AIREX® PXw is a closed-cell, fiber reinforced polymer foam panel with a special formulation and very high mechanical properties.

The sophisticated manufacturing process evenly distributes continuous glass fibers with woven fabrics throughout the foam. This generates a product with enhanced mechanical properties in flexure (bending), allowing it to be used with or without face sheets.

AIREX® PXw is dimensionally stable, does not lose strength when wet, and is resistant to chemicals and high temperatures. It is ideally suited as a material for static applications requiring high stiffness or as a replacement for wood and plywood.

**CHARACTERISTICS**

- Stand alone product – does not need face sheets
- High flexural strength and stiffness
- Replacement for wood and plywood
- Good fastener pull-out strength
- High heat resistance
- Compatible with a wide range of resins and adhesives
- Dimensionally stable
- High styrene resistance
- Very low water absorption
- Non biodegradable
- Excellent chemical resistance

**APPLICATIONS**

- **Wind energy:** Floors, soles, bulkheads, transoms, stringers, engine beds, interiors, local reinforcements, tooling and molds
- **Road and Rail:** Floors, sidewalls, roofs, engine covers, interior panels
- **Industrial:** Covers, tanks, containers, floors, tooling and molds, concrete pouring forms, architectural panels, tub and shower enclosures

**PROCESSING**

- Contact molding (hand/spray)
- Resin infusion / injection (VARTM / RTM)
- Adhesive bonding
- Pre-preg processing
- Processing molding (GMT)
The data provided gives approximate values for the nominal density. Due to density variations these values can be lower than indicated above. Minimum values to calculate sandwich constructions can be provided upon request.

The information contained herein is believed to be correct and to correspond to the latest state of scientific and technical knowledge. However, no warranty is made, either expressed or implied, regarding its accuracy or the results to be obtained from the use of such information. No statement is intended or should be construed as a recommendation to infringe any existing patent.

www.3ACcorematerials.com
### MECHANICAL PROPERTIES

<table>
<thead>
<tr>
<th>Typical properties for AIREX® PXw</th>
<th>Unit (imperial)</th>
<th>PXw.320</th>
<th>PXw.385</th>
<th>PXw.420</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>ASTM C-271</td>
<td>lb/ft³</td>
<td>20</td>
<td>24</td>
</tr>
<tr>
<td>Compressive strength perpendicular to the plane*</td>
<td>ASTM C-365</td>
<td>psi</td>
<td>214</td>
<td>445</td>
</tr>
<tr>
<td>Compressive modulus perpendicular to the plane*</td>
<td>ASTM C-365</td>
<td>psi</td>
<td>10'538</td>
<td>21'100</td>
</tr>
<tr>
<td>Shear strength</td>
<td>ASTM C-273</td>
<td>psi</td>
<td>125</td>
<td>255</td>
</tr>
<tr>
<td>Shear modulus</td>
<td>ASTM C-273</td>
<td>psi</td>
<td>6'330</td>
<td>12'040</td>
</tr>
<tr>
<td>Flexural strength*</td>
<td>ASTM D-790</td>
<td>psi</td>
<td>3'245</td>
<td>4'770</td>
</tr>
<tr>
<td>Flexural modulus*</td>
<td>ASTM D-790</td>
<td>psi</td>
<td>271'070</td>
<td>325'305</td>
</tr>
</tbody>
</table>

| Standard sheet                   | Width | in    | 48    | 48    | 48    |
|                                 | Length | in    | 96    | 96    | 96    |
|                                 | Thickness | in    | ¾ to 2 | ½ to 1 ¾ | ½ to 1 ¾ |

Finishing Options, other dimensions and closer tolerances upon request

* Evaluated on ¾” (20 mm) rigid sheet

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