



## ANA AMBER NOMEX AEROSPACE HONEYCOMB

Amber's ANA core is manufactured from Nomex® paper sheets and is coated and bonded together with a high modulus phenolic resin.

### FEATURES:

- > High strength-to-weight ratio
- > Readily available
- > Low cost
- > Fire-resistant, self extinguishing and low fumes toxicity
- > High temperature capabilities, service Temperature up to 180°C
- > Good thermal and electrical insulator
- > Easily formed to shape
- > Corrosion resistance against water, oil and fuel

### 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 non-metallic sandwich structures using high performance fibre reinforced composites as the facing material.

Typical sandwich panel applications include,

- Helicopter rotor blades
- Aircraft leading and trailing edges
- Aircraft floors
- Fuselage components
- High-performance boats
- Racing car bodywork



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### PRODUCT DESIGNATION

e.g.    **ANA**    **-3.2**    **29** OX  
          (a)       (b)       (c)

- a.       ANA       = Amber Nomex Aerospace honeycomb
- b.       3.2         = Cell size in millimetre.
- c.       29         = Density ( Kg/m<sup>3</sup> ).

Note: OX should be added at the end of the product designation for grades which are required over expanded

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### PRODUCT RANGE

#### Standard Products

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

- ANA-3.2-29
- ANA-3.2-48
- ANA-3.2-48 OX

For our range of Commercial grade Nomex honeycomb, please refer to Amber ANC honeycomb TDS.

#### Standard dimensions and tolerances

Nominal sheet length (W) = 2500 ± 75 mm  
Nominal sheet width (L) = 1250 ± 75mm  
Sheet thickness as requested from 1.5mm to 100mm, ± 0.125 mm  
Sheet thickness above 100mm, tolerance = ± 0.25 mm  
Density as nominal, ± 10% (except ANA-3.2-29 ± 13%)

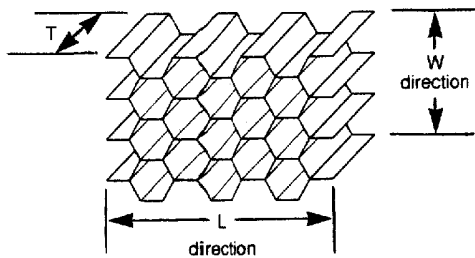
Other sheet sizes may be available upon request.



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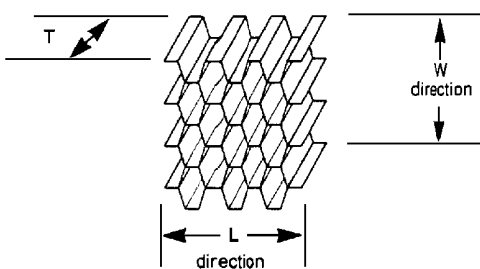
GRADE	COMPRESSIVE			PLATE SHEAR			
	BARE	STABILISED		L DIRECTION		W DIRECTION	
	Strength psi	Strength psi	Modulus ksi	Strength psi	Modulus ksi	Strength psi	Modulus ksi
ANA-3.2-29	100	115	7	75	3.0	48	1.6
ANA-3.2-48	285	325	20	190	6.0	105	3.5
ANA-3.2-48 OX	320	350	17	105	2.5	120	6.0

Hexagonal Cell



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

Over-Expanded Cell



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

For further information refer to Aluminium Honeycomb Material Safety Datasheet.

This is not a specification. The information given in this data sheet in relation to the performance, storage and other characteristics of the product is based on results gained from experience and tests and is believed to be accurate. Given, however, that conditions of use and storage will vary, Amber Composites will not be liable for any loss or damage resulting from reliance upon such information. The purchaser is recommended to carry out his own tests to establish the suitability of the product for its particular purpose. The use of the product in certain processes may require third party consent.