

Welcome to the SAFTI *FIRST*[®] Guide Specification System prepared as an aid to specifiers in preparing written construction documents. For specification assistance with specific product applications, please contact SAFTI *FIRST*[®]. To download an electronic copy, please visit www.safti.com.



SPECIFICATION

SECTION 08 8810: FIRE RATED GLASS & FRAMING

SuperLite[®] II-XLB 60 minute with GPX[®] Architectural Series Framing

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Fire rated glazing

1. SuperLite[®] II-XLB 60 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 3323: Shop Drawings, Product Data and Samples.
2. Section 08 8000: Glazing.
3. Section 08 5130: Steel Window.
4. Section 08 5110: Aluminum Windows.

1.02 REFERENCES

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

1. ASTM E119: Methods for Fire Tests of Building Construction and Materials.
- 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 263: Fire Tests of Building Construction and Materials.
- D. Standard Council of Canada:
1. ULC Standard CAN4-S101: Fire Tests of Building Construction and Materials.
- E. Consumer Product Safety Commission (CPSC):
1. CPSC 16 CFR 1201: Safety Standard for Architectural Glazing Materials.
- F. American National Standards Institute (ANSI):
1. ANSI Z97.1: Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test.
- G. Glass Association of North America (GANA)
1. GANA – Glazing Manual.
 2. FGMA – Sealant Manual.
- H. [American Recovery and Reinvestment Act
1. Section 1605, Title XVI Buy American Provision]
- I. [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: 60 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 approved by OSHA 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 12x12 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 and at temperature conditions recommended by manufacturer.

1.06 PROJECT CONDITIONS

A. Field Measurements: Verify actual measurements for openings by field measurements before fabrication. Show recorded measurements on shop drawings. Coordinate field measurements and fabrication schedule with construction progress to avoid construction delays.

1.07 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document. Manufacturer's warranty is not intended to limit other rights that the Owner may have under the Contract Documents.
1. Warranty Period: 5 years from date of shipping.

PART 2 PRODUCTS

2.01 FIRE RATED GLAZING ASSEMBLY

- A. Material: SuperLite® II-XLB 60 minute fire resistive glazing with hose stream with GPX® Architectural Series Framing.
- B. Manufacturer: SuperLite® II-XLB 60 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; Fax 888.653.4444; email info@safti.com; Web site www.safti.com.
 2. Fire rated glass and framing must be provided by a single-source, US manufacturer. Distributors of fire rated glass and framing are not to be considered as manufacturers.

C. Design Requirements:

1. Glass Make-up: Comprised of multiple lites of [clear tempered] [Starphire® Ultra-Clear Low-Iron Tempered Glass by PPG] with clear, fire resistive, intumescent interlayers in between.
2. Glass Thickness: 1-7/8"
3. Glass Weight: approx. 17.65 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 10,000 sq. in. not to exceed 125 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 [0.750 with clear tempered] [0.861 with Starphire®]
9. Fire Rating: Must be fire rated to 120 minutes with hose stream and meet ASTM E-119, ANSI/UL263, ULC CAN4-S101.
10. Impact Safety Resistance: CPSC 16 CFR 1201 Cat. I & II.
11. Customization: Decorative and other custom make-ups available. Please contact the manufacturer for more information.

D. 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

E. Substitutions: No substitutions allowed.

2.02 MATERIALS

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

1. Glazing with EPDM tape or other listed flame resistant gasket material and calcium silicate setting blocks.

2.03 RELATED PRODUCTS

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

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

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