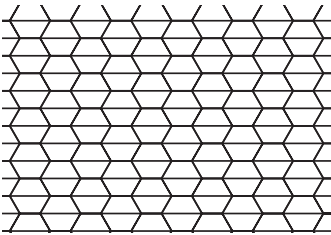




PLAScore®

# PFHD Aerospace Grade High Density Fiberglass Honeycomb



## Description:

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**PFHD** aerospace grade honeycomb exhibits outstanding flammability properties while having extremely high strength characteristics. It is manufactured from a phenolic resin impregnated fiberglass cloth and coated with phenolic resin.

## Applications:

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PFHD honeycomb is ideal for use in all composite aerostructures, when high mechanical performance is required.

## Features:

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- Bisected Hexagonal
- Fire resistant for use up to 350°F.
- Can handle higher temps for a short period of time.
- Significantly stronger shear and compressive properties than Aramid.
- Non-hygroscopic

## Availability:

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PFHD honeycomb is available in three forms: untrimmed sheets, cut to size sheets, and machined components.

|                                |                                                                                                                                            |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Cell Size:</b>              | 3/16"                                                                                                                                      |
| <b>Densities:</b>              | 16 pcf                                                                                                                                     |
| <b>Configuration:</b>          | Plain weave glass, bisected nodes                                                                                                          |
| <b>Sheet "Ribbon" (L):</b>     | 48" typical                                                                                                                                |
| <b>Sheet "Transverse" (W):</b> | 32" typical                                                                                                                                |
| <b>Tolerances:</b>             | L (Ribbon) +3"/-0"<br>W (Transverse) +6"/-0"<br>Thickness: $\pm .006$ " (under 1.5" thick)<br>Density: $\pm 10\%$<br>Cell Size: $\pm 10\%$ |

## PFHD Fiberglass honeycomb is specified as follows:

Material - Cell Size - Density

Designates high density fiberglass      Nominal density in pounds per cubic foot

**PFHD - 3/16 - 16.0**

Cell size in inches

## PFHD Mechanical Properties

| Cell size |     | Nominal density |        | Compressive strength |       |         |       | Shear strength L direction |       |         |      | Shear modulus L direction |      | Shear strength W direction |      |         |      | Shear modulus W direction |      |
|-----------|-----|-----------------|--------|----------------------|-------|---------|-------|----------------------------|-------|---------|------|---------------------------|------|----------------------------|------|---------|------|---------------------------|------|
|           |     |                 |        | Typical              |       | Minimum |       | Typical                    |       | Minimum |      | Typical                   |      | Typical                    |      | Minimum |      | Typical                   |      |
| in        | mm  | lb/ft^3         | kg/m^3 | psi                  | Mpa   | psi     | Mpa   | psi                        | Mpa   | psi     | Mpa  | ksi                       | Gpa  | psi                        | Mpa  | psi     | Mpa  | ksi                       | Gpa  |
| 3/16      | 4.8 | 16.0            | 256    | 3120                 | 21.51 | 2850    | 19.65 | 1530                       | 10.55 | 1400    | 9.65 | 82                        | 0.56 | 700                        | 4.83 | 660     | 4.55 | 20                        | 0.14 |

The above data is based on various sample sizes and is for reference only.

Certified to AMS3715



Plascore, Inc., employs a quality management system that is Nadcap, AS9100, ISO 9001 and ISO 14001 certified.

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