SPECIFICATION

Section 09 8200 – Sound Absorption Materials

Acousti-Seal by Willseal

Mass-Loaded Acoustic Partition Closure with Factory-Coated Silicone Surfaces

Sound, Draft, Heat, Cold and Dust Blocking; Fire-resistant Acoustic Partition closure and Joint Filler for Interior, Non-moving Joints and Gaps

PART 1 – GENERAL

1.01 Work Included

The work shall consist of furnishing and installing acoustic partition closure(s) in accordance with the details shown on the plans and the requirements of the specifications. Acoustic partition closure shall be silicone pre-coated, preformed, mass-loaded acoustic foam seal – Acousti-Seal by Willseal

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Related Work

Division 9 – Interior Walls and Partitions

Division 8 – Store Fronts and Curtainwalls

1.02 Submittals

General – Submit the following according to Division 1 Specification Section.

Standard Submittal Package Must Include All of the Following:

1) Typical drawing(s) indicating pertinent dimensions, general construction, joint opening dimensions and product information.
2) Sample of material is required at time of submittal.
3) Color Charts for silicone selection by Architect.
4) Certification that products have been tested to ASTM E90-09 and are certified by independent laboratory test reports to meet or exceed an STC 54 rating in an STC 56 wall and an OITC 47 rating in an OITC 47 wall.
5) Certification that products have been tested to ASTM E-84-12 and are certified by independent laboratory test reports to meet or exceed Smoke and Flame Spread Class A.
6) Certification that products have been tested to ASTM C-518-04 and are certified by independent laboratory test reports to meet or exceed a thermal insulation of R-value 2.93/in depth.
7) Certification that the material does not contain extruded metal components and that no drilling, or screwing, or fasteners of any type are required attached to anchor the material into the substrates.
8) Products must not be constructed of unbonded laminations.
9) Quality and Environmental control: Manufacturer shall be certified to both ISO-9001 (quality management) and ISO-14001(environmental management) and shall provide written confirmation that formal Quality and Environmental management systems and processes have been adopted.
10) Manufactured in the USA.

1.03 Product Delivery, Storage and Handling

Deliver products to site in Manufacturer’s original, intact, labeled containers. Handle and protect as necessary to prevent damage or deterioration during shipment, handling and storage. Store in accordance with manufacturer’s installation instructions.

1.04 Basis of Design

All joints shall be designed to meet the specified performance criteria of the project as manufactured by: Willseal LLC, 34 Executive Drive, Hudson, NH 03051, 800-274-2813. Willseal.com, custserv@willseal.com.

Alternate manufacturers must demonstrate that their products meet or exceed the performance criteria of the basis of design products and must submit certified performance test reports performed by recognized independent laboratories as called for in section 1.02 Submittals. Submittal of alternates must be made three weeks prior to bid opening to allow proper evaluation time.

1.05 Quality Assurance

Manufacturer's Checklist must be completed by expansion joint subcontractor and returned to manufacturer at time of ordering material.

Warranty – Manufacturer's standard warranty shall apply.

LEED Building Performance Requirements:

- The VOC of the silicone must not exceed 40 grams/liter
- Products must be proved to have been certified by independent test report to ASTM E-90-09 and to meet or exceed a STC rating of 54 and OITC rating of 47.
- Products must be proved to have been certified by independent laboratory test reports to meet or exceed Smoke and Flame Spread Class A, ASTM E-84-12.
- Products must be proved to have been certified by independent test report in accordance with ASTM C518-04 and demonstrate an R-Value per 1-inch (25mm) of depth of not less than 2.15 at as-installed nominal joint size compression.

PART 2 – PRODUCT

2.01 General

Provide a non-invasively anchored, high-STC/OITC, sound attenuating, fire-resistant, and thermally insulating mass-loaded partition closure for sealing construction-created voids and gaps.

Typical locations include but are not limited to the following: acoustic partition barriers, end of partition to window (3-sided coating), end of partition to mullion (2-sided coating), end of partition to wall (2-sided coating), and head of wall (2-sided coating). Coatings can be a different color on each side or the same based on design requirements.

Provide Willseal Acousti-Seal, fire resistant acrylic impregnated polyurethane foam as manufactured by Willseal LLC.

Silicone external color facing to be factory-applied to the foam. Silicone coating to be available in a range of standard colors for coordination with typical building materials. Separate colors may be chosen for each silicone coated surface.

Select the sealant system model appropriate to the design requirements at each gap location that meets the project specification or as defined by the designer of record.

2.02 Fabrication

Supply Acousti-Seal in full-story, 10-foot (3-meter) lengths, and ship in loosely laid coils inside cardboard boxes. Custom sizes available upon request.

The material is to be sized approximately 10% larger than the field-measured joint width.

Supply standard offered width and depth of seal to suit field verified conditions as shown on drawings or custom depths of seal as specified by designer.

Part 3 – EXECUTION

3.01 Installation

Preparation of Work Area

The contractor shall clean the joint opening of all contaminants immediately prior to installation of joint closure.

Installation

Consult manufacturer's installation instructions supplied with materials before proceeding.

Being careful not to stretch it, lay out the material and cut it to the desired length.

Position material over the joint opening and squeeze by hand to ease it into the joint. Position the material to ensure a uniform, flat, plane.

The silicone coating will fold at its edges to absorb slight variations in substrates while maintaining a smooth appearance.

Once in desired location, use a plastic putty knife to tuck the edges of the silicone against the substrates to remove any wrinkles.

The internal backpressure of the material will mate it to the mullion, partition, glass or other joint faces. The material is to remain free of any metal components, i.e. fasteners, screws, bolts, extrusions, etc.

Willseal supplied adhesive can use used to secure the Acousti-Seal in place for long-term applications if required.

3.02 Clean and Protect

Protect the system and its components during construction. Subsequent damage to the joint closure will be repaired at the general contractor's expense. After work is complete, clean exposed surfaces with a suitable cleaner that will not harm or attack the finishes.

END OF SECTION