1220 × 2440 mm / 1300 × 2600 mm |
| **Core thickness** | Custom slicing: 1~800 mm |

## 03 TYPICAL MECHANICAL PROPERTIES

| Specification | Flatwise Compressive Strength (MPa) | Plate Shear Properties | | | |
|---|---|---|---|---|---|
| | | L Shear Strength (MPa) | L Shear Modulus (MPa) | W Shear Strength (MPa) | W Shear Modulus (MPa) |
| MX-3.2-32 | 0.71 | 0.45 | 18.37 | 0.28 | 9.86 |
| MX-3.2-48 | 1.92 | 1.19 | 41.78 | 0.63 | 22.19 |
| MX-3.2-64 | 3.35 | 1.42 | 58.13 | 0.97 | 30.34 |
| MX-3.2-80 | 4.82 | 2.05 | 72.60 | 1.28 | 56.61 |
| MX-4.8-32 | 0.73 | 0.51 | 18.67 | 0.31 | 10.68 |
| MX-4.8-48 | 2.12 | 1.15 | 43.89 | 0.61 | 22.53 |
| MX-4.8-56 | 2.45 | 1.43 | 52.65 | 0.80 | 23.55 |
| MX-6.4-32 | 0.75 | 0.58 | 25.74 | 0.34 | 16.98 |
| MX-6.4-48 | 1.72 | 1.07 | 38.25 | 0.61 | 27.69 |

| Specification | Flatwise Compressive Strength (MPa) | Plate Shear Properties | | | |
|---|---|---|---|---|---|
| | | L Shear Strength (MPa) | L Shear Modulus (MPa) | W Shear Strength (MPa) | W Shear Modulus (MPa) |
| MX-9.5-32 | 0.76 | 0.63 | 32.88 | 0.35 | 15.82 |
| MX-9.5-48 | 1.71 | 1.01 | 46.65 | 0.62 | 25.10 |
| MX-OX-4.8-40 | 1.32 | 0.46 | 23.37 | 0.63 | 34.86 |
| MX-OX-4.8-48 | 1.69 | 0.67 | 35.45 | 0.94 | 48.31 |

Note: L and W denote the principal in-plane honeycomb directions.

## 04 DIMENSIONS & TOLERANCES

| | |
|---|---|
| **Length tolerance** | Nominal +50 / -0mm |
| **Width tolerance** | Nominal +75 / -0mm |
| **Thickness tolerance** | ± 0.2 mm |
| **Density tolerance** | ± 10% |
| **Cell Size tolerance** | ± 10% |

## 05 AVAILABILITY & CUSTOMIZATION

- Standard and custom sheet sizes are available subject to technical review.
- Cell geometry, nominal density and core thickness can be customized for project requirements.
- Cut-to-size and custom slicing services are available upon request.
- Final availability depends on the selected grade, geometry, density and dimensional requirements.