SPECIFICATION
Section 07900/079500
Previous 05800

Wabo®FireFlex
Horizontal and Vertical Fire Barrier System

PART 1 - GENERAL

1.01 Work Included

A. The work shall consist of furnishing and installing fire barrier assemblies in accordance with the details shown on the plans and the requirements of the specifications. The fire barrier assemblies are proprietary designs utilizing pre-engineered components and materials tested to meet a required fire endurance rating expressed in hours.

B. Related Work
- Cast-in-place concrete
- Miscellaneous and ornamental metals
- Flashing and sheet metal

1.02 Submittals

A. Template Drawings - Submit typical fire barrier cross-section(s) indicating pertinent dimensioning, general construction, and relationship to expansion control system (if applicable).

B. Test Reports - Submit nationally recognized independent third party test report certifying product to meet the required test standard(s) and fire endurance rating.

1.03 Product Delivery, Storage and Handling

A. Deliver products in manufacturer's original carton or labeled containers and store under cover in a dry location until installed. Store off the ground, protect from weather and construction activities.

1.04 Acceptable Manufacturer

A. All fire barriers shall be as manufactured/supplied by Sika Emseal, 25 Bridle Lane, Westborough, MA 01581 USA.

B. Alternate manufacturers and their products that have been cycle tested for lateral shear movement will be considered, provided they meet the required fire rating, and are produced of materials that are equal to or superior to those used in the specified fire barrier assembly.

C. Any proposed alternate systems must be submitted and receive approval 21 days prior to the bid. All post bid submittals will not be considered. This submission shall be in accordance with MATERIALS AND SUBSTITUTIONS.

Any manufacturer wishing to submit for prior approval must provide the following:

1. A working 6" sample of the proposed system with a letter describing how system is considered superior to the specified fire barrier assembly.

2. A project proposal drawing that illustrates the recommended alternate system installed in the construction that is specific to the project. Typical catalog cut sections will not be considered.

3. Nationally recognized third party test report certifying that proposed system meets all required test standards, cycling requirements and fire endurance ratings. Incomplete test reports or letters submitted from the manufacturer substituting as third party certification will not be permitted.

4. Verifiable list of prior installations showing prior and successful experience with the proposed systems.

5. Any substitution products not adhering to all specification requirements within, will not be considered.

1.05 Quality Assurance

A. Warranty: Standard material limited warranty or project specific warranty available. Installation shall be in strict accordance with manufacturer's technical specifications, details, installation instructions and general procedures in effect for normal intended usage and suitable applications under specific design movements and loading conditions.

B. Manufacturer: Shall have a minimum ten (10) years experience specializing in the design and manufacture of Architectural Expansion Control Systems

C. Application: Minimum 2 years [documented] experience in work of this Section

PART 2 - PRODUCT

2.01 General

A. Provide encapsulated fire barrier assembly that has been designed to provide the required fire endurance rating, minimize passage of smoke and accommodate dynamic movement including lateral shear without stress or degradation to its components. Documentation by a recognized third party witnessing agency shall certify that the system has been tested and meets the requirements of ASTM E-119, ASTM E-1399-97, UL-2079, NFPA 251, UBC 7-1 and CAN/ULC - S101 for fire endurance. For assurance of movement capability, provide system that

meets the requirements of section 2.03 Table I accompanied by third party documentation.

Furnish Wabo®FireFlex Fire Barrier System for rated openings as supplied by Sika Emseal and as indicated on drawings.

2.02 Components and Materials

A. Flexible Fire Blanket - Provide lateral shear capable high purity ceramic fiber blanket assembly encapsulated to minimize dusting and passage of smoke.

B. Attachment Retainer - Provide preformed 24ga.(min.) galvanized sheet metal profile with manufacturer's hardware and fasteners to provide proper attachment of fire barrier assembly to adjoining construction.

C. Accessories - Provide necessary and related parts required for field splicing and complete installation.

2.03 Movement Cycling

Manufacturers Fire Barrier assembly shall demonstrate ability to cycle in multiple directions in accordance with Table I. All cycling and performance observations shall be witnessed and documented by an independent third party testing laboratory.

TABLE I

Movement	Nominal Cycling Rate (cpm)	Complete Number of Cycles
Thermal / Seismic (combined)	**45**	**500**
Followed by:		
Lateral Shear Movement +/- 50 percent of nominal opening	**45**	**100**

2.04 Fabrication

A. Fire barrier blankets shall be shipped in standard 25 foot rolls. Galvanized metal retainers shall be supplied in standard 10 foot lengths.

B. Splice kits and hardware required for a complete installation will be shipped as loose components in manufacturer's standard shipping carton.

C. Fire Barrier Assemblies shall be cut in the field for exact length and changes in direction.

PART 3 - EXECUTION

3.01 Installation

A. Protect all fire barrier components from damage during storage, installation and post installation activities including placement of expansion control system.

B. Wabo®FireFlex fire barrier assembly shall be installed in strict accordance with manufacturer's installation procedures along with the advice of their product engineers.

C. Fire barrier assembly shall be installed in the correct width of opening as called for in the contract plans. Variations in width shall be brought to the attention of the architect and product manufacturer prior to the installation of any material.

3.02 Clean and Inspect

A. Upon completing installation of the Wabo®FireFlex Fire Barrier Assembly, inspect all splices to ensure proper compliance with manufacturer's instructions. Clean and remove any debris that is observed at the base of the fire barrier void.