TP Thermoplastic Panel

Description:

Plascore TP Panels are made from a Plascore Polypropylene (PP) Honeycomb core with Oriented or Random Chopped Glass reinforced polypropylene facing both sides.

PP Honeycomb density/cell size and facing thicknesses can be modified for specific performance needs. Various surface treatments can be applied for color, adhesive bonding and printing.

These Lightweight, Durable, Tough and Structural sandwich panels offer superior strength to weight ratios.

Features:

- Moisture and Chemical Resistance
- UV Resistance
- Vibration and Acoustical Dampening
- Thermoformable
- Recyclable
- Economical

Availability:

<table>
<thead>
<tr>
<th>Thickness:</th>
<th>1/4” – 5”</th>
<th>± .03”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length:</td>
<td>up to 144”</td>
<td>± 1/8’</td>
</tr>
<tr>
<td>Width:</td>
<td>up to 72”</td>
<td>± 1/8’</td>
</tr>
<tr>
<td>Finish:</td>
<td>Commercial (Bondable, Printable, Non Porous versions available)</td>
<td></td>
</tr>
</tbody>
</table>

NOTE: PP Honeycomb density/cell size and facing thicknesses can be modified for specific performance needs. Various surface treatments can be applied for color, adhesive bonding and printing.

Applications:

Ideal for doors, floors, walls, tables, platforms, packaging, pallets, dividers, etc.

Lightweight replacement for plywood and foam-cored panels.
Thermoplastic (TP) Panel is specified as follows:

Material - Cell Size - Color - Thickness

Example: PP1 - 5.0 - UV - 8 - 30 - T - N - 0.500 - 72.000 - 78.000

Material Type (PP) (Virgin Grade)

N = No scoring
S = Scoring

Cell size in mm

Material density in lbs/ft³

Part dimensions in inches (T x W x L)

Facing Types:
-30 — 0-90 Glass-PP
-32 — 0-90 Glass-PP with a bondable outer surface layer (Nonwoven or Film)
-50 — Chopped Glass-PP
-52 — Chopped Glass-PP with a bondable outer surface layer (Nonwoven)

1) Other facing thicknesses and weights available
2) Other PP Honeycomb densities available
3) Per ASTM C365 (Stablized)
4) Per ASTM C393 (4 pt 1/4 pt, 20" span)

Typical (TP) Panel Mechanical Properties

<table>
<thead>
<tr>
<th>PRODUCT ID</th>
<th>FACING TYPE</th>
<th>CORE TYPE</th>
<th>THICKNESS (INCHES)</th>
<th>WEIGHT (LBS/FT²)</th>
<th>COMPRESSION STRENGTH (PSI)</th>
<th>FLEXURAL RIGIDITY³ (EI/INCH-WIDTH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP1-5.0-UV-30</td>
<td>.02”T ¹ 0-90 GLASS-PP</td>
<td>PP HONEYCOMB 5 PCF²</td>
<td>0.25</td>
<td>0.36</td>
<td>275</td>
<td>1,100</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.50</td>
<td>0.46</td>
<td>275</td>
<td>4,400</td>
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<tr>
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<td></td>
<td></td>
<td>0.75</td>
<td>0.56</td>
<td>275</td>
<td>10,000</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>1.0</td>
<td>0.67</td>
<td>275</td>
<td>17,000</td>
</tr>
<tr>
<td>PP1-5.0-UV-50</td>
<td>.03”T ¹ CHOPPED GLASS-PP</td>
<td>PP HONEYCOMB 5 PCF²</td>
<td>0.5</td>
<td>0.5</td>
<td>275</td>
<td>2,850</td>
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<tr>
<td></td>
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<td></td>
<td>0.75</td>
<td>0.6</td>
<td>275</td>
<td>6,500</td>
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<tr>
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<td></td>
<td></td>
<td>1.0</td>
<td>0.7</td>
<td>275</td>
<td>11,000</td>
</tr>
</tbody>
</table>

¹ Other facing thicknesses and weights available
² Other PP Honeycomb densities available
³ Per ASTM C365 (Stablized)
⁴ Per ASTM C393 (4 pt 1/4 pt, 20" span)