

**SECTION 07 92 19**  
**ACOUSTICAL JOINT SEALANTS**

*Note to Specifier: This specification section covers only "Acoustical Joint Sealants" associated with noise attenuation. Specifications for other purposes, such as "Elastomeric Joint Sealants" and "Rigid Joint Sealants", under companion sections 07 92 13 "Elastomeric Joint Sealants" and 07 92 16 "Rigid Joint Sealants", must be separately evaluated.*

**PART 1 - GENERAL**

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Section, apply to work specified in this section.

1.02 DEFINITIONS

- A. Acoustic Joint Sealant: "Acoustic Joint Sealant or Spray: Material or combination of materials used to achieve specified acoustical rating of non fire-rated assembly by providing an effective barrier against sound transmission through construction joint and through penetration openings."

1.03 GENERAL DESCRIPTION OF THE WORK OF THIS SECTION

Only tested acoustic systems shall be used in specific locations as follows:

- A. Top and bottom of gypsum board partitions.
- B. Top of masonry walls.
- C. Through-penetrations in gypsum and masonry walls.

1.04 RELATED WORK OF OTHER SECTIONS

- A. Coordinate work of this section with work of other sections as required to properly execute the work and as necessary to maintain satisfactory progress of the work of other sections, including:
  - 1. Section 03 30 00 – Concrete
  - 2. Section 04 00 00 – Masonry
  - 3. Section 07 80 00 – Firestopping
  - 4. Section 07 86 00 – Smoke Seals
  - 5. Section 07 90 00 – Joint Sealers
  - 6. Section 09 20 00 – Plaster and Gypsum Board
  - 7. Section 13 48 00 – Sound, Vibration and Seismic Control
  - 8. Section 21 00 00 – Fire Suppression
  - 9. Section 22 00 00 – Plumbing
  - 10. Section 23 00 00 – Heating, Ventilating, and Air-Conditioning
  - 11. Section 26 00 00 – Electrical
  - 12. Section 27 00 00 – Structured Cabling

## 1.05 REFERENCES

### A. Test Requirements:

1. ASTM C734, Standard Test Method for Low-Temperature Flexibility of Latex Sealants After Artificial Weathering
2. ASTM C834, Standard Specification for Latex Sealants
3. ASTM C919, Standard Practice for Use of Sealants in Acoustical Applications
4. ASTM D217, Standard Test Methods for Cone Penetration of Lubricating Grease
5. ASTM E84, Standard Test Method for Surface Burning Characteristics of Building Materials
6. ASTM E90, Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements
7. ASTM G21, Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
8. ISO 11600, Building construction -- Jointing products -- Classification and requirements for sealants

### B. All major building codes: IBC, SBCCI, BOCA

*(Note to specifier: Further elaborate, retain or delete building codes listed above as applicable)*

## 1.06 QUALITY ASSURANCE

- A. Installing contractor shall arrange for the acoustic joint sealant manufacturer's direct representative (not distributor or agent) to be on-site during initial installation of acoustic sealant and spray systems to train appropriate contractor personnel in proper selection and installation procedures.
- B. Acoustical sealants shall be installed per manufacturer's written recommendations published in their literature and drawing details.

## 1.07 SUBMITTALS

- A. Submit Product Data: Manufacturer's specifications and technical data for each material including documentation of STC testing and manufacturer's installation instructions in accordance with Section 01 30 00.
- B. Submit material safety data sheets provided with product delivered to job-site.
- C. VOC Content Limitations: Submit documentation of conformance with LEED EQ Credit 4.1 "Low-Emitting Materials, Adhesives, and Sealants."

## 1.08 INSTALLER QUALIFICATIONS

- A. Engage an experienced Installer who is certified, licensed, or otherwise qualified by the acoustic sealant and acoustic spray manufacturer as having been provided the necessary training to install manufacturer's products per specified requirements. A manufacturer's willingness to sell its acoustical sealant products to the Contractor or to an Installer engaged by the Contractor does not in itself confer qualification on the buyer.

## 1.09 DELIVERY, STORAGE, AND HANDLING

- A. Deliver materials undamaged in manufacturer's clearly labeled, unopened containers.
- B. Coordinate delivery of materials with scheduled installation date to allow minimum storage time at job-site.

- C. Store materials under cover and protect from weather and damage in compliance with manufacturer's requirements, including temperature restrictions.
- D. Comply with recommended procedures, precautions or remedies described in material safety data sheets as applicable.
- E. Do not use damaged or expired materials.

#### 1.10 PROJECT CONDITIONS

- A. Do not use materials that contain flammable solvents.
- B. Schedule installation of acoustical sealants after completion of gypsum wall board but prior to covering or concealing of joints.
- C. Verify existing conditions and substrates before starting work. Correct unsatisfactory conditions before proceeding.
- D. Weather conditions: Do not proceed with installation of acoustical sealant materials when temperatures are outside the manufacturers recommended limitations.
- E. During installation, provide masking and drop cloths to prevent acoustical sealant materials from contaminating any adjacent surfaces.

