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SAFTIFIRST®
FIRE RATED GLAZING SOLUTIONS

SPECIFICATION
SECTION 08 11 03: HOLLOW METAL DOORS AND FRAMES
GPX® Builders Series Fire Protective

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Fire protective framing system.
   1. GPX® Builders Series Fire Protective 20-45 minute fire protective doors and openings for interior and exterior applications.
   2. Applications of fire protective framing includes:
      a. Vision lites in fire protective doors, fire protective openings, fire protective sidelites, borrowed lites, and transoms with fire rating requirements as specified.

B. Related Sections:
   1. Section 01 3323: Shop Drawings, Product Data and Samples.
   2. Section 08 8000: Glazing.
   3. Section 88 00: Special Function Glazing
   4. Section 08 88 13: Fire-Rated Glazing
   5. Section 08 41 13.13: Fire-Rated Aluminum Framed Entrances and Storefronts
   6. Section 08 71 00: Door Hardware

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 for Fire Tests of Window Assemblies.
   3. ASTM E2074: Standard Test Method for Fire Tests of Door Assemblies, including Positive Pressure Testing of Side-hinged and Pivoted Swinging Door Assemblies.
   4. ASTM E2010-1: Standard Test for Positive Pressure of Fire Tests of Window Assemblies.

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

D. 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.

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:
1. Fire Rating: must meet 20 or 45 minutes for fire protective doors and openings as specified.
2. Window Certifications: Window assemblies with ratings of less than 60 minutes may be tested in accordance with ASTM E2010-01, NFPA 80, NFPA 257, UL 9, CAN4-S106.
3. Door Certifications: Doors shall be tested in accordance with ASTM E2074-00, NFPA 80, NFPA 252, UL 10C, 10C, or CAN4-S104.
4. Testing Laboratory: Fire test must be conducted by a nationally recognized independent testing laboratory.
5. Glazing: Must use fire protective glazing less than 60 minutes up to the max. size tested. All glazing used in doors, sidelites and other hazardous locations must meet CPSC Cat. I or II impact safety.
6. Max. Door Opening Sizes: must meet maximum sizes of 54 in. x 120 in. for single doors and 108 in. x 120 in. for pair doors. No intermediate rails required. For max. door sizes, continuous hinges may be required.

B. Listings and Labels:
   1. Fire rated framing system 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 samples for finishes, colors and textures.
   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 FABRICATION DIMENSIONS

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.

PART 2 PRODUCTS

2.01 MANUFACTURERS – (FIRE PROTECTIVE DOOR) (FIRE PROTECTIVE OPENING)

A. Manufacturer of Framing System: GPX® Builders Series Fire Protective Framing as distributed by SAFTI *FIRST*® Fire Rated Glazing Solutions.
   1. Contact: 100 N Hill Drive, Suite 12, Brisbane, CA 94005; Telephone 888.653. 3333; email info@safti.com; Web site www.safti.com

B. Manufacturer of Glazing Material: (SuperLite ® I) (SuperClear® 45-HS) (SuperClear® 45- HS-LI) (SuperLite ® I IGU) (SuperLite® II-XL) (SuperLite® I-XL IGU) (SuperLite® II-XL 45) (SuperLite ® II-XL 45 IGU) (SuperLite X-45/60/90) as manufactured and distributed by SAFTI *FIRST*® Fire Rated Glazing Solutions.
   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

C. 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. Materials for the project should be shipped together in the same shipment on the same truck.

D. Substitutions: No substitutions allowed.

2.02 MATERIALS – FRAMING

A. Fire protective framing system for 20-45 minute doors and openings.

B. Properties:
   1. Constructed in accordance with the individual manufacturer's listings or in accordance with HMMA 861-06 and HMMA 850.
   2. Maximum door opening sizes are 54 in. x 120 in. for single doors and 96 in. x 120 in. for pair doors. No intermediate rails required. For max. door sizes, continuous hinges may be required.
   3. Standard door profile includes 5 in. rail and 2 in. frame. Narrow door profile includes 3- 3/4 in. rail and 1-1/8 in frame.
   4. 10 in. ADA compliant bottom rail (can be modified with AHJ approval).
   5. 4 to 5 in. door depth

2.03 MATERIALS – GLASS

A. Assemblies shall be glazed with SuperLite® glazing products.

B. Properties:
   1. Fire protective glazing less than 60 minutes up to the max. size tested.
   2. Individual Lites shall be permanently identified with a listing mark.

3. Glazing material installed in “Hazardous Locations” (subject to human impact) shall be certified to meet the applicable requirements for fire rated assemblies referenced in ANSI Z97.1 Standard for Safety Glazing Materials Used In Buildings and/or CPSC 16 CFR 1201 Safety Standard for Architectural Glazing Materials.
4. Visible daylight transmission: Varies by glazing type. Refer to SuperLite® product data for more information.
5. STC rating: Varies by glazing type. Refer to SuperLite® product data for more information.

C. Logo: Each piece of fire rated glazing shall be labeled with a permanent logo.

2.03 FABRICATION

A. Assemblies shall be furnished [knocked down for field assembly and will be glazed in the field] [assembled (should configurations and job site conditions allow)][unitized (should configurations and job site conditions allow)].

B. Door assemblies shall be factory prepared for field mounting of hardware.

C. Fabrication Dimensions: Fabricate to approved dimensions. The general contractor shall guarantee dimensions within required tolerance. Obtain approved shop drawings prior to fabrication.

2.04 FINISHES

A. Available with high performance Coraflon fluoropolymer finishes by PPG® or other custom finishes including stainless steel or aluminum clad.

2.05 DOOR HARDWARE FOR SINGLE AND PAIR DOORS

A. Hardware shall be supplied with the fire door. Hardware selection shall be from door manufacturer’s standard recommended hardware groups as specified below.

B. Provide high traffic areas of areas requiring a door motion force of greater than 15 lbs. with power assisted hardware for use with manufacturer’s frame system.

C. Standard operating hardware for standard profile single and pair doors. Please call manufacturer for narrow profile door hardware and custom hardware options (including but not limited to concealed rods, concealed closers, electric strike, etc.)

Quantity	Item	Description	Manufacturer	Finish
4	Hinges	Ball Bearing Heavy Duty Butt Hinges	PBB4B81	US26D

1	Panic Device	Heavy Duty Touch Bar Panic with Surface vertical Rods	Monarch F-25-V	US26D
1	Closing Device	Heavy-duty Surface Applied Closer	LCN 4040XP	Aluminum
1	Auto Door Bottoms	420APKL	Pemko	

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. Openings shall be plumb, square and within allowable tolerances. The Architect/Engineer shall be notified of any conditions that jeopardize the integrity of the proposed fire wall/door framing system. Do not proceed until such conditions are corrected.

3.03 INSTALLATION

A. Fire door/window installation shall be by a licensed contractor and in strict accordance with the approved shop drawings.

3.04 CLEANING AND PROTECTION

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

2. 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.

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

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

END OF SECTION

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