

NOMEX® HONEYCOMB - AEROSPACE GRADE Core Material

TenCate's Nomex® aerospace (ANA) grade honeycomb core is manufactured from Nomex® paper sheets and is coated and bonded together with a phenolic resin.

Nomex Honeycomb - Aerospace Grade Features/Benefits

- High strength-to-weight ratio
- Excellent fire-resistant and self extinguishing properties to FAR 25.583
- High temperature capabilities, service temperature up to 180°C
- Easily formed to shape
- Corrosion resistance against water, oil and fuel
- Cut to customer specifications
- Good dielectric properties

APPLICATIONS

Designed to offer users and designers high strength to weight properties at relatively low cost, particularly suitable as a core material for production of sandwich structures requiring significant FST performance and using high performance fibre reinforced composites as the facing material.

Typical sandwich panel applications include;

- Aircraft flooring – varying densities depending on level of duty
- Aircraft interiors – ranging from sidewalls, galleys and ceilings, including commercial aerospace, business and VIP interiors
- Cargo lining
- Helicopter rotor blades
- Aircraft leading and trailing edges
- Fuselage components

PRODUCT DATASHEET



TENCATE ADVANCED COMPOSITES

NOMEX® HONEYCOMB - AEROSPACE GRADE Core Material

PRODUCT DESIGNATION

e.g. ANA 3.2 29
(a) (b) (c)

- a. ANA = TenCate Nomex® Aerospace honeycomb
- b. 3.2 = Cell size in millimetres
- c. 29 = Density (kg/m³)

PRODUCT RANGE

Standard products:

The following products are usually available as ex-stock items, other grades are available to order.

- ANA-3.2-29
- ANA-3.2-48
- ANA-3.2-64
- ANA-4.8-48 OX

For our range of commercial grade Nomex® honeycomb, please refer to TenCate's Nomex® honeycomb – commercial grade product data sheet.

STANDARD DIMENSIONS AND TOLERANCES:

Nominal sheet length (W) = 2500 ± 75 mm

Nominal sheet width (L) = 1250 ± 75 mm

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

Density as nominal ± 10% (except ANA-3.2-29 ± 13%)

*Other sheet sizes may be available upon request.

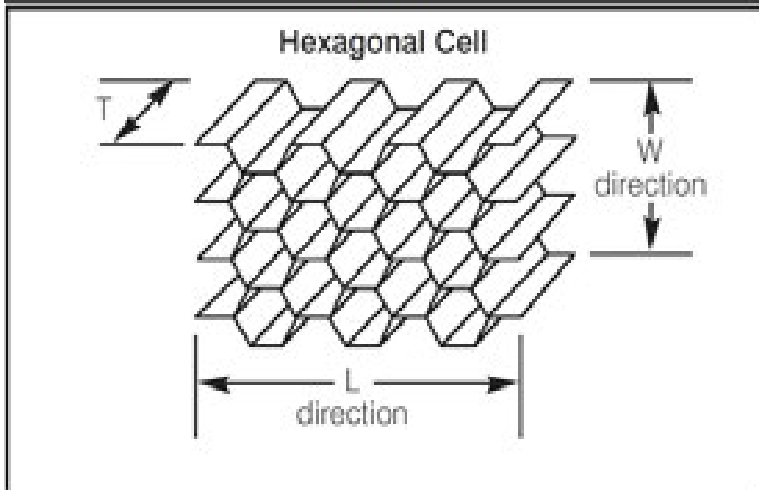
PRODUCT DATASHEET



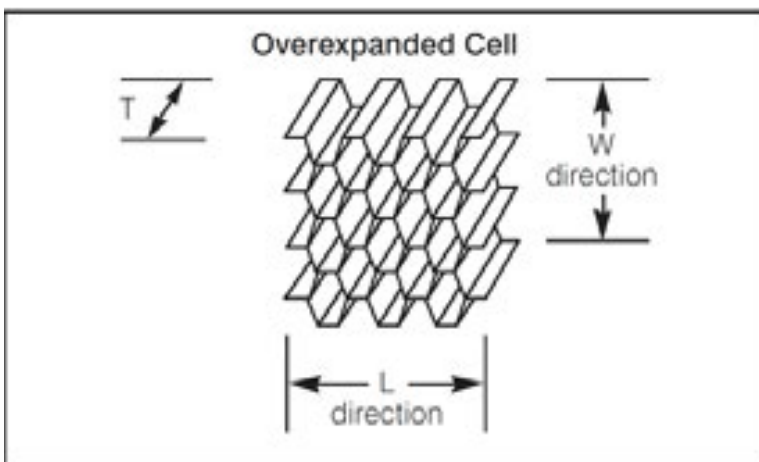
TENCATE ADVANCED COMPOSITES

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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)
ANA-3.2-29	0.90	60	0.5	25	0.35	17
ANA-3.2-48	2.4	138	1.25	40	0.73	25
ANA-3.2-64	3.9	190	2.0	63	1.0	35
ANA-4.8-48 OX	2.9	120	0.8	20	0.85	35



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



PRODUCT DATASHEET



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FURTHER INFORMATION

Please contact TenCate Advanced Composites, Langley Mill for additional information.

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 TenCate Advanced Composites has no assurance of how its customers will use the material, the corporation cannot guarantee these properties. TenCate AmberTool® and all other related characters, logos and trade names are claims and/or registered trademarks TenCate and/or its subsidiaries. Use of trademarks, trade names and other IP rights of TenCate without express written approval of TenCate is strictly prohibited. Nomex® is a registered trademark of E.I du Pont de Nemours and Company.

TENCATE ADVANCED COMPOSITES

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