



Gillcore® HF5035 Honeycomb Core

DESCRIPTION

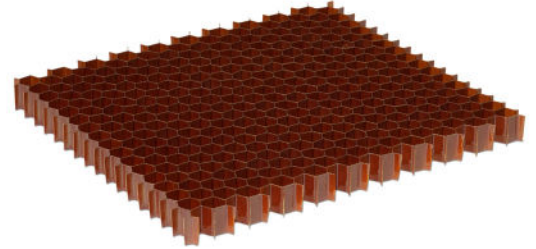
Gillcore® HF5035 honeycomb core is a high performance non-metallic fiberglass honeycomb core. The honeycomb core is made of fiberglass fabric reinforced with heat resistant phenolic resin for moisture resistance and suitable for high temperature applications.

APPLICATIONS

Engine nacelles and interior aircraft parts where high temperature application up to 350°F (177°C).
Heat formability for complex and contour components.

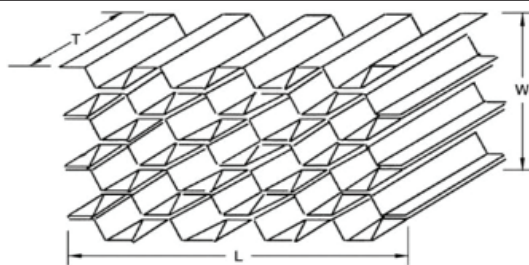
FEATURES

- Good strength to weight ratio
- Corrosion resistant
- Fire resistant
- High toughness, shear strength and shear modulus
- Excellent thermal stability
- Good formability for curve forming



AVAILABILITY

Hexagonal Shaped Core
L = Ribbon Dimension
W = Dimension normal to ribbon
T = Thickness dimension



| Direction/Configuration | Hexagonal Core | Hexagonal Core |
|-----------------------------------|---|----------------------------------|
| | Ribbon dimension as block width | Ribbon dimension as block length |
| L (Ribbon dimension) | Typical 48 inch (1,219 mm) Maximum 65 inch (1,651 mm) | Maximum 96 inch (2,438 mm) |
| W (Dimension normal to ribbon) | Typical 96 inch (2,438 mm) Maximum 144 inch (3,658 mm) | Maximum 48 inch (1,219 mm) |
| Thickness | 23 inch (584.2 mm) | |
| Nominal cell size, in (cm) | 0.375 ± 0.006 (0.952 ± 0.015) | |
| Nominal core density | 4.50 pound per cubic foot (72.08 kilograms per cubic meter) | |

Custom block sizes available upon request

CONSTRUCTION

Reinforcement: Woven E-glass fiber cloth
Resin: Phenolic

SPECIFICATIONS

- AMS3715, Rev. D



HEALTH PRECAUTIONS

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. A SDS is available at <https://www.thegillcorp.com/msds.php>.

For industrial use only. Keep away from children. Additional information can be found at: www.thegillcorp.com. For sales and ordering information call 1-626-443-6094.

PERFORMANCE PROPERTIES, TYPICAL

| Properties | Test Method | Condition | Test at -75°F (-59°C) | Test at 75°F (24°C) | Test at 250°F (121°C) | Test at 350°F (177°C) |
|---|-------------|------------|-----------------------|---------------------|-----------------------|-----------------------|
| Sandwich Flatwise Tension, psi (MPa) | ASTM C297 | Ambient | 1,250 (8.62) | 1,250 (8.62) | 1,100 (7.58) | 900 (6.21) |
| | | Wet | --- | 900 (6.21) | 550 (3.79) | 450 (3.10) |
| Stabilized Compression Strength, psi (MPa) | ASTM C365 | Ambient | 857 (5.91) | 790 (5.45) | 600 (4.14) | 450 (3.10) |
| | | Wet | --- | 750 (5.17) | 500 (3.45) | 400 (2.76) |
| Ambient | | 84 (0.581) | 70 (0.483) | 55 (0.379) | --- | |
| Wet | | --- | 70 (0.483) | 55 (0.379) | --- | |
| Stabilized Compression Modulus, ksi (GPa) | ASTM C273 | Ambient | 450 (3.10) | 440 (3.03) | 340 (2.34) | 190 (1.31) |
| | | Wet | --- | 390 (2.69) | 270 (1.86) | 150 (1.03) |
| Plate Shear Strength L-direction, psi (MPa) | ASTM C273 | Ambient | 26 (0.179) | 26 (0.179) | 21 (0.145) | 12 (0.083) |
| | | Wet | --- | 25 (0.172) | 15 (0.103) | 7 (0.048) |
| Plate Shear Modulus L-direction, ksi (GPa) | ASTM C273 | Ambient | 270 (1.86) | 250 (1.72) | 200 (1.38) | 140 (0.965) |
| | | Wet | --- | 240 (1.65) | 180 (1.24) | 110 (0.758) |
| Plate Shear Strength W-direction, psi (MPa) | ASTM C273 | Ambient | 15 (0.103) | 14 (0.097) | 13 (0.090) | 8 (0.055) |
| | | Wet | --- | 14 (0.097) | 9 (0.062) | 5 (0.034) |
| Plate Shear Modulus W-direction, ksi (GPa) | ASTM C273 | Ambient | --- | --- | --- | --- |
| | | Wet | --- | --- | --- | --- |

- (1) Wet Conditioning: 158 °F ± 9°F (70°C ± 5°C), 95 ± 5% Relative Humidity, 750 Hours (+ 48/-0 Hours)
- (2) Temperature tolerance for testing is ±5°F

Updated: 07/31/23

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