

PRODUCT DATA SHEET

DESCRIPTION

ANC commercial grade Nomex[®] 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 (ANA), please refer to our 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.



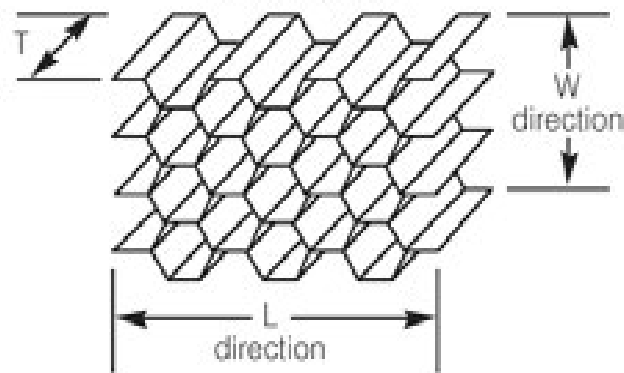
Contact us for more information:
Europe/Middle East/Africa
e explore@toraytac-europe.com
t +44 (0)1773 530899

PRODUCT DATA SHEET

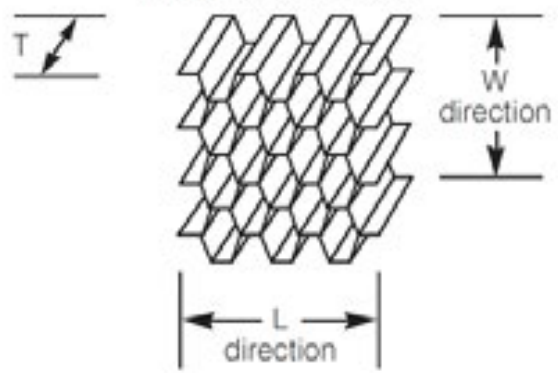
MECHANICAL PROPERTIES

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

NomexHC-Comm_PDS_v8_2020-06-12 Page 2/2

© 2019–2020 Toray Advanced Composites. All data given is based on representative samples of the materials in question. Since the method and circumstances under which these materials are processed and tested are key to their performance, and Toray Advanced Composites has no assurance of how its customers will use the material, the corporation cannot guarantee these properties. Toray®, (Toray) AmberTool®, (Toray) Cetex®, (Toray) MicroPly™, and all other related characters, logos, and trade names are claims and/or registered trademarks of Toray Industries Inc. and/or its subsidiary companies in one or more countries. Use of trademarks, trade names, and other IP rights of Toray Industries Inc. without prior written approval by such is strictly prohibited. Nomex® is a registered trademark of E.I du Pont de Nemours and Company.