### HOW TO USE THE CHART

HEXCEL offers a broad range of various laminate types for sports and industrial applications. This chart has been arranged to allow easy selection of a cured glass fibre epoxy laminate. To choose the most appropriate laminate for a particular application refer to mechanical properties and/or laminate thickness; this focuses on the smaller choice of laminates. Specific laminate information is available on individual data sheets. Please contact Hexcel for more information.

### Notes
- Matrix: Epoxy resin, hot cured
- Resin content: 25 - 50 % depending on reinforcement type and laminate type e.g. R-Type resin content < 35 %,
- Reinforcement: E-glass fibre, Bi- and unidirectional woven fabrics, Bidirectional carbon fabrics,
- UD-glass roving - 2400 tex, weight = fibre weight/m²
- Mechanical properties: measured in 0° - direction on sanded laminate.
- Surface grinding: EU-, EV-, R- and R-Kombi-Types are ground on both sides. VOEL-Types are ground on the laminate side. Unground laminates are available on request.
- Colours: VOEL: surface material - white pigmented paper 100 g/m²
- Glass Transition: EV, R, R-Kombi: These Laminates are available with epoxy systems - Tg 125°C.

### Polyspeed® Laminates

#### Selector Guide

<table>
<thead>
<tr>
<th>Type</th>
<th>Key Features</th>
<th>Thickness mm</th>
<th>Mechanical Properties</th>
<th>Reinforcement</th>
<th>Width mm</th>
<th>Glass Transition °C</th>
<th>Applications</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>Cured without pressure, single layer, uni- and bidirectional reinforcement</td>
<td>0.35 - 1.2</td>
<td></td>
<td>woven</td>
<td>38 - 1300</td>
<td>110</td>
<td>Ski Snowboard</td>
<td>EU</td>
</tr>
<tr>
<td>EV</td>
<td>Press cured, 1 - 3 layers, uni- and bidirectional reinforcement</td>
<td>0.35 - 1.8</td>
<td></td>
<td>woven glass</td>
<td>38 - 1300</td>
<td>125</td>
<td>Ski Snowboard</td>
<td>EV</td>
</tr>
<tr>
<td></td>
<td>Press cured, 1 layer, bidirectional</td>
<td>0.35</td>
<td></td>
<td>woven carbon</td>
<td>38 - 1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>Press cured, single layer, uni-directional, high mechanical properties, high fibre weights</td>
<td>0.4 - 1.8</td>
<td></td>
<td>UD</td>
<td>38 - 1300</td>
<td>125</td>
<td>Industrial</td>
<td>R</td>
</tr>
<tr>
<td>R-Kombi</td>
<td>Press cured, 2 - 3 layers, high fibre weights, high mechanical properties, UD glass fibre plus 1-2 layers of woven fabric</td>
<td>0.8 - 2.0</td>
<td></td>
<td>UD and woven</td>
<td>38 - 1300</td>
<td>125</td>
<td></td>
<td>R-Kombi</td>
</tr>
<tr>
<td>VOEL</td>
<td>Press cured, laminate with decorative epoxy paper surface (0.10/0.15 mm), uni- and bidirectional reinforcement</td>
<td>0.5 - 1.6</td>
<td></td>
<td>UD, woven</td>
<td>38 - 1300</td>
<td>125</td>
<td>Ski Snowboard</td>
<td>VOEL</td>
</tr>
</tbody>
</table>
Important
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- Structural Film Adhesives
- Honeycomb Sandwich Panels
- Engineered Core
- Reinforcement Fabrics

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