

# Technical Data Sheet

Aramid honeycomb 32 kg/m<sup>3</sup>

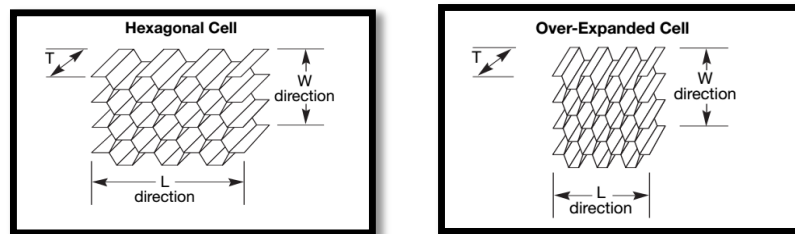
## DESCRIPTION & FEATURES:

AC-NH: Meta-aramid paper honeycomb is manufactured with meta-aramid paper and coated with phenolic resin. It is light but with high strength. At mean time, it is flame resistant, corrosion resistant, electrical insulating and has anti-fatigue function.

## APPLICATIONS:

AC-NH is widely used in aerospace, transportation structures, racing boats, vessel, antenna cover, military shelters, and special purpose panels.

## DIMENSIONAL NOMENCLATURE:



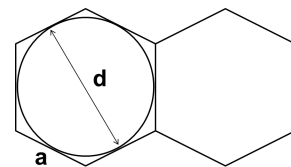
T= thickness, or cell depth    L= ribbon direction    W= long direction, or direction perpendicular to the ribbon

|          |      |      |      |      |      |     |
|----------|------|------|------|------|------|-----|
| d (mm)   | 3.2  | 4.0  | 4.8  | 6.4  | 8.0  | 9.5 |
| d (inch) | 1/8  | 5/32 | 3/16 | 1/4  | 5/16 | 3/8 |
| a (mm)   | 1.83 | 2.29 | 2.75 | 3.67 | 4.5  | 5.5 |

Notes: d:diameter of inscribed circle

a:length of a hexagonal side

$$d = \sqrt{3} a$$



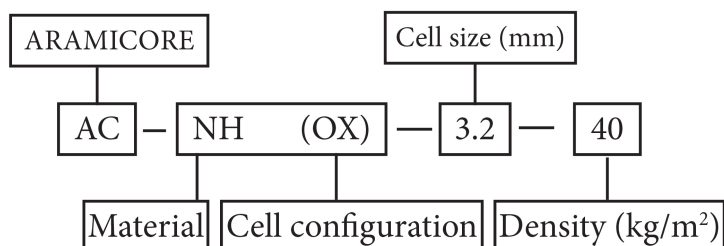
## TOLERANCES:

Length:  $\geq 0$ mm    Width:  $\geq -5$ mm

Density:  $\pm 10\%$     Cell size:  $\pm 5\%$

Thickness:    2~50mm             $\pm 0.2$ mm  
                   50.01~100mm        $\pm 0.5$ mm  
                   >100.01mm            $\pm 3$ mm

AC-NH aramid paper honeycomb is specified as follows:



| AC-NH Mechanical Properties   |                  |                  |         |               |         |
|---|------------------|------------------|---------|---------------|---------|
| Aramicore Honeycomb<br>Designation<br>Material-Cell Size-Density<br>NH mm kg/m <sup>3</sup> | Compression(MPa) | Plate Shear(MPa) |         |               |         |
|   | Bare             | "L" Direction    |         | "W" Direction |         |
|   | Strength         | Strength         | Modulus | Strength      | Modulus |
|   | Typ.             | Typ.             | Typ.    | Typ.          | Typ.    |
| AC-NH-3.2-32  | 0.64             | 0.68             | 36      | 0.41          | 20      |
| AC-NH-3.2-40  | 1.29             | 0.86             | 40      | 0.50          | 22      |

This table presents guarantee values of AC honeycomb obtained from testing specimens of 12.7mm thickness at RT. All data are representative at the nominal product density. Data is based on results gained from experience and tests and is believed to be accurate yet without acceptance of liability for loss or damage incurred and attributable to reliance thereon as conditions of use lie outside our control.