**DESCRIPTION**

**Gillcore® HD Honeycomb**

Gillcore® HD is a meta-aramid fiber reinforced honeycomb which is coated with heat resistant phenolic resin. Gillcore® HD provides a wide range of honeycomb types, including different cell sizes, cell geometries, paper thicknesses and densities, for commercial and aerospace defense applications.

**APPLICATIONS**

Interior aircraft panels including flooring, sidewalls, ceilings, galleys and lavatories.

Exterior aircraft panels including trailing and leading edges, flaps, ailerons, radomes, fairings, helicopter blades, access panels and doors.

Sports and leisure industry such as surfboards, pleasure boats, skis and auto racing bodies.

Ceilings, walls and floors of portable structures.

Dividing berthing areas, staterooms and hulls for marine applications.

**FEATURES**

- High strength to weight ratio
- High toughness
- Corrosion resistant
- Good fatigue and impact resistance
- Fire resistant (self-extinguishing)
- Excellent dielectric properties
- Good thermal stability
- Good formability for curve forming
- Good thermal and electrical insulating properties

**AVAILABILITY**

Available in sheet form or block form

<table>
<thead>
<tr>
<th>Direction/Configuration</th>
<th>Hexagonal Core</th>
<th>Hexagonal Core</th>
<th>Overexpanded Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>L (Ribbon dimension)</td>
<td>Typical 48 inch (1,219 mm)</td>
<td>Maximum 96 inch (2,438 mm)</td>
<td>Maximum 50 inch (1,270 mm)</td>
</tr>
<tr>
<td>W (Dimension normal to ribbon)</td>
<td>Maximum 65 inch (1,651 mm)</td>
<td>Maximum 48 inch (1,219 mm)</td>
<td>Maximum 144 inch (3,658 mm)</td>
</tr>
<tr>
<td>Thickness</td>
<td>Maximum 144 inch (3,658 mm)</td>
<td>Maximum 48 inch (1,219 mm)</td>
<td>Maximum 144 inch (3,658 mm)</td>
</tr>
<tr>
<td></td>
<td>0.080 inch (2.03 mm) - 34 inch (864 mm)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CONSTRUCTION**

Reinforcement: Meta-aramid paper

Resin: Phenolic

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F203 – 1219
SPECIFICATIONS

- Qualified to FMS 1030
- Qualified to McDonnell Douglas DMS 1974 Gr A
- Qualified to Lockheed LCM 28-1041
- Qualified to Vought 10425.1957
- Qualified to AMS 3711, Aerospace Material Standards
- Qualified to Raytheon/Beech - BS 23732
- Meets the requirements of AMS-C-81986
- Qualified to Airbus AIMS 11-01-001/ABSS035
- Qualified to Lockheed-Georgia STM 28-105. [1/8 - 1.8 (1.5) and 1/8 - 3.0 (2)]
- Qualified to DHM S P1.26 DeHavilland
- Qualified to Lockheed STM 28-105
- Qualified to Northrop Grumman GC101
- Qualified to Cessna CMNP083, Ty II, Cl 4, Gr 1.8, 3.0, 6.0
- Qualified to Bell Helicopter (Textron) 299-947-103
- Qualified to AIM Aviation AIM-M-1013, AIMS 11-01-001
- Meets the requirements of Rockwell LB0130-022
- Qualified to Lockheed C28-105
- Meets the requirements of AMS-C-81986
- Meets the requirements of Rockwell LB0130-022
- Qualified to Airbus AIMS 11-01-001/ABSS503
- Meets the requirements of Rockwell LB0130-022
- Qualified to DHM S P1.26 DeHavilland

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

The following tests are run in accordance with BMS 8-124 requirements.
# Gillcore® HD Honeycomb

**Gillcore® HD Honeycomb**

**Description**

**Configuration**

<table>
<thead>
<tr>
<th>Gillcore® HD Honeycomb Description</th>
<th>Gillcore® HD Honeycomb Configuration</th>
<th>Cell Size</th>
<th>Density</th>
<th>Compressive</th>
<th>Plate Shear</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>mm</td>
<td>kg/m³</td>
<td>Bare Strength</td>
<td>Stabilized Strength</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mpa</td>
<td>Mpa</td>
</tr>
<tr>
<td>HD-1/8-1.8</td>
<td>HD111</td>
<td>3.2</td>
<td>29</td>
<td>0.74</td>
<td>0.64</td>
</tr>
<tr>
<td>HD-1/8-3.0</td>
<td>HD132</td>
<td>3.2</td>
<td>48</td>
<td>2.13</td>
<td>1.81</td>
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<tr>
<td>HD-1/8-4.0</td>
<td>HD142</td>
<td>3.2</td>
<td>64</td>
<td>3.82</td>
<td>3.17</td>
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<tr>
<td>HD-1/8-5.0</td>
<td>HD153</td>
<td>3.2</td>
<td>80</td>
<td>4.93</td>
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<tr>
<td>HD-1/8-6.0</td>
<td>HD163</td>
<td>3.2</td>
<td>96</td>
<td>7.40</td>
<td>6.64</td>
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<tr>
<td>HD-1/8-8.0</td>
<td>HD183</td>
<td>3.2</td>
<td>128</td>
<td>11.86</td>
<td>9.89</td>
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<tr>
<td>HD-1/8-9.0</td>
<td>HD193</td>
<td>3.2</td>
<td>144</td>
<td>13.33</td>
<td>11.97</td>
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<tr>
<td>HD-3/16-2.0</td>
<td>HD322</td>
<td>4.8</td>
<td>32</td>
<td>0.88</td>
<td>0.72</td>
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<tr>
<td>HD-3/16-3.0</td>
<td>HD332</td>
<td>4.8</td>
<td>48</td>
<td>2.09</td>
<td>1.63</td>
</tr>
<tr>
<td>HD-3/16-4.0</td>
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<td>4.8</td>
<td>64</td>
<td>3.59</td>
<td>3.09</td>
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<tr>
<td>HD-1/4-1.5</td>
<td>HD412</td>
<td>6.4</td>
<td>24</td>
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<td>0.5</td>
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<tr>
<td>HD-1/4-3.0</td>
<td>HD433</td>
<td>6.4</td>
<td>48</td>
<td>2.08</td>
<td>1.08</td>
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<tr>
<td>HD-3/8-3.0</td>
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<td>9.5</td>
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<td>1.91</td>
<td>1.65</td>
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<tr>
<td>HD-3/16-1.8-OX</td>
<td>HD312O</td>
<td>4.8</td>
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<td>0.74</td>
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<tr>
<td>HD-3/16-3.0-OX</td>
<td>HD332O</td>
<td>4.8</td>
<td>48</td>
<td>2.23</td>
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<tr>
<td>HD-3/16-4.0-OX</td>
<td>HD342O</td>
<td>4.8</td>
<td>64</td>
<td>3.80</td>
<td>2.92</td>
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</tbody>
</table>

**Flammability:** Gillcore® HD honeycomb meets the flammability requirements of BMS 8-124.

**Water migration:** Gillcore® HD honeycomb does not exceed 1 cell migration in 24 hours when tested per BMS 8-124.

Figures shown reflect typical values and should not be used as design specifications.