

PRODUCT DATA SHEET

DESCRIPTION

Toray's Nomex® commercial (ANC) grade honeycomb core is manufactured from Nomex® paper sheets and is coated and bonded together with a phenolic resin.

Designed to offer industrial users and designers high strength-to-weight properties at relatively low cost, Nomex® honeycomb is particularly suitable as a core material for production of nonmetallic sandwich structures using high performance fiber reinforced composites as the facing material.

FEATURES

- ▶ High strength-to-weight ratio
- ▶ Excellent fire-resistant, self-extinguishing, and low fumes toxicity
- ▶ High temperature capabilities
- ▶ Easily formed to shape
- ▶ Low cost
- ▶ Corrosion resistance against water, oil, and fuel
- ▶ Good thermal and electrical insulator
- ▶ Cut to customer specification

TYPICAL APPLICATIONS

- ▶ Racing car bodywork
- ▶ Ground antennas and radomes
- ▶ Marine applications—ranging from interior panels, flooring, hatches
- ▶ Leisure applications—skis and surfboards
- ▶ Precision optical equipment
- ▶ Filter systems

PRODUCT RANGE

Standard products:

The following products are usually available as ex-stock items. Additional grades can be sourced upon request, subject to minimum order quantities and extended lead times.

- ▶ ANC-3.2-48
- ▶ ANC-4.8-32
- ▶ ANC-4.8-48
- ▶ ANC-4.8-48(OX)

For our range of aerospace grade Nomex® honeycomb, please refer to Toray's Nomex® honeycomb—aerospace grade product data sheet.

PRODUCT DESIGNATION

e.g.	ANC (a)	4.8 (b)	48 (c)	(OX) (d)
a. ANC	Nomex® commercial honeycomb			
b. 3.2	Cell size in millimeters			
c. 29	Density (kg/m ³)			
d. (OX)	Overexpanded			

STANDARD DIMENSIONS AND TOLERANCES

Nominal sheet length (W) = 2500 ± 75 mm

Nominal sheet width (L) = 1250 ± 75 mm

Sheet thickness as requested from 1.5 mm to 100 mm ± 0.125 mm

Sheet thickness above 100 mm, tolerance = ± 0.25

Density as nominal ± 10%

Other sheet sizes may be available upon request.



Contact us for more information:

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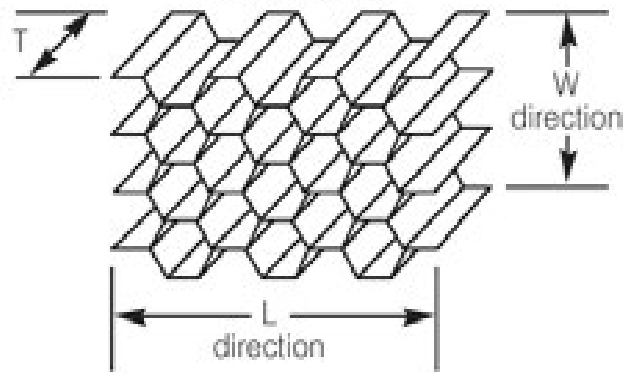
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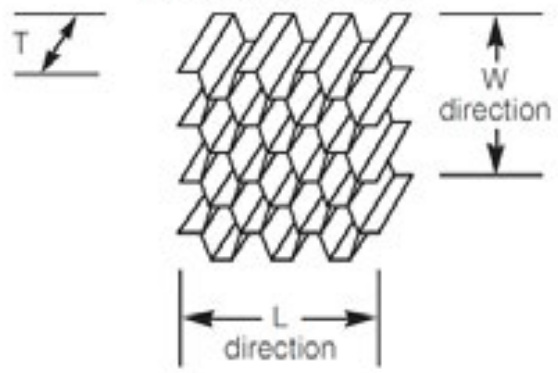
MECHANICAL PROPERTIES

Property	Stabilized Compression		Plate Shear			
	Strength (MPa)	Modulus (MPa)	Strength "L Direction" (MPa)	Modulus "L Direction" (MPa)	Strength "W Direction" (MPa)	Modulus "W Direction" (MPa)
ANC-3.2-48	2.17	127	1.10	36	0.62	21
ANC-4.8-32	1.20	75	0.70	29	0.40	19
ANC-4.8-48	2.40	140	1.20	40	0.70	25
ANC-4.8-48(OX)	2.90	120	0.76	22	0.49	43

HEXAGONAL CELL



OVEREXPANDED CELL



T = Thickness or cell depth L = Ribbon direction W = Direction perpendicular to the ribbon direction

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