SPECIFICATION

SECTION 08 88 13: FIRE RATED GLAZING

SuperLite® II-XLB 120 minute and SuperLite® II-XLB 120 minute with Low-Iron Glass with GPX® Architectural Series Framing

PART 1: GENERAL

1.01 SUMMARY

A. Section Includes: Fire rated glazing

1. SuperLite® II-XLB 120 fire resistive, safety rated glazing material for interior and exterior applications.
2. Applications of fire rated glazing includes:
    a. Fire rated glazing as wall assemblies in GPX® Architectural Series Framing.
    b. Fire rated glazing in transparent wall applications in butt-glazed assemblies.

B. Related sections:

1. Section 01 33 23: Shop Drawings, Product Data and Samples.
2. Section 08 80 00: Glazing
3. Section 08 88 00: Special Function Glazing
4. Section 08 12 13: Hollow Metal Frames
5. Section 08 12 16: Aluminum Frames
6. Section 08 12 16.13: Fire-Rated Aluminum Frames
7. Section 08 14 33: Stile and Rail Wood Doors
8. Section 08 41 13.13: Fire-Rated Aluminum Framed Entrances and Storefronts
9. Section 08 43 13.13: Fire-Rated Aluminum Storefronts
10. Section 08 44 13: Glazed Aluminum Curtain Walls
11. Section 08 44 18: Glazed Steel Curtain Walls

1.02 REFERENCES

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

1. ASTM E119: Methods for Fire Tests of Building Construction and Materials.
2. ASTM E546: Standard Test Method for Frost/Dew Point of Sealed Insulating Glass Units.
3. ASTM E2188: Standard Test Method for Testing Resistance to Fogging in Insulating Glass Units.
4. ASTM E2190: Standard Specification for Insulating Glass Unit Performance and Evaluation.

B. Underwriters Laboratories, Inc. (UL):

1. UL 263: Fire Tests of Building Construction and Materials.

C. Standard Council of Canada:

1. ULC Standard CAN4-S101: Fire Tests of Building Construction and Materials.

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: 120 minutes with hose stream.

2. Fire resistive, safety rated glazing tested in accordance with ASTM E119, ANSI/UL 263.
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 services 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 layouts, 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 or distributor’s packaging.

D. Storage and Protection: Store off ground, under cover, protected from weather and construction activities. Avoid exposure to extreme temperatures by storing the specialty fire rated glass in a cool and dry location. To prevent damaging the glass or voiding the product warranty, storage within a conditioned space above 32°Fahrenheit (0°Celsius) and below 140°Fahrenheit (60°Celsius) is strongly recommended.

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: 5-year limited warranty from date of shipping.

PART 2: PRODUCTS

2.01 FIRE RATED GLAZING

A. Material: SuperLite® II-XLB 120 minute fire resistive glazing with hose stream with GPX® Architectural Series Framing.

B.

C. Manufacturer: SuperLite® II-XLB 120 and GPX® Architectural Series Framing 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; Website 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. Product manufactured in the United States are preferred. Adhere to Buy America, Buy American or the Build America Buy America standards when required.

D. Design Requirements:

1. Glass Make-up: Comprised of multiple lites of [clear tempered] [clear low-iron] with clear, fire resistive, intumescent interlayers in between.
2. Glass Thickness: 2-5/8"
3. Glass Weight: approx. 23.40 lbs./sq. ft.
4. Frame Profile: 2-1/2"
5. Frame Finishes: High performance fluoropolymer finishes by PPG, clear anodized, bronze anodized, black anodized, Decoral®, any species of wood veneer, ornamental metal, and more.
6. Dimensions: Must meet max. clear view area of 7,980 sq. in. not to exceed 133 in clear view height or width. Butt-glazed option available.
7. Appearance: Must be tint-free, optically clear fire rated glazing.

8. Visible Light Transmission: Must meet [0.755 with clear tempered] [0.865 with clear low-iron]
9. Sound Rating: Must meet STC 46/OITC 40
10. Fire Rating: Must be fire rated to 120 minutes with hose stream and meet ASTM E-119, ANSI/UL263, ULC CAN4-S101.
11. Impact Safety Resistance: CPSC 16 CFR 1201 Cat. I & II.
12. Thermal Performance: Must present U-Factor, Solar Heat Gain Coefficient and Visible Transmittance simulations performed in the NFRC CMA Modeling Application.
    a. SAFTI *FIRST*® can simulate the thermal performance of assemblies using approved glass and components available in the NFRC CMA database.
    b. Designers may request project-specific simulations or NFRC Bid Reports using sizes and configurations for that project. SAFTI *FIRST*® has an in-house NFRC ACE Individual that can help with these requests.
13. Customization: Decorative and other custom make-ups available. Please contact the manufacturer for more information.

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 materials installed in Hazardous Locations, subject to human impact, shall be certified and permanently labeled as meeting applicable requirements reference in NFPA 80:
    a. CPSC 16 CFR 1201 Cat. I & II
    b. ANSI Z97.1 Class A
3. For GPX® Architectural Series Framing, glazing tape is not required, but closed foam tape can be used. For GPX® EZ Framing, use 1/8" thick x 5/8" wide closed cell foam tape.
4. Use ¼" (+/-) high x 1-7/8" wide x 3" long hardwood or calcium silicate setting blocks.
5. For 1/4" butt-joint, use 1/8" x 1-1/2" wide FS Zero 3003 intumescent tape centered on the glass edge then fully cover the joint with a cure type silicone sealant.

F. Substitutions: No substitutions allowed.

2.02 MATERIALS

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

1. Glazing Tape: For GPX® Architectural Series Framing, glazing tape is not required, but closed foam tape can be used. For GPX® EZ Framing, use 1/8” thick x 5/8” wide closed cell foam tape.
2. Setting Blocks: Use ¼” (+/-) high x 1-7/8” wide x 3” long hardwood or calcium silicate setting blocks.
3. For 1/4” butt-joint, use 1/8” x 1-1/2” wide FS Zero 3003 intumescent tape centered on the glass edge then fully cover the joint with a cure type silicone sealant.
4. 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 as manufactured by SAFTI *FIRST*®

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

B. Pressure glazing is allowed.

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*®.

Last updated July 2026.