Physical Security Glass: Technical Specifications

We provide a wide range of laminated security glass products satisfying a diverse range of requirements including:

- BS EN 356
- DIN 52290

The standard product comprises two layers of annealed float glass bonded together with a 1.5mm thick polyvinyl butyral (PVB) interlayer. Enhanced security is achieved by increasing the number and/or thickness of glass layers and interlayers. Options can be provided with a “low spall” rear face to give maximum protection from flying glass splinters.

Typical applications include jewellery shops, display cases, and other vulnerable areas where the possibility of break-in exists.

Where enhanced security is required we would recommend the use of products meeting the more stringent requirements of BS EN 356. These products are normally constructed using glass clad polycarbonate which combine the chemical and abrasion resistance of glass with the impact resistance of polycarbonate. The key advantage over standard laminated glass products is that the weight of the glass is reduced whilst improving the level of protection.
**Intruder Resistance BS EN 356**

<table>
<thead>
<tr>
<th>BS EN 356</th>
<th>Drop Height mm</th>
<th>Number of Strikes</th>
<th>Impact Energy per Stroke J</th>
<th>Glass Thickness mm</th>
<th>Maximum Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1A</td>
<td>1500</td>
<td>3 in a Triangle</td>
<td>62</td>
<td>6.8</td>
<td>3210 x 2000mm</td>
</tr>
<tr>
<td>P2A</td>
<td>3000</td>
<td>3 in a Triangle</td>
<td>123</td>
<td>8.8</td>
<td>3210 x 2000mm</td>
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<tr>
<td>P3A</td>
<td>6000</td>
<td>3 in a Triangle</td>
<td>247</td>
<td>9.1</td>
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<tr>
<td>P4A</td>
<td>9000</td>
<td>3 in a Triangle</td>
<td>370</td>
<td>9.5</td>
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<tr>
<td>P5A</td>
<td>9000</td>
<td>3 x 3 in a Triangle</td>
<td>370</td>
<td>10.3</td>
<td>3210 x 2000mm</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BS EN 356</th>
<th>Sledge + Axe Min No Blows Required</th>
<th>Thickness mm</th>
<th>Weight Kg/m²</th>
<th>Construction</th>
<th>Maximum Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>P6B</td>
<td>31</td>
<td>18</td>
<td>42.4</td>
<td>Glass/PVB</td>
<td>3210 x 2000mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14</td>
<td>28.0</td>
<td>Glass/Poly/Glass</td>
<td>2500 x 1500mm</td>
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<tr>
<td>P7B</td>
<td>51</td>
<td>28</td>
<td>61.0</td>
<td>Glass/PVB</td>
<td>3210 x 2000mm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
<td>31.0</td>
<td>Glass/Poly/Glass</td>
<td>2500 x 1500mm</td>
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<tr>
<td>P8B</td>
<td>71</td>
<td>36</td>
<td>77.0</td>
<td>Glass/PVB</td>
<td>3210 x 2000mm</td>
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<tr>
<td></td>
<td></td>
<td>18</td>
<td>34.0</td>
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**Maximum sizes**
- Standard laminated glass 3210 x 2000
- Glass Clad Polycarbonate 2500 x 1500

**Options**
- Tinted/solar control
- Romag California Series
- Reflective Glass
- Curved Glass

**Special Requirements**
- Sizes outside the above standard may be available
- Double glazed units
- Water white glass
- Alarm glazing (Detectaglaze)

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The attached information is intended as a guide to the technical details on Romag’s products. The information may be incorrect or incomplete. For more detailed information relating to specific applications, please contact Romag’s technical department.

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**Product Notes**

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