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.

SAFTIFIRST®
FIRE RATED GLAZING SOLUTIONS

SPECIFICATION

SECTION 08 88 13: FIRE-RATED GLAZING

SuperClear® 45-HS (*patent pending*)

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Fire rated glazing

1. SuperClear® 45-HS fire protective, safety rated, clear glazing material.
2. Applications of fire rated glazing include:

   a. Fire rated glazing as vision lites in door assemblies.

   b. Fire rated glazing as sidelites, windows or transoms in fire rated frames.

B. Related Sections:

1. Section 01 3323: Shop Drawings, Product Data and Samples.
2. Section 08 80 00: Glazing
3. Section 08 88 00: Special Function Glazing
4. Section 08 11 13: Hollow Metal Doors and Frames
5. Section 08 11 16: Aluminum Doors and 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

1.02 REFERENCES

A. 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.

B. Underwriters Laboratories, Inc. (UL):

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

C. Standard Council of Canada (ULC):

1. ULC Standard CAN4-S104: Fire Tests of Door Assemblies.
2. ULC Standard CAN4-S106: Fire Tests of Window 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 Z91.1: Safety Glazing Materials Used in Buildings – Safety Performance Specifications and Methods of Test.

F. Canadian General Standards Board (CGSB):

1. CAN/CGSB 12.1: Safety Glazing

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 rating glazing manufactured, fabricated and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.
   1. Fire Rating: 45 minutes with hose stream.

2. Fire protective, safety rated clear glazing tested in accordance with NFPA 80, NFPA 252, NFPA 257, UL 9, UL 10B, UL 10C, CAN/ULC S104 and CAN/ULCS106.
3. Safety Rating: CPSC 16 CFR 1201 Category I and II, ANSI Z79.1 Class A and B and CGSB 12.1 Class A and B.
4. Maximum Sizes: Maximum clear view area for non-temperature rise 45 minute doors is 3,288 sq. in. (33 in width x 99-5/8 in. height). Maximum clear view area for 45-minute sidelites, openings and transoms when ASTM E-119/UL 263/ULC-S101 is not required is 3,880 sq. in. (96 in. width or height).
5. 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 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 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 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: Standard 5 year limited warranty.

PART 2 PRODUCTS

2.01 FIRE RATED GLAZING

A. Material: SuperClear® 45-HS 45 minute fire and safety rated glazing.
B. Manufacturer: SuperClear® 45-HS ¾" thick clear specialty fire protective glazing 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. Must be provided by a US manufacturer. Distributors of fire rated glass are not to be considered as manufacturers.

C. Design Requirements:
   1. Thickness: ¾" (19 mm).
   2. Weight: 9 lbs./sq. ft.
   3. Sound Transmission Rating: Must meet 37 STC/35 OITC in standard hollow metal frames. Glass and frame must be tested as an assembly. Glass only STC/OITC values are not acceptable.
   4. Appearance: clear, wireless and tint-free.
   5. Visual Light Transmission: Must meet 83% VLT for standard clear.
   6. Fire Rating: 45 minutes with hose stream.
   7. Impact Safety Resistance: Must meet CPSC 16 CFR 1201 Category I and II, ANSI Z91.1 Class A and B and CAN/CGSB 12.1 Class A and B.
   8. Customizations: Available in insulated and energy performance make-ups.

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 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 or II

E. Substitutions: No substitutions allowed.

2.02 MATERIALS

A. Glazing Accessories: Manufacturer recommended fire rated glazing accessory as follows:
   1. Glazing tape: closed cell PVC foam tape or neoprene tape.
   2. Setting blocks: calcium silicate or hardwood.
   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 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

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Last updated October 2021.