**SPECIFICATION**

**SECTION 08 88 13: FIRE RATED GLAZING**

**SuperLite® I-XL 20-45 minute**

**SuperLite® I-XL IGU 20-45 minute**

## PART 1: GENERAL

### 1.01 SUMMARY

A. Section Includes: Fire rated glazing

1. SuperLite® I-XL patented, fire protective, safety rated, specialty tempered, radiant heat reducing glazing material for 20-45 minute interior and exterior applications.
2. Applications of fire rated glazing includes:
    a. Fire rated glazing as vision lites in door assemblies.
    b. Fire rated glazing as sidelites, transoms or openings in fire rated frames.

B. Related Sections:

1. Section 01 33 23: Shop Drawings, Product Data and Samples.
2. Section 08 80 00: Glazing.
3. Section 08 11 13: Hollow Metal Doors and Frames.
4. Section 08 11 16: Aluminum Doors and Frames.
5. Section 08 12 16.13: Fire-Rated Aluminum Frames.
6. Section 08 14 33: Stile and Rail Wood Doors.
7. Section 08 41 13.13: Fire-Rated Aluminum Framed Entrances and Storefronts.
8. Section 08 43 13.13: Fire-Rated Aluminum Storefronts.

### 1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM E152: Methods of Fire Tests of Door Assemblies.
2. ASTM E163: Methods of Fire Tests of Window Assemblies.
3. ASTM E2074-00: Methods of Fire Tests of Door Assemblies, including Positive Pressure Testing of Side-hinged and Pivoted Swinging Door Assemblies.
4. ASTM E2010-01: Standard Test for Positive Pressure of Fire Tests of Window Assemblies.
5. ASTM E546: Standard Test Method for Frost/Dew Point of Sealed Insulating Glass Units.
6. ASTM E2188: Standard Test Method for Testing Resistance to Fogging in Insulating Glass Units.
7. ASTM E2190: Standard Specification for Insulating Glass Unit Performance and Evaluation.

B. National Fire Protection Association (NFPA):

1. NFPA 80: Fire Doors and Windows.
2. NFPA 252: Fire Tests of Door Assemblies.
3. NFPA 257: Fire Tests of Window Assemblies.

C. Underwriters Laboratories, Inc. (UL):

1. UL 9: Standard for Safety of Fire Tests of Window Assemblies.
2. UL 10B: Standard for Safety of Fire Tests of Door Assemblies.
3. UL 10C: Standard for Safety of Positive Pressure Tests of Door Assemblies.

D. Consumer Product Safety Commission (CPSC):

1. CPSC 16 CFR 1201: Safety Standard for Architectural Glazing Materials.

E. American National Standards Institute (ANSI):

1. ANSI Z97.1: Safety Glazing Materials Used in Buildings Safety Performance Specifications and Methods of Test.

F. Glass Association of North America (GANA)

1. GANA – Glazing Manual.
2. FGMA – Sealant Manual.

G. [Insert requirement for federally funded projects:

1. Build America, Buy America Act.
2. Buy America Act.
3. Buy American Act.]

H. [Insert building code used by Authority Having Jurisdiction]

## 1.03 SYSTEM DESCRIPTION

A. Performance Requirements: Provide a fire rated glazing manufactured, fabricated and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.

1. Fire Rating: 20-45 minutes without hose stream. Use of SuperLite® I-XL and I-XL IGU 45 minute is subject to AHJ approval because it is fire tested without hose stream. SuperLite® I-XL is a directional product. SuperLite® I-XL IGU is a bi-directional product.
2. Fire protective, specialty tempered, heat reflective glass tested in accordance with NFPA 80, NFPA 252, NFPA 257, UL 9, UL 10B and UL 10C.
3. Testing Laboratory: Fire test shall be conducted by a nationally recognized independent testing laboratory.

B. Listings and Labels:

1. Fire rated glazing shall be under current follow-up service by a nationally recognized independent testing laboratory and maintain a current listing or certification. Assemblies shall be labeled in accordance with limits of listings.

## 1.04 SUBMITTALS

A. Submit listed submittals in accordance with Conditions of the Contract and Division 1 Submittal Procedure Section.

1. Shop Drawings: Submit shop drawings showing layout, profiles and product components.
2. Samples: Submit 12” x 12” glass samples.
3. Technical Information: Submit latest edition of manufacturer’s product data.

## 1.05 DELIVERY, STORAGE AND HANDLING

A. General: Comply with Division 1 Product Requirements Sections.

B. Ordering: Comply with manufacturer’s ordering instructions and lead-time requirements to avoid construction delays.

C. Delivery: Deliver materials to specified destinations in manufacturer’s

or distributor's packaging undamaged, complete with installation instructions.

D. Storage and Protection: Store off ground, under cover, protected from weather and construction activities.

## 1.06 PROJECT CONDITIONS

A. Field Measurements: Verify actual measurements for openings by field measurements before fabrication. Contractor to verify all dimensions and field measurements on shop drawings and coordinate fabrication schedule with construction progress to avoid construction delays.

