**Fire-Rated or Fire/Impact Safety-Rated Insulated Glass Unit (IGU)**

**Fire-Rating: 20-180 Minutes**

FireLite IGU is composed of FireLite glass ceramic products and tempered or annealed float glass. Make-ups that achieve 3-hour fire ratings must be specified with FireLite NT or FireLite Plus®.

**FEATURES**

- ultraHD® Technology for improved surface quality, clarity and color
- Fire-rated for up to 180 minutes with required hose stream test
- Available in two surface grades: Premium and Standard
- Clear and wireless glass ceramic
- Impact safety-rated—meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- Typical 1” thickness fits in Fireframes® Designer Series or Fireframes Hardwood Series from TGP, or standard fire-rated frames (variable thicknesses available)

**Note:** This product is not a barrier to radiant heat, as it does not meet test standards ASTM E119 or UL 263. If your jurisdiction requires a “barrier to heat” product, please contact TGP regarding Pilkington Pyrostop®.

**SURFACE GRADES**

- **Standard Grade** - Polished for a surface quality that is comparable to alternative fire-rated ceramics marketed as having a premium finish.
- **Premium Grade** - Finish ground and polished on both surfaces to provide superior surface quality, improving overall clarity and providing a surface that is unmatched by alternative products.

**LISTINGS/STANDARDS**

Classified and labeled by Underwriters Laboratories, Inc.® and Underwriters Laboratories of Canada. File number for labeled fire-rated assemblies is R13377. Tests performed in accordance with:

- UL 9 NFPA 80 CAN4 S-104 LARR 25798
- UL 10B NFPA 252 CAN4 S-106
- UL 10C NFPA 257

fireglass.com 800.426.0279
**MAXIMUM EXPOSED AREA**

<table>
<thead>
<tr>
<th>RATING</th>
<th>ASSEMBLY</th>
<th>MAX. EXPOSED AREA</th>
<th>MAX. WIDTH OF EXPOSED GLAZING</th>
<th>OR</th>
<th>MAX. HEIGHT OF EXPOSED GLAZING</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 to 60 min.</td>
<td>DOORS (non-temp rise)</td>
<td>3,204 in² / 22.25 ft² (2.07 m²)</td>
<td>36” (914 mm)</td>
<td>89” (2,260 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DOORS (temp rise)</td>
<td>100 in² / 0.69 ft² (.06 m²)</td>
<td>12” (304 mm)</td>
<td>33” (838 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OTHER THAN DOORS</td>
<td>3,325 in² / 23.09 ft² (2.15 m²)</td>
<td>95” (2,413 mm)</td>
<td>95” (2,413 mm)</td>
<td></td>
</tr>
<tr>
<td>90 min.</td>
<td>DOORS (non-temp rise)</td>
<td>2,034 in² / 14.13 ft² (1.31 m²)</td>
<td>36” (914 mm)</td>
<td>56-1/2” (1,435 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DOORS (temp rise)</td>
<td>100 in² / 0.69 ft² (.06 m²)</td>
<td>12” (304 mm)</td>
<td>33” (838 mm)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OTHER THAN DOORS</td>
<td>2,627 in² / 18.24 ft² (1.69 m²)</td>
<td>56-1/2” (1,435 mm)</td>
<td>56-1/2” (1,435 mm)</td>
<td></td>
</tr>
<tr>
<td>180 min.</td>
<td>DOORS</td>
<td>100 in² / 0.69 ft² (.06 m²)</td>
<td>12” (304 mm)</td>
<td>33” (838 mm)</td>
<td></td>
</tr>
</tbody>
</table>

Check with frame manufacturer for maximum tested glass sizes and required stop height.
Note: Individual lite sizes cannot exceed “Max. Exposed Area” shown above.

**MAXIMUM SHEET SIZE**

<table>
<thead>
<tr>
<th>SURFACE FINISH</th>
<th>PREMIUM</th>
<th>STANDARD</th>
<th>OBSCURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>48” x 96”</td>
<td>48” x 96”</td>
<td>36” x 96”</td>
<td>(1.21 m x 2.43 m)</td>
</tr>
</tbody>
</table>

**GENERAL CHARACTERISTICS**

**U-VALUE**

- Similar to standard insulating units with a make-up of 1/4” float glass - 1/2” air space - 1/4” float glass (6.4 mm float glass - 12.7 mm air space - 6.4 mm float glass)
  - Summer U-value: Approximately .55*
  - Winter U-value: Approximately .49*

  *U-values increase with use of high performance float glass products

**STC RATING**

- 3/16” (5 mm) FireLite
- 3/16” (5 mm) FireLiteNT
- 5/16” (8 mm) FireLite Plus

<table>
<thead>
<tr>
<th>STC RATING</th>
<th>MAX. EXPOSED AREA</th>
<th>MAX. WIDTH OF EXPOSED GLAZING</th>
<th>OR</th>
<th>MAX. HEIGHT OF EXPOSED GLAZING</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/16”</td>
<td>9/16” (14.23 mm) air space</td>
<td>1/4” (6.4 mm) float glass</td>
<td>35**</td>
<td>35**</td>
</tr>
<tr>
<td>3/16”</td>
<td>9/16” (14.23 mm) air space</td>
<td>1/4” (6.4 mm) float glass</td>
<td>35**</td>
<td>38**</td>
</tr>
<tr>
<td>5/16”</td>
<td>9/16” (14.23 mm) air space</td>
<td>1/4” (6.4 mm) float glass</td>
<td>35**</td>
<td>38**</td>
</tr>
</tbody>
</table>

**LABELING**

Each unit of FireLite IGU shall be permanently labeled with the FireLite IGU logo, UL logo and fire rating.
**INSTALLATION**

FireLite IGU shall be glazed into the appropriate fire-rated framing with an approved glazing compound (closed cell PVC tape) as supplied by the installer. For 90 minute ratings that exceed 1,393 in\(^2\) (8.987 m\(^2\)) FireLite IGU shall be glazed with fire-rated glazing tape as supplied by TGP.

**Note:** Pure silicone can be used for a cap seal or cap bead

Inspect each piece of FireLite IGU immediately before installation and eliminate any with observable edge damage or face imperfections. As with any glass produced by the “roll out” method, individual pieces of FireLite IGU may contain minimal variations in thickness. Occasionally, process marks and small occlusions or seeds (bubbles, knots or crystals) may be apparent. However, since they do not generally impair the transparency or affect the technical performance of the glass, they do not represent cause for rejection.

**STORAGE & HANDLING**

FireLite IGU must be handled with care during transportation, storage, inspection and installation. Store in a dry place.

**FAMILY OF PRODUCTS**

TGP offers a complete family of products for all your fire-rated glazing needs, ranging from 20 minute to 3 hour applications. More information is available online at fireglass.com, or by calling 800.426.0279.

- **Fireglass®20**
  Fire-rated, impact safety-rated glass

- **FireLite®**
  Fire-rated glass ceramic

- **FireLite® NT**
  Fire-rated, impact safety-rated glass ceramic with surface-applied film

- **FireLite Plus®**
  Fire-rated, impact safety-rated glass ceramic

- **FireLite® IGU**
  Fire-rated or fire/impact safety-rated insulated glass units

- **Pilkington Pyrostop®**
  Fire-rated, impact safety-rated transparent wall panels

- **WireLite®**
  Fire-rated, wired glass

- **WireLite® NT**
  Fire-rated, impact safety-rated wired glass with surface-applied film

- **Fireframes®**
  Fire-rated framing & doors for use with all TGP glass products