### **PART 2 - PRODUCTS**

#### 2.01 ACOUSTICAL SEALANTS

- A. Acoustic Sealant for Exposed and Concealed Joints and annular spaces around through-penetrations: Provide manufacturer's standard non-sag, paintable, non-staining latex sealant complying with ASTM C834, ASTM C919 and the following:
  - a. Sealant effectively reduces airborne sound transmission through head-of-wall and bottom-of-wall joints and openings to accommodate through-penetrations in building construction as demonstrated by testing representative assemblies in accordance with ASTM E90.
  - b. Acoustical Sealant to maintain STC ratings at sound rated partitions as indicated on the drawings.
  - c. Sealant has flame-spread and smoke-developed ratings of less than 25 as tested in accordance with ASTM E84.
  - d. Sealant is mold and mildew resistant per ASTM G21 with a rating of zero (0), "no growth".
  - e. Sealant has movement capability of minimum 12.5% in accordance with ISO 11600. Latex sealant according to ASTM C 834 class OP -18°C with shrinkage according to ASTM C 1241 < 25 % C.
  - f. Proposed acoustic sealant materials and methods shall conform to applicable governing codes having local jurisdiction.

#### 2.02 ACOUSTICAL SPRAYS

- A. Acoustic Spray for exposed and concealed joints: Provide manufacturer's standard sprayable latex material complying with ASTM C919 and the following:

- a. Spray effectively reduces airborne sound transmission through head-of-wall joints in building construction as demonstrated by testing representative assemblies in accordance with ASTM E90.
- b. Acoustical Spray to maintain STC ratings at sound rated partitions as indicated on the drawings.
- c. Spray has flame-spread and smoke-developed ratings of less than 25 as tested in accordance with ASTM E84.
- d. Spray is mold and mildew resistant per ASTM G21 with a rating of zero (0), "no growth".
- e. Spray has movement capability of minimum 12.5%.
- f. Proposed acoustic spray materials and methods shall conform to applicable governing codes having local jurisdiction.

## 2.03 ACCEPTABLE MANUFACTURERS

### A. **Basis of Design:**

Hilti, Inc., Plano, Texas  
800-879-8000  
www.us.hilti.com

B. *No substitutions will be accepted.*

## 2.04 MATERIALS

A. Products: Subject to compliance with requirements, provide the following:

- 1. Hilti CP 506 Smoke and Acoustic Sealant
- 2. Hilti CP 572 Smoke and Acoustic Spray
- 3. Hilti CP605 bottom of wall sealant

## 2.05 ACCESSORIES

A. Pre-formed mineral wool:

- 1. CP 767 Speed Strips
- 2. CP 777 Speed Plugs

B. Mineral wool

## **PART 3 - EXECUTION**

### 3.01 PREPARATION

A. Verification of Conditions: Examine areas and conditions under which work is to be performed and identify conditions detrimental to proper or timely completion.

- 1. Verify acoustic joints are properly sized and in suitable condition for application of materials.
- 2. Surfaces to which acoustic sealant and spray materials will be applied shall be free of dirt, grease, oil, rust, laitance, release agents, water repellents, and any other substances that may affect proper adhesion.
- 3. Provide masking and temporary covering to prevent soiling of adjacent surfaces by acoustic sealant and spray materials.

4. Comply with manufacturer's recommendations for temperature and humidity conditions before, during and after installation of acoustic sealant and spray.
5. Do not proceed until unsatisfactory conditions have been corrected.

### 3.02 INSTALLATION

- A. General: Comply with acoustic sealant and spray manufacturer's written installation instructions for products and applications indicated.
- B. Standards: Comply with recommendations of ASTM C919 for use of joint sealants in acoustical applications as applicable to materials, applications and conditions indicated.
- C. Install acoustic sealant backings of type indicated to support sealant and spray during application in accordance with manufacturer's written installation instructions.
- D. Install acoustic sealant and spray free of air pockets, embedded foreign matter, sags and ridges.
- E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.
  1. Remove excess acoustic sealant from surfaces adjacent to joint.
  2. Remove excess acoustic spray from surfaces adjacent to joint as indicated on the drawings.
  3. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
  4. Provide concave joint configuration per Figure 8A in ASTM C1193, unless otherwise indicated.

### 3.03 FIELD QUALITY CONTROL

- A. Examine acoustic joints and penetrations to ensure proper installation before concealing or enclosing areas.
- B. Keep areas of work accessible until inspection by applicable code authorities.

### 3.04 CLEANING

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturer of acoustical joint sealants.
- B. During the course of the Work and on completion, remove and dispose of excess materials, equipment and debris away from premises.

### 3.05 PROTECTION

- A. Protect acoustic joints during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes so that they are without deterioration or damage at time of Contract Completion.

**END OF SECTION**