

**SECTION 08 3480**

**AUTOMATIC FABRIC SMOKE BARRIER ENCLOSURE**

**PART 1 - GENERAL**

**1.01 SUMMARY**

- A. Section Includes:
  - 1. Smoke detector-activated, fabric smoke barrier enclosure system.
  - 2. Self-closing without auxiliary power.
  - 3. Rectangular or polygon shaped enclosure system for horizontal penetrations or complex shaped vertical enclosures.
  - 4. Closed fabric bellows enclosure deployed from ceiling.
  - 5. Open fabric bellows enclosure connected to walls.
  
- B. Related Requirements:
  - 1. 08 3100–Access Panels.
  - 2. 09 2200– Load Bearing Header Framing
  - 3. 09 9100–Paint: Field painting of specified components.
  - 4. 28 3000–Detection and Alarm: Provision of smoke detectors.
  - 5. Division 26 Sections for 240V and control circuit power including conduit, boxes, conductors, wiring devices, and emergency power.

**1.02 REFERENCES**

- A. NFPA Codes and Standards:
  - 1. 70 – National Electrical Code.
  - 2. 72 – National Fire Alarm Code-2002 and 2007.
  
- B. UL Standards:
  - 1. 268 – Smoke Detectors for Fire Protective Signaling Systems.
  - 2. 864 – Control Units for Fire Protective Signaling Systems.

**1.03 SUSTAINABLE DESIGN REQUIREMENTS**

- A. LEED-NC: Comply with Section 01 8100 Sustainable Design Requirements including, without limitation, submittal and documentation requirements.
  
- B. Credit/Point Goals Applicable To This Section: In addition to global Project credit/point goals:
  - 1. Materials & Resources - Construction Waste Management
  - 2. Materials & Resources - Recycled Content
  - 3. Materials & Resources - Regional Materials
  - 4. Indoor Environmental Quality - Construction IAQ Management Plan

**1.04 SUBMITTALS**

- A. Comply with Section 01 3300–Submittal Procedures:
  - 1. Product Data.
  - 2. Shop Drawings:

- a. Include configuration layout and dimensions.
- b. Show and identify related work performed under other sections of the specifications.
3. Quality Assurance/Control Submittals:
  - a. Certifications.
  - b. Manufacturer's installation instructions and testing procedures.

#### 1.05 CLOSEOUT SUBMITTALS

- A. Comply with Section 01 7700–Project Closeout:
  1. Operation and Maintenance Manual.
  2. Manufacturer's Warranty

#### 1.06 QUALITY ASSURANCE

- A. Certifications:
  1. UL864 / UL1784 / ASTM E 84 / OSHPD CA Certificate / CAL FIRE Listing
- B. Pre-Installation Meeting:
  1. Schedule and convene a pre-installation meeting prior to commencement of field operations with representatives of the following in attendance: Owner, Architect, General Contractor, fire barrier system sub-contractor, and electrical sub-contractor.
  2. Review substrate conditions, requirements of related work, installation instructions, storage and handling procedures, and protection measures.
  3. Document responsibilities of various parties and deviations from specifications and installation instructions.

#### 1.07 DELIVERY, STORAGE, AND HANDLING

- A. Comply with Section 01 6600–Delivery, Storage, and Handling.
- B. Comply with manufacturer's instructions.

#### 1.08 WARRANTY

- A. Provide manufacturer's standard one year warranty.
- B. Maintenance and Testing:
  1. Perform minimum semi-annual maintenance and testing on each smoke containment system as required by the manufacturer's warranty, code agency evaluation reports, and as required by local authority having jurisdiction.
  2. Backup Battery: Tested per the Operation and Maintenance Manual.
  3. Provide test documentation.

### **PART 2 - PRODUCTS**

#### 2.01 MANUFACTURED UNITS

- A. Stoebich Smoke Curtain S
- B. Manufacturer:
  1. Stoebich Fire Protection,  
As distributed by Overhead Door Company of Portland; 503-252-5111

- C. Label each smoke barrier system with following information:
  - 1. Manufacturer's name.
  - 2. Label of quality control agency.

## 2.02 PERFORMANCE / DESIGN CRITERIA

- A. Test Operation and Fire Operation: By gravity, controlled by building fire alarm system signal and test switch.
  - 1. Raise Curtain after Test and After Fire Alarm: Power operated motor in roller.
  - 2. Reset After Test and After Fire Alarm: Automatic. No service call needed. No replacement parts needed.
- B. Maximum Opening Sizes (feet):
  - 1. 52.5 side length x up to 19.9 drop x up to 330 feet perimeter.
  - 2. Perimeter more than 164 feet, maximum drop of 11.5 feet.
  - 3. Perimeter less than 164 feet, maximum drop of 19.9 feet.
  - 4. Minimum leg length for open system is 5 feet.

## 2.03 COMPONENTS

- A. Curtain Fabric: Glass filament fabrics of glass fiber material coated on one side with a polyester polyurethane latex, with steel wire. Rectangular or polygon shaped base area of the closure. Creates corners without additional columns.
  - 1. Ecotex 1100
  - 2. Rating: DH 120, 120 minute assembly ( stands 2012°F over 120 minutes )
- B. Side Guide Assembly:
  - 1. Manufacturer's standard.
  - 2. Use special wall guide for open systems.
- C. Casing Type: Standard.
- D. Safety Unit: Manufacturer's standard attached to casing.
- E. Bottom Bar:
  - 1. Warp free, self leveling type sealed flush to ceiling.
- F. Closing System:
  - 1. Gravigen, fail safe operation.
  - 2. Provide a minimum of 2 drive units and one additional drive unit for each 32.8 feet of perimeter above 65.6 feet in length.
  - 3. 208-240V AC.
- G. Control System:
  - 1. Comply with UL Standard No. 864.
  - 2. RZ7 with battery backup.  
Hold open time 45 minutes ( RZ7 ).
- H. Finishes:

1. Galvanized, field finished as noted.

#### 2.04 FABRICATION

- A. Installation Configuration:
  1. Casings attached directly to ceiling above opening or layout.
  2. Provide wall guides for open type layout.
- B. Fabricate and install mounting brackets, hardware, and fasteners needed to attach curtain assembly to building structure.

### **PART 3 - EXECUTION**

#### 3.01 EXAMINATION

- A. Examine substrates upon which work will be installed.
  1. Verify related work performed under other sections is complete and in accordance with Shop Drawings.
  2. Verify wall surfaces are acceptable for installation of smoke containment system components.
- B. Coordinate with responsible entity to perform corrective work on unsatisfactory substrates.
- C. Coordinate electrical interface and connection with Division 26.
- D. Coordinate interface and connection with fire alarm system.
- E. Commencement of work by installer is acceptance of substrate.

#### 3.02 INSTALLATION

- A. Install smoke barrier system components in accordance with manufacturer's installation instructions.

#### 3.03 FIELD QUALITY CONTROL

- A. Field Test: Follow manufacturer's cycle test procedures.
  1. Notify Owner's Representative, local Fire Marshal and alarm sub-contractor minimum one week in advance of scheduled testing.
  2. Complete maintenance service record.

#### 3.04 DEMONSTRATION

- A. Demonstrate required testing and maintenance procedures to Owner's Representative.
- B. Screen Replacement Notice: Inform Owner's Representative that smoke containment screen requires replacement following exposure to temperatures exceeding 200 degrees F.

END OF SECTION