

## Nomex Honeycomb Core

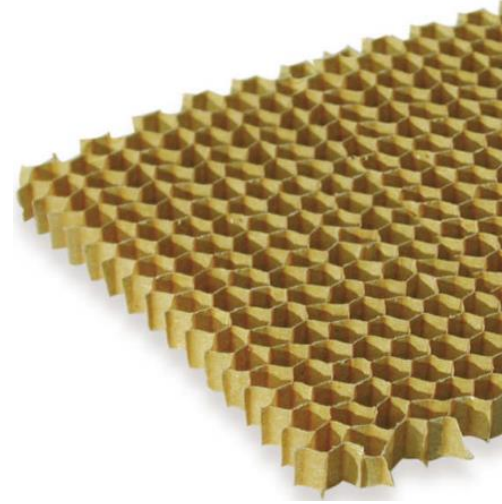
**Nomex honeycomb core** is an extremely lightweight, high strength and non-metallic product manufactured with aramid fiber paper impregnated with a heat resistant phenolic resin.

This core material offers the unique combination of properties necessary for superior electrical insulation. Aramid paper is used in boat hulls, auto racing bodies and military shelters. Furthermore it also have many applications in the aeronautical, railway and shipyard industry.

Honeycomb has the following characteristics:

- high strength to weight ratio
- corrosion resistant
- excellent dielectric properties
- thermally insulating
- high toughness
- excellent creep and fatigue performance
- good thermal stability

The client can choose between commercial and aeronautical grade.



Honeycomb core's Properties								
Designation	Cell size (mm)	Density (kg/m <sup>3</sup> )	Compression Strength (MPa)		L-Shear Strength (MPa)		W-Shear Strength (MPa)	
			Typ	Min	Typ	Min	Typ	Min
Hexagonal	3.2	48	1.88	1.12	1.22	1.01	0.62	0.53
Hexagonal	3.2	64	3.38	2.05	1.65	1.40	0.89	0.62
Hexagonal	3.2	80	5.03	3.72	1.98	1.46	1.09	0.75
Hexagonal	3.2	96	6.91	4.96	2.42	1.61	1.54	0.84
Hexagonal	4.8	32	0.81	0.56	0.66	0.45	0.39	0.25
Hexagonal	4.8	48	2.05	1.12	1.09	0.78	0.73	0.42
Hexagonal	4.8	64	3.51	1.99	1.49	1.40	1.01	0.70
Hexagonal	6.4	48	1.58	1.12	1.10	0.84	0.70	0.37
Hexagonal	6.4	64	2.93	1.92	1.51	1.24	0.93	0.60
Over expanded	4.8	32	0.74	0.56	0.43	0.31	0.51	0.25
Over expanded	4.8	40	1.01	0.69	0.49	0.34	0.60	0.27
Over expanded	4.8	48	1.96	1.55	0.71	0.59	0.87	0.60

**Standard dimensions**  
(other dimensions available on request)

