**BALLISTIC GLAZING - LEVEL 2**

Hygard BR1000 ballistic grade sheet is a 1.000˝, 4-ply polycarbonate laminate that meets the UL 752 Level 2 rating for .357 Magnum ballistic attack and HP White TP 0500 Level IV. Unlike glass-clad products, this all-polycarbonate laminate resists spalling and white-out after repeated high force and ballistic impacts, an advantage in maintaining visibility of a threat during an attack. All Hygard products incorporate TUFFAK polycarbonate sheet produced for high optical quality in security glazing laminates. Exterior surfaces have a proprietary TUFFAK AR hardcoat that facilitates cleaning and resists marring, chemical attack, and graffiti. Hygard BR1000 sheet has a seven (7) year Limited Product Warranty against coating failure, yellowing, and hazing. The terms of the warranty are available upon request.

**APPLICATIONS**

Government and detention facilities, banks, specialty retailers, 24 hour convenience stores, cash transaction windows

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### Typical Properties*

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge / Tolerance</td>
<td>1.05 in ± 5%</td>
</tr>
<tr>
<td>Weight</td>
<td>6.5 lbs / sq ft</td>
</tr>
<tr>
<td>Shading Coefficient</td>
<td>0.85</td>
</tr>
<tr>
<td>U-Value</td>
<td>0.60</td>
</tr>
<tr>
<td>Light Transmission</td>
<td>72%</td>
</tr>
</tbody>
</table>

*Typical properties are not intended for specification purposes*

### Product Performance Ratings

**BALLISTIC**

UL 752 Level 2 (.357 Magnum jacketed lead soft point)

**FORCED ENTRY & CONTAINMENT**

ASTM F 1233.08 Class 5 Body Passage
ASTM F 1233.08 Class 2.4 Contraband Passage
ASTM F 1915.03 Grade 1
H.P. White TP 0500.03 Level IV Sequence 43

**AGENCY INFORMATION**

Combustibility Class CC1
Florida Building Code 2017, 6th Ed.
Miami-Dade NOA
UL File: BP6864

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*Hygard® BR1000 polycarbonate sheet*
Hygard BR1000 polycarbonate sheet

Glazing recommendations
» Structural security framing systems with equal or greater forced entry and/or ballistics ratings as the selected Hygard® laminate are recommended
» Hygard laminate should be cut to allow for a minimum of one (1) inch edge engagement in the frame, with sufficient rabbet depth for material expansion (approx. 1/16˝/ft.)
» Use wet or dry sealants/gaskets that are compatible with polycarbonate
» Remove protective masking after glazing operations are completed and before prolonged exposure to direct sunlight, moisture, or high temperature

Standard sheet size
48” x 60”, 48” x 72”, 38” x 78”, 38” x 96”, 48” x 96”, 60” x 72”, 60” x 96”

Product specification
Hygard BR1000 polycarbonate laminate:
» Four-ply, clear TUFFAK polycarbonate sheet constructed as follows:
  - 1/8˝ TUFFAK AR-1 abrasion resistant surface
  - Polyurethane bonding interlayer
  - 3/8˝ TUFFAK polycarbonate sheet
  - Polyurethane bonding interlayer
  - 3/8˝ TUFFAK polycarbonate sheet
  - Polyurethane bonding interlayer
  - 1/8˝ TUFFAK AR-1 abrasion resistant surface