**PP Polypropylene Honeycomb**

**Description:**
PP polypropylene honeycomb exhibits a unique cell structure. The core has 3 orientations vs. the 2 orientations common with other honeycomb, making its properties more uniform. Each cell has a tubular form and is inherently stable.

PP polypropylene honeycomb is supplied with or without a non-woven polyester veil for better bonding. It is also supplied with or without a film barrier under the polyester veil to limit the amount of resin consumption.

**Applications:**
PP polypropylene honeycomb uses include sandwich panel cores, energy absorption and filtration media.

**Features:**
- High strength to weight ratio
- Corrosion, fungi, rot, chemical and moisture resistant
- Sound and vibration dampening
- Energy absorbing
- Thermoformable
- Temperature use to 180°F
- Recyclable

**Availability:**
PP polypropylene honeycomb is available in the following standard dimensions.

- **Densities:** 3.5 to 20.0 pcf
- **Thickness:** ¼" to 6' Laminated; up to 24' open cell
- **Sheet Length:** Up to 50'
- **Sheet Width:** 72' max.
- **Tolerances:**
  - Length: ± .125"
  - Width: ± .125"
  - Thickness: ± .02"
  - Open Cell: ± .03"
  - w/reinforced PP facings ± .03"
  - Density: ± 10%
PP polypropylene honeycomb is specified as follows:

Material - Cell Size - Color - Thickness

Material Type (PP) (Virgin Grade)

Color (Natural)

Material density in lbs/ft³

Cell size in mm

Skin Types:
00 — Open Cell
01 — Standard Non Woven
10 — Standard Non Woven with Film Barrier
20 — Infusion Grade

T = Trimmed
U = Untrimmed
N = No scoring
S = Scoring

Part dimensions in inches (T x W x L)

PP Honeycomb Core Mechanical Properties

<table>
<thead>
<tr>
<th>CORE</th>
<th>CELL SIZE</th>
<th>DENSITY</th>
<th>FLATWISE TENSILE1</th>
<th>BARE COMPRESSION2</th>
<th>PLATE SHEAR3</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(in) (mm)</td>
<td>lb/ft³</td>
<td>psi</td>
<td>psi</td>
<td>psi</td>
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<td></td>
<td>kg/m³</td>
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<tr>
<td>PP1-5.0-N1-8</td>
<td>0.315 8</td>
<td>5 80.0</td>
<td>4.75 75.0</td>
<td>130 0.89</td>
<td>275 1.89</td>
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<tr>
<td></td>
<td></td>
<td>51 4.75</td>
<td>255 1.55</td>
<td>11.5 79.2</td>
<td>85 0.58</td>
</tr>
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<td>255 1.55</td>
<td>11.5 79.2</td>
<td>85 0.58</td>
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<td>PP1-4.0-N1-10</td>
<td>0.395 10</td>
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<td>140 0.96</td>
<td>10.5 72.3</td>
<td>60 0.41</td>
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<tr>
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<td>140 0.96</td>
<td>10.5 72.3</td>
<td>60 0.41</td>
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<td>60 0.41</td>
</tr>
</tbody>
</table>

1 Flatwise Tensile
Tested per ASTM C 393
Room Temperature cure epoxy used

2 Bare Compression
Tested per ASTM C 385

3 Plate Shear
Tested per ASTM C 273

The data provided is based on the testing of -01 (veil only) version of each core type.

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

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