## 1.07 WARRANTY

A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document.

1. Warranty Period for SuperLite® I-XL: Lifetime limited warranty from date of shipping
2. Warranty Period for SuperLite® I-XL IGU: 5-year limited warranty from date of shipping

# PART 2: PRODUCTS

## 2.01 FIRE RATED GLAZING

A. Material: SuperLite® I-XL and SuperLite® I-XL IGU 20-45 specialty tempered glazing with partial radiant heat protection.

1. Patented product, no known equal.

B. Manufacturer: SuperLite® I-XL and I-XL IGU as manufactured and distributed by SAFTI *FIRST*®.

1. Contact: 100 N Hill Drive, Suite 12, Brisbane, CA 94005; Telephone 888.653.3333; email info@safti.com; Web site www.safti.com.
2. Products distributed or manufactured by companies outside of the United States must be identified in any substitution request or product offerings. Products manufactured in the United States are preferred. Adhere to Buy America, Buy American, Build America Buy America standards when required.

C. Design Requirements: SuperLite® I-XL

1. Thickness: Must be 1/4” (6 mm) thick.
2. Weight: Must weigh 3.0 lbs./sq. ft.
3. Solar Heat Gain Coefficient: Must provide 0.70 SHGC.
4. Sound Transmission Rating: Must provide STC 28 rating.
5. Appearance: Must be specialty tempered float glass.
6. Visible Light Transmission: Must meet 0.82
7. Fire Rating: Must be fire rated from 20-45 minutes without hose stream and provide measurable radiant heat protection. This is a directional product that reflects radiant heat transfer from one side only.
8. Impact Safety Resistance: Must meet CPSC 16 CFR 1201 Cat. I & II.

D. Proprietary Products System: SuperLite® I -XL IGU

1. Thickness: Must be 3/4” (19 mm) thick.
2. Weight: Must weigh 6 lbs./sq. ft.
3. Appearance: Must be insulated specialty tempered float glass.
4. Fire Rating: Must be fire rated from 20-45 minutes without hose stream and provide measurable radiant heat protection.
5. Impact Safety Resistance: Must meet CPSC 16 CFR 1201 Cat. I & II

E. Manufacturer’s Fire Rated Glazing Material:

1. Each piece of fire-rated glazing material shall be labeled with a permanent logo including name of product, manufacturer, testing laboratory, fire rating period and safety glazing standards.
2. Glazing material installed in Hazardous Locations, subject to human impact, shall be certified and permanently labeled as meeting applicable requirements referenced in NFPA 80:

    a. CPSC 16 CFR 1201, Cat. I & II

F. Substitutions: No substitutions allowed.

## 2.02 MATERIALS

A. Glazing Accessories: Manufacturer recommended fire rated glazing accessory as follows:

1. Glazing tape: Use Firefrax tape, closed cell PVC or Pemko FG3000545 glazing tape.
2. Setting blocks: Use hardwood, rubber or calcium silicate setting block.
3. Cleaners, primers, sealers: type recommended by manufacturer of glass and gaskets.

## 2.03 RELATED PRODUCTS

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Note: Basis of design for fire rated framing system is GPX® Framing or GPX® SNAPCAP as manufactured by SAFTI *FIRST*®

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A. Glazing shall be installed in an equally rated framing system.

## 2.04 SOURCE QUALITY

A. Obtain fire rated glazing products from a single manufacturer.

B. Fabrication Dimensions: Fabricate to approved dimensions. The general contractor shall guarantee dimensions where practicable within required tolerances.

# PART 3: EXECUTION

## 3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data including product technical bulletins and installation instructions.

## 3.02 EXAMINATION

A. Site Verification of Conditions: Verify substrate conditions, have been previously installed under other sections, and are acceptable for product installation in accordance with manufacturer's instructions.

## 3.03 INSTALLATION

A. Installation shall be in strict accordance with the fire glazing material manufacturer's specifications. Field cutting or tampering is strictly prohibited.

## 3.04 CLEANING AND PROTECTION

A. Protect glass from contact with contaminating substances resulting from construction operations. Remove such substances by method approved by manufacturer.

B. Wash glass on both faces not more than four days prior to date schedule for inspections intended to establish date of Substantial Completion. Wash glass by method recommended by glass manufacturer.

C. Remove temporary coverings and protection of adjacent work areas.

D. Remove construction debris from project site and legally dispose of debris.

**END OF SECTION**

In the interest of continuous improvement of its product line, SAFTI *FIRST*® reserves the right to modify its products' composition, colors, textures, sizes, and other physical, performance attributes, and these guide specifications at any time. SAFTI *FIRST*® makes no expressed or implied warranties regarding content, errors, or omissions in the information presented. Specifications modified or rewritten not in conformance with manufacturer's standard processes, products, and procedures may void warranties and related remedies. © 2026 SAFTI *FIRST*®.

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