

## FIRE-RATED, GLASS CERAMIC FOR UP TO 2-HOUR ASSEMBLIES WHEN USED WITH TYCO WS SPECIFIC APPLICATION WINDOW SPRINKLERS

FireLite Plus® WS is a nominal 5/16" (8 mm) thick laminated glazing material listed for use in doors, sidelites, transoms and borrowed lites. When acceptable to the local Authority Having Jurisdiction (AHJ), FireLite Plus WS may be used in combination with TYCO Model WS Window Sprinklers as an alternative to fire rated assemblies requiring a 2-hour rating. Unlike tempered glass, using FireLite Plus WS glazing eliminates TYCO's WS Special Application Sprinkler requirement for keeping combustible materials a minimum of 2" from the glass face (typically accomplished by incorporating a minimum 36" ponywall).



**FIRE RATING**  
UP TO 120 MINUTES



**ultraHD**  
TECHNOLOGY

### FEATURES

- Can be used with TYCO Model WS Window Sprinklers as an alternative to a fire-rated assembly when acceptable to the AHJ
- Clear and wireless glass ceramic
- May be butt-glazed allowing longer spans of uninterrupted glass free of vertical frames
- Installs into non-combustible frames with a standard EPDM rubber gasket seal
- May be lightly sandblasted or etched on one side without affecting fire rating
- Available in two surface grades: Premium and Standard
- Impact safety-rated-meets ANSI Z97.1 and CPSC 16 CFR1201 (Cat. I and II)
- ultraHD® Technology for improved surface quality, clarity and color
- Protects from fire and impact on both sides of the glass
- Withstands thermal shock
- May be insulated (see FireLite IGU fact sheet)
- 5-year limited FireLite Plus warranty

### DOCUMENTATION\* AND USE

TYCO Model WS Window Sprinklers are the first to be specifically listed to provide complete wetting and coverage for FireLite Plus WS glass for windows and glazing using closed sprinklers. As part of the sprinkler testing, the gas flow required to achieve the time/temperature relationship specified in ASTM E119 was established in a test furnace. A window assembly protected with the TYCO Model WS Window Sprinklers was then installed in the test furnace, and the same gas flow conditions were maintained for a two-hour test period. No cracking or visible damage to the window was permitted during the test period, even when a hose stream was directed at the window.

The Model WS Window Sprinkler and FireLite Plus WS glazing can be used as interior protection of windows or glazing in a sprinklered or non-sprinklered building in accordance with Section 104 of the International Building Code (IBC) ("Alternate Materials, Design and Methods of Construction and Equipment"). TYCO Model WS Window Sprinkler and FireLite Plus WS glazing can be used as an open sprinkler for "Outside Sprinkler Protection against Exposure Fire", using the design requirements of NFPA.

\*Important: For complete information, application, detail drawings and design criteria, please refer to the TYCO Model WS product information document 'TFP 620' which may be found at [tyco-fire.com](http://tyco-fire.com).

### 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.



BIM 3D Model



Fire-Rated



Hose Stream Tested



Positive Pressure Tested



Impacted Rated



UL Classified & Labeled



NORTH AMERICA'S  
**MOST SPECIFIED**  
FIRE-RATED GLASS COMPANY

## LISTINGS/STANDARDS

FireLite Plus (including FireLite Plus WS) is 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	MEA-290-90-M-6
UL 10B	NFPA 252	CAN/ULC-S106	LARR 25798
UL 10C	NFPA 257		

## MAXIMUM SHEET SIZE

When used with TYCO Model WS Window Sprinklers and acceptable to the AHJ, FireLite Plus WS may be used up to 36" x 96" (.91 m x .2.4 m) per piece.

## LABELING

Each piece of FireLite Plus WS shall be permanently labeled with the FireLite Plus WS logo, UL logo and listing number.

## LIABILITY DISCLAIMER

As with any specific fire-rated glazing and sprinkler application, the installation instructions for the glazing and sprinkler system must be precisely followed. If there are additional local or jurisdiction installation standards / codes for window sprinklers on glazed window systems, this document and the TYCO Model WS Sprinkler documentation does not relieve the designer / installer from these requirements. Consult your local AHJ to verify if or when these additional guidelines must be followed.

## SAMPLE DETAIL

For complete information, application, detail drawings and design criteria, please refer to the TYCO Model WS product information document 'TFP 620' which may be found at tyco-fire.com.

