Light, Strong, Tough, Cost-Effective

Plascore PP Honeycomb is a tough, lightweight and ductile polypropylene material that provides efficient and optimum mechanical performance in composite sandwich structures. PP Honeycomb is an excellent alternative to traditional core materials such as plywood, balsa and foam used in manufacturing consumer and industrial products.

Available in a wide range of sheet sizes and facings, PP Honeycomb is engineered for ease of use in many mainstream manufacturing processes, is readily available and can be modified to meet specific requirements for strength and stiffness. Plascore PP Honeycomb is used in many composite sandwich structures that require core shear, compression and adhesion performance. The unique cell structure, the use of a high impact copolymer PP and unique material processing contribute to its attractive performance levels.

Features

- Multi-axial structure provides isotropic performance
- Engineered raw materials for higher performance
- Uniform and uninterrupted cell structure
- Non woven surfacing is compatible with most resin systems
- Minimizes laminating resin for full wet out
-继续吸收能量，即使在最终极限之后

A World of Applications

Marine & Recreation – Easy to use in open or closed molding processes, PP Honeycomb offers a high strength-to-weight ratio that satisfies the demands of many applications. Boat decks, partitions, stringers, hatches and doors are just a few examples.

Transportation – PP Honeycomb when used in a thermoset or thermoplastic sandwich structure provides an economical, lightweight solution for doors, sidewalls, bulkheads and shelving.

Building Products – Providing structural support in a low cost, easy to use product is essential for many thermoset building product applications such as bath and shower, sub floors, walls and more.

Commercial – PP Honeycomb mechanical properties, moisture, chemical and impact resistance as well as vibration dampening offer improved performance benefit for indoor and outdoor industrial doors, platforms and covers.

Automotive – Load floors, package trays, spare tire covers, bolsters and pillars are just a few applications that utilize Plascore PP Honeycomb performance and processing features.
**PP polypropylene honeycomb is specified as follows:**

**Material - Cell Size - Color - Thickness**

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**PP Honeycomb Core Mechanical Properties**

<table>
<thead>
<tr>
<th>CORE</th>
<th>CELL SIZE</th>
<th>DENSITY</th>
<th>FLATWISE TENSILE(^1)</th>
<th>BARE COMPRESSION(^2)</th>
<th>PLATE SHEAR(^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>TYPICAL</td>
<td>MINIMUM</td>
<td>TYPICAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(psi)</td>
<td>(ksi)</td>
<td>(psi)</td>
</tr>
<tr>
<td></td>
<td>(in)</td>
<td>(mm)</td>
<td>kg/m³</td>
<td>lbs/ft³</td>
<td>psi</td>
</tr>
<tr>
<td>PP1-5.0-N1-8</td>
<td>0.315</td>
<td>8</td>
<td>80.0</td>
<td>4.75</td>
<td>130</td>
</tr>
<tr>
<td>PP1-4.0-N1-10</td>
<td>0.395</td>
<td>10</td>
<td>64.0</td>
<td>3.8</td>
<td>120</td>
</tr>
</tbody>
</table>

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

**Availability:**

- **Densities:** 3.5 to 20.0 pcf
- **Tolerances:**
  - **Length:** ± .125"
  - **Width:** ± .125"
  - **Thickness:** ± .02"
- **Core Cell Size:**
  - **Open Cell:** 0.315 in (8 mm)
  - **Standard Non Woven:** 0.395 in (10 mm)
  - **Open Cell:** 0.03 in
  - **Open Cell:** ± .03 in
  - **Density:** ± 10%

**Storage:**

- Store material flat and horizontal.
- Store material in a dry and covered area, protected from UV sunlight and extreme temperatures.
- Material may need to be dried prior to use if surface moisture is present.

**ISO-9001 Quality**

Plascore manufacturing standards meet or exceed North American and international industry requirements. Plascore, Inc. is ISO-9001 registered, employing Lean Principles throughout design, manufacturing and administration. In addition to our proprietary honeycomb manufacturing process, our value-added capabilities include adhesive development, CNC machining, powder coating, welding, thermostet and thermoplastic laminating and assembly. This extensive capability, along with Plascore JIT, Kanban and sequencing programs, allows us to maintain rigid quality standards on all components, control project scheduling and delivery in the manner best suited to the client’s specific needs.

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

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