



# FIRE-RATED OR FIRE/IMPACT SAFETY-RATED INSULATED GLASS UNIT (IGU)

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)
- · Withstands thermal shock
- · Large sizes available

- Typical 1" thickness fits in Fireframes®
   Designer Series or standard fire-rated frames (variable thicknesses available)
- Available incorporating a variety of glass products, including (but not limited to): Tinted; Art Glass; One-Way Mirror; Low-E; Reflective; Lead Glass (X-Ray)
- May be lightly sandblasted or etched on one side without affecting fire rating
- 10-year limited warranty



BIM 3D Model



Fire-Rated



Hose Stream Tested



Positive Pressure Tested



**Energy Efficient** 



Impact-Rated



UL Classified & Labeled



MOST SPECIFIED
FIRE-RATED GLASS COMPANY

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  | CAN/ULC-S104 | LARR 25798 |
|--------|----------|--------------|------------|
| UL 10B | NFPA 252 | CAN/ULC-S106 |            |
| UL 10C | NFPA 257 |              |            |







# **MAXIMUM EXPOSED AREA**

| RATING        | ASSEMBLY   | MAX. EXPOSED AREA  | MAX. WIDTH OF EXPOSED GLAZING                      | MAX. HEIGHT OF EXPOSED GLAZING                           |
|---------------|--|--|--|--|
| 20 to 60 min. | DOORS (non-temp rise) DOORS (temp rise) OTHER THAN DOORS | 3,204 in <sup>2</sup> / 22.25 ft <sup>2</sup> (2.07 m <sup>2</sup> )<br>100 in <sup>2</sup> / 0.69 ft <sup>2</sup> (.06 m <sup>2</sup> )<br>3,325 in <sup>2</sup> / 23.09 ft <sup>2</sup> (2.15 m <sup>2</sup> ) | 36" (914 mm)<br>12" (304 mm)<br>95" (2,413 mm)     | 89" (2,260 mm)<br>33" (838 mm)<br>95" (2,413 mm)         |
| 90 min.       | DOORS (non-temp rise) DOORS (temp rise) OTHER THAN DOORS | $2,034  \text{in}^2 /  14.13  \text{ft}^2  (1.31  \text{m}^2)$ $100  \text{in}^2 /  0.69  \text{ft}^2  (.06  \text{m}^2)$ $2,627  \text{in}^2 /  18.24  \text{ft}^2  (1.69  \text{m}^2)$                         | 36" (914 mm)<br>12" (304 mm)<br>56-1/2" (1,435 mm) | 56-1/2" (1,435 mm)<br>33" (838 mm)<br>56-1/2" (1,435 mm) |
| 180 min.      | DOORS  | 100 in² / 0.69 ft² (.06 m²)  | 12" (304 mm)                                       | 33" (838 mm)   |

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

# GENERAL CHARACTERISTICS

| 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)  U-VALUE  Summer U-value: Approximately .55*  Winter U-value: Approximately .49* |  |   |                      |  |  |
| STC RATING              | 3/16" (5 mm) FireLite<br>3/16" (5 mm) FireLite NT<br>5/16" (8 mm) FireLite Plus   | 9/16" (14.23 mm) air space<br>9/16" (14.23 mm) air space<br>9/16" (14.23 mm) air space | 1/4" (6.4 mm) float glass<br>1/4" (6.4 mm) float glass<br>1/4" (6.4 mm) float glass | 35**<br>35**<br>38** |  |  |

<sup>\*</sup>U-values increase with use of high performance float glass products

## **LABELING**

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





 $<sup>\</sup>ensuremath{^{**}}\xspace\ensuremath{^{\mathsf{Values}}}\xspace$  were not achieved with these specific make ups





### **MAXIMUM SHEET SIZE**

 SURFACE FINISH
 Premium
 Standard
 Obscure

 48" x 96"
 48" x 96"
 36" x 96"

 (1.21 m x 2.43 m)
 (1.21 m x 2.43 m)
 (.91 m x 2.43 m)

### **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<sup>2</sup> (.8987 m<sup>2</sup>) 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.

Detail based on use of Fireframes Designer Series narrow profile framing

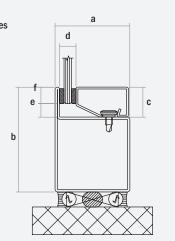
Glazing Thickness: 3/16" - 1" (5 mm - 25.4 mm)

a. Frame width: 2" (51 mm)b. Frame height: 2-3/4" (70 mm)

 c. Stop height: 3/4" (19 mm)
 d. Pocket width: 1/2" - 1-1/4" 12.7 mm x 31.8 mm)

e. Edge clearance: 1/4" (6.4 mm)

f. Bite: 1/2" (12.7 mm)



### **STORAGE & HANDLING**

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

