

## NOMEX® HONEYCOMB - COMMERCIAL GRADE Core Material

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

### Nomex Honeycomb - Commercial Grade Features/Benefits

- 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

## APPLICATIONS

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

Typical sandwich panel applications include;

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

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### PRODUCT DESIGNATION

e.g.           ANC   4.8   48   (OX)  
                 (a)   (b)   (c)   (d)

- a. ANC                   = TenCate Nomex® Commercial honeycomb
- b. 3.2                   = Cell size in millimetres
- c. 29                    = Density (kg/m<sup>3</sup>)
- d. (OX)                 = Over expanded

### PRODUCT RANGE

Standard products:

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

- 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 TenCate's Nomex® honeycomb – aerospace 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

Sheet thickness above 100mm, tolerance = ± 0.25

Density as nominal ± 10%

\*Other sheet sizes may be available upon request.

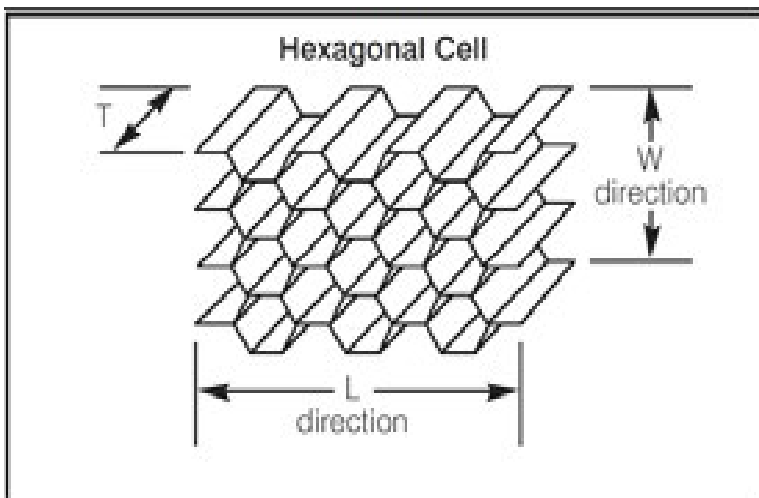
# PRODUCT DATASHEET



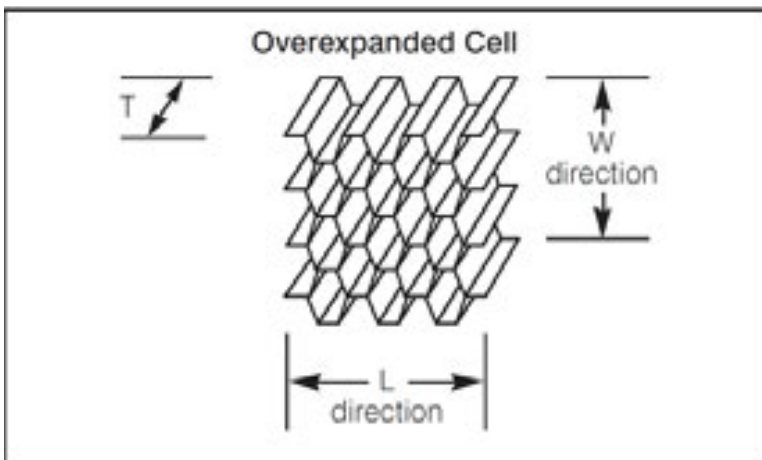
TENCATE ADVANCED COMPOSITES

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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)
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



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.

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