

# PYRAN® Star fire-rated glass-ceramic

## Product Information

PYRAN® Star is a transparent fire-rated glass-ceramic for architectural application produced using SCHOTT's rolling process.

PYRAN® Star fire-rated glass-ceramics are certified by Underwriters Laboratories for fire-protection ratings up to 90 minutes in windows and 180 minutes in doors. For safety-rated applications, filmed and laminated versions are available.











### General Characteristics

- Transparent, wireless
- Withstands thermal shock (hose-stream tested)
- Approximate visible light transmission: 87 percent
- Surface finish: Standard with a slight texture
- Maximum sheet sizes: Approximately 1,954 x 1,100 mm
- Suited for use with standard fire-rated frames with the same rating
- Conforms to positive pressure test standards

### Product overview

PYRAN® Star fire-rated glass ceramics are available in three product types:

| Product type              | Design  | Thickness | Performance   |
|---------------------------|---|-----------|---|
| PYRAN® Star               | Monolithic glass-ceramic                                  | 5 mm      |     |
| PYRAN® Star F (filmed)    | Monolithic glass-ceramic with surface applied safety film | 5 mm      |    |
| PYRAN® Star L (laminated) | Two glass-ceramic lites with 1 mm interlayer              | 9 mm      |    |

All three product types are certified by Underwriters Laboratories for use in fire-rated windows. Both PYRAN® Star F and PYRAN® Star L meet CPSC impact requirements for safety-rated applications according to ANSI Z 97.1 and CPSC 16 CFR 1201 (Cat. I and II).



Fire-rated



Hose-Stream tested



Impact-safety rated

## UL-Listings

| Rating  | Locations                       | Max. Exposed area of glazing (m <sup>2</sup> ) | Max. width of exposed glazing (mm) | Max. height of exposed glazing (mm) | Min. depth of glazing channel (mm) |
|---|---------------------------------|--|------------------------------------|-------------------------------------|------------------------------------|
| Applying for PYRAN® Star, PYRAN® Star F & PYRAN® Star L |                                 |  |                                    |                                     |                                    |
| Up to 90  | Other than doors                | 2.06   | 1,930                              | 1,930                               | 15.9                               |
| Up to 90  | Doors temp rise                 | 0.06   | 304                                | 838                                 | 15.9                               |
| Up to 90  | Doors non-temp rise             | 1.77   | 914                                | 1,930                               | 15.9                               |
| Applying for PYRAN® Star F & PYRAN® Star L              |                                 |  |                                    |                                     |                                    |
| Up to 180   | Doors temp rise / non-temp rise | 0.06   | 304                                | 304                                 | 12.7                               |

All fire tests performed in accordance with UL9, UL10B, UL10C, UBC7-2 (1997), UBC7-4 (1997), NFPA252, NFPA257, NFPA80, ASTM E2010-01, ASTM E2074-00, ULCCAN4-S104 and ULCCAN4-S106.

Note: This product is not considered a barrier to radiant heat and does not meet the ASTM E-119 or UL 263 test standards. All listing information is subject to change. The current listing can be accessed in the UL directory under file #R22036 or upon request from SCHOTT.

### Processing & Labeling

PYRAN® Star is available in stock sheets or cut to size. Customers processing these products need to be UL certified with SCHOTT's endorsement. After cutting, each lite of PYRAN® Star fire-rated glass-ceramic shall be permanently labeled according to code requirements with product and manufacturer's name, UL Mark, fire rating, etc.

### Installation

PYRAN® Star shall only be installed into fire-rated frame and window assemblies carrying the same rating. Each PYRAN® Star panel should be inspected carefully before installation, and any pieces with visible edge or surface damage should be sorted out. All glazing components and the stop height must be chosen according to the PYRAN® Star UL classification. The panel must be placed on calcium silicate setting blocks and glazed using PYRAN® Star classified glazing tape, such as closed cell PVC, Fiberfrax tape or Pemko FG3000S90. The installation of the framed unit must comply with the frame supplier's instructions.

PYRAN® Star is a specially developed glass-ceramic that fulfills fire-protection rated glazing requirements. The production process may create certain optical imperfections, such as bubbles or knots. Since these do not generally impair the transparency or the technical performance of the glass-ceramic, they do not represent cause for rejection or replacement. For further details please ask for the delivery specification.

### Storage & Handling

PYRAN® Star fire-rated glass-ceramic should be handled with care during transportation, storage, inspection, and installation. It should be stored in dry conditions only and needs to be stacked upright or at a slight angle with support along the entire length of the bottom edge. In addition, the panels must be separated by an appropriate material, such as soft cork pads for PYRAN® Star and PYRAN® Star L and acid-free tissue paper (or cork pads only in the outer perimeter) for PYRAN Star F.

### Maintenance & Care

To maintain the aesthetics, it is important to keep the panel clean. A soft, clean, non-abrasive cloth and a mild soap, detergent, or non-abrasive window cleaning solution is suitable for cleaning. After cleaning, rinse immediately with clean water and remove any excess water from the panel surface. Also, do not allow any metal or sharp components of the cleaning equipment to come in contact with the panel surface.

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