

SECTION 07900 - SEALANTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Sealing of exterior joints between perimeters of window frames, door frames, and other items occurring in openings in exterior walls, and the surrounding masonry construction, including bed sealing of thresholds.
- B. Caulking of interior perimeter joints around window frames, door frames, penetrations through walls, and other items occurring in openings in exterior or interior walls or joints.
- C. All other exterior sealing and interior caulking called for, and as required to provide tight conditions in walls and partitions.

1.2 REFERENCES

- A. ASTM C 920-79: Elastomeric Joint Sealants.
- B. F.S. TT-S-8227E: Sealing Compound, Elastomeric Type, Multi-Component (for Caulking, Sealing and Glazing in Building Construction).
- C. F.S. TT-S-00230C: Sealing Compound, Elastomeric Type, Single Component (For Caulking, Sealing and Glazing in Buildings and Other Structures)

1.3 SUBMITTALS

- A. Submittals shall be in accordance with Section 01300.
- B. Submit manufacturer's descriptive literature, color samples, technical samples and data sheets on each type of caulking and sealant material proposed.
- C. Submit manufacturer's material safety data sheets (MSDS) for all system products to be utilized for record.

1.4 QUALITY CONTROL

- A. All caulking and sealant installation shall be installed by a specialty Subcontractor proficient in this trade and approved by Shaw's. Samples of workmanship shall be provided for review and approval.

1.5 DELIVERY AND HANDLING

- A. Sealants shall be delivered to the job site in sealed containers bearing the manufacturer's name; mixed, stored, handled and applied in strict accordance with manufacturer's detailed instruction, copies of which shall be submitted with samples for approval and made available to the Designer and Shaw's Project Representative at all times on the job site.

1.6 MATERIAL LIFE

- A. Manufacturer's label shall indicate date of manufacture of sealants, or manufacturer shall otherwise attest to date of manufacture. Period of time no longer than 6 months for polyurethane shall have elapsed from date of manufacture to date of usage on job.

PART 2 - PRODUCTS

2.1 SEALANT MATERIALS

- A. General Sealant: Low modulus, one component, moisture cured, non-sag, permanently flexible polyurethane sealant with 100 to 50 percent movement capabilities. Conforms to Fed. Spec. TT-S-00230C, Type II, Class A, ASTM C-920, Type S, Class 25, Grade NS, Sika Sikaflex 1a, Sonneborn NP-1, Tremco Dymonic, or approved equal.
 - 1. Custom colored sealant shall be equal to Tremco Dymeric, or Sonneborn NP-2.
- B. Acrylic Latex Sealant: (At Interior Painted Joints, Joints at Mirrors): Tremco acrylic latex, or approved eq.
- C. Seam Sealant (At Small Metal to Metal Joints): Tremco Seam Sealer, or approved equal.

2.2 ACCESSORIES

- A. Backer Rod Material: Closed cell polyethylene foam, or butyl and neoprene rods. Do not use an asphalt treated packing material.
- B. Primer: As recommended by sealant manufacturer.
- C. Bond Breaker Tape: Polyethylene tape as recommended by sealant manufacturer.

PART 3 - EXECUTION

3.1 WORKMANSHIP

- A. Joints and spaces to be sealed shall be clean, dry and free of dust, loose mortar, and other foreign matter. Clean ferrous metal of all rust, mill scale and coatings by wire brush, grinding or sandblasting. Remove oils and grease with solvent, such as xylol, toluol, or methyl-ethyl-ketone. Remove protective coatings from aluminum surfaces against which caulking materials are to be placed.
- B. Pack all recesses or joints to be caulked to within 1/2" of surface with one of the specified packing materials. Joints to be caulked shall not be over 1" wide or less than 1/4". Depth of sealant shall equal joint width up to 1/2" wide; depth of sealant shall equal 1/2 width of joint for joints over 1/2" wide. Use bond breaker tape in masonry control joints that have been raked.
- C. Mask exposed surfaces on both sides of joints to prevent contact with sealant.
- D. Immediately prior to caulking with sealant, prime both sides of joint.
- E. After joints have been completely filled, neatly tool the joint.
- F. Immediately clean adjacent materials which have been soiled; leave work in a neat, clean condition.
- G. Place no sealant when the temperature is below 40°F.
- H. No sealant shall be left feather-edged out onto adjacent surfaces.
- I. Cure sealants and caulking compounds in compliance with manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability. Protect joint sealers during construction period to prevent damage or deterioration.
- J. Bond Breaker Tape: Shall be applied to sealant-contact surfaces where bond to substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape where applicable.

3.2 GUARANTEE

- A. Provide written guarantee, on approved format, guaranteeing all sealant work against defective material and workmanship for a period of 5 years, commencing on the date of substantial completion of the building.

END OF SECTION 07900