

SECTION 08675 - HORIZONTAL SLIDING STEEL INTERIOR FIRE WINDOW

1.01 SUMMARY

A. WORK INCLUDES:

1. Steel sliding counter windows/window wall with 45(60) minute fire rating.

B. RELATED SECTIONS:

1. Section 08100: Hollow steel doors and frames.
2. Section 08800: Glazing.
3. Section 09900: Painting.
4. Section 13850: Fire alarm and detection systems.

1.02 REFERENCES

- A. American National Standards Institute (ANSI) Z97.1- Safety Glazing Materials Used in Building-Safety Performance Specifications and Methods of test.
- B. American Society for Testing and Materials (ASTM):
 1. ASTM A366-Specification for Steel, Sheet, Carbon, Cold-rolled, Commercial Quality.
 2. ASTM C1036-Specification for Flat Glass.
 3. ASTM E163-Fire Tests of Window Assemblies.
- C. National Fire Protection Agency (NFPA) NFPA 257-Fire Tests of Window Assemblies.

1.03 SYSTEM DESCRIPTION

- A. DESIGN REQUIREMENTS: Provide 45 (60) minute fire rated steel sliding windows complying with the requirements of Underwriters Laboratories File #R19270, when tested in accordance with UL 10C and UBC 7-4 (1997).

1.04 SUBMITTALS

- A. PRODUCT DATA: Submit manufacturer's specifications, recommendations, standard details, including details on fabrication, finishing, glazing, accessories and other components of work.
- B. SHOP DRAWINGS: Submit shop drawings indicating opening dimensions, framed tolerances, affected related work, and installation requirements of window units and components.
- C. CERTIFICATES: Submit certification reports prepared by independent testing agency that system complies with specified requirements.

2.01 MANUFACTURER:

- A. For function and quality, the Drawings and Specifications are based on the Series 425 Horizontal Sliding Window as manufactured by:
 1. **Fire Windows & Doors:** 22850 Perry St., Perris, CA 92570.
Phone (951) 943-1780, Fax (951) 943-2894.

2.02 MATERIALS

- A. Cold-rolled steel sheets: ASTM 366, commercial quality carbon steel.
- B. PRIMER: Manufacturer's standard rust inhibiting primer, compatible with finish painting specified in Section 09900.
- C. GLASS: Provide labeled glass complying with the requirements of Section 08800. Each piece of glass to carry certification agency label.
- D. FASTENERS:
 1. Manufacturer's standard fasteners, compatible with steel window members, trim hardware, anchors and other components of window units.
 2. Provide concealed fasteners wherever possible.
 3. Provide exposed fasteners that match finish of member or hardware being fastened.
- E. HARDWARE:
 1. Manufacturer's standard latches on window interlock.
 2. OPTIONAL:
 - i. SELF-CLOSING DEVICE:
 - a. Provide automatic cable self-closing device that is capable of closing window vent from any position.
 - b. Device must be easily reset with no special equipment in less than 60 seconds after restoration of power.
 - ii. RELEASING DEVICE:
 - a. Provide reset able 24VDC Easy-Set Electric Link.
 - b. Provide 165-degree back-up fusible link integral to release system.
 - c. Provide manual test switch integrated into window frame.

- d. All electrical wiring shall be concealed but easily accessible without removing the frame from framed opening.
- e. Release system shall operate whenever power supply is interrupted; system must be fail-safe and require no battery back-up system.
- f. Each window frame to carry a permanent Underwrites Laboratories fire label specifying the manufactures name, type of fire label and label number.

2.03 MANUFACTURED UNITS

- A. Provide units containing horizontal sliding sash, with interlocking meeting stile.
- B. FRAME
 1. 16-gauge cold rolled steel head, jambs, and sill.
 2. Frame face dimensions to be 2".
 3. Frame depth to be a minimum of 5 7/8".
- C. MUNTINS: 1/8" hot rolled steel or 16 gauge cold rolled steel sheet.
- D. STOPS: Maximum stop height to be 5/8".
- E. CORNERS: Corners of frames and ventilators shall be coped or mitered and electrically welded; exposed welds shall be dressed smooth.
- F. TRACK: Knapp & Vogt 455 roller track, welded to frame.
- G. Provide steel ball bearing rollers in bottom rail of sliding section.
- H. GLAZING GASKETS: As required for fire ratings.

2.04 FABRICATION

- A. GENERAL
 1. Fabricate metal work neat in appearance and free from defects, warp or buckle.
 2. Accurately form metal to required sizes and profiles.
 3. Fabricate frames, concealed stiffeners, reinforcing, edge channels and other components from cold rolled steel.
 4. Prepare sash for factory or field glazing.
 5. Mortise, reinforce, drill and tap frames at factory to receive hardware.
 6. Identify assembly with factory applied labels indicating fire rating, company name, evaluation report number, serial number and inspection agency name and logo.
 7. Provide fixed and sliding panel with overlapped joints to prevent racking and provide positive seal.
 8. Maximum Glass Lite Size: 4608 square inches.

2.05 FINISH

- A. Clean, treat and prime surfaces of fabricated units.
- B. Clean steel surfaces free of mill scale, rust, oil, grease, dirt and other foreign materials before application of shop prime finish.
- C. Apply rust inhibiting primer to produce uniform smooth coat at minimum dry film thickness of 2.0 mils.

3.01 INSTALLATION

- A. Comply with manufacturer's specifications and recommendations for installation of window units, hardware, operators and other components of work.
- B. Do not install until finishing of concrete, masonry, or other operations harmful to glass are complete.
- C. Set units plumb, level and true to line without warp or rack of frames or sash.
- D. Anchor securely in place in accordance with manufacturer's requirements to maintain fire rated barrier.
- E. Anchors, attachments, and shims supplied by others.

3.02 ADJUSTING

- A. Adjust operating sash and hardware to provide tight fit at contact points and at gasketing for smooth operation.
- B. Lubricate hardware and moving parts, if necessary.
- C. Touch-up marred or abraded surfaces to match original finish.

3.03 CLEANING

- A. Clean steel and glass surfaces promptly after installation of windows.
- B. Avoid damages to protective coatings and finishes.

Fire Windows & Doors

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Dealer: