

SECTION 07900 – SEALANTS

PART 1 – GENERAL

1.01 RELATED SECTIONS

The General Provisions of the contract, including the General Provisions for Construction Projects (2016), Special Provisions, and General Requirements of the Specifications, apply to the work specified in this section.

1.02 SUMMARY

Furnish and install sealants as required to provide continuous airtight and weatherproof joints between adjoining surfaces as indicated on the drawings and/or as specified herein.

1.03 GENERAL REQUIREMENTS

Except as otherwise indicated, sealants shall be provided to establish and maintain airtight and weatherproof continuous seals on a permanent basis within recognized limitations of wear and aging for each application and type of sealant material. Provide at all joint locations where weather penetration is possible, where a weather-tight installation is required, and where indicated or required to finish the installation of two or more adjoining materials.

1.04 SUBMITTALS

- A. Certificates of Compliance: Submit certificates from the manufacturers attesting that materials meet the specified requirements.
- B. Manufacturers' Descriptive Data: Submit complete descriptive data for each type of material. Clearly mark data to indicate the type the Contractor intends to provide. Data shall state conformance to specified requirements. Data for sealant and calking shall include application instructions, shelf life, mixing instructions for multi-component sealants, and recommended cleaning solvents.

1.05 DELIVERY AND STORAGE

Deliver materials to the job site in the manufacturers' external shipping containers, unopened, with brand names, date of manufacture, color, and material designation clearly marked thereon. Containers of elastomeric sealant shall be labeled as to type, class, grade, and use. Carefully handle and store all materials to prevent inclusion of foreign materials.

1.06 WARRANTY

- A. The Contractor shall execute to the owner a 2-year written warranty after the Project

Acceptance Date that the installation will be watertight and that any leaks which develop during that period which are not due to improper use or willful damage will be repaired at no cost to the State. The guaranty shall provide the following at no cost to the State:

1. Repair of sealants as necessary to seal leaks which are attributable to faulty materials and/or workmanship;
2. Repair or replacement of damage to the building and/or its finishes, equipment and/or furniture when occasioned by such leaks.

PART 2 – PRODUCTS

2.01 MATERIALS

- A. Products shall conform to the reference documents listed for each use. Color of sealant shall match adjacent surface color unless specified otherwise. For ASTM C 920 sealants, use a sealant that has been tested on the type(s) of substrate to which it will be applied.
- B. Interior Sealants: ASTM C 920, Type S or M, Grade NS, Class 12.5, Use NT. For use to seal general building construction joints, etc.
- C. Exterior Sealants: For joints in vertical surfaces, provide ASTM C 290, Type S or M, Grade NS, Class 25, Use NT. For joints in horizontal surfaces, provide ASTM C 920, Type S or M, Grade P, Class 25, Use T. For use to seal general building construction joints, etc.
- D. Primer for Sealants: Provide non-staining, quick-drying type and consistency recommended by the sealant manufacturer for the particular application.
- E. Bond Breakers: Provide type and consistency recommended by the sealant manufacturer for the particular application.
- F. Backstops: Provide glass fiber roving or neoprene, butyl, polyurethane, or polyethylene foams free from oil or other staining elements as recommended by the sealant manufacturer. Backstop material shall be compatible with the sealant. Do not use oakum and other types of absorptive materials as backstops.
- G. Cleaning Solvents: Provide types recommended by the sealant manufacturer.

PART 3 – EXECUTION

3.01 SURFACE PREPARATION

Surfaces shall be clean, dry to the touch, and free from moisture, grease, oil, wax,

lacquer, paint, or other foreign matter that would tend to destroy or impair adhesion. Where adequate grooves have not been provided, clean out grooves to a depth of ½ inch without damage to the adjoining work. No grinding shall be required on metal surfaces.

3.02 SEALANT PREPARATION

Do not modify the sealant by addition of liquids, solvents, or powders. Mix multicomponent elastomeric sealants in accordance with manufacturer's printed instructions.

3.03 APPLICATION

- A. Elastomeric Sealant Installation Standard: Comply with the requirements of ASTM C 962 for the use of joint sealants as applicable to the materials, applications, and conditions required.
- B. Backstops: Install backstops dry and free from tears or holes. Tightly pack the back or bottom of joint cavities with backstop materials to provide a joint of the depth as recommended by the sealant manufacturer.
- C. Primer: Immediately prior to application of the sealant, clean out all loose particles from joints. Where recommended by sealant manufacturer, apply primer to joints in concrete masonry units, wood, and other porous surfaces in accordance with compound manufacturer's instructions. Do not apply primer to exposed finish surfaces.
- D. Bond Breaker: Provide bond breakers to the back or bottom of joint cavities, as recommended by the sealant manufacturer for each type of joint and sealant used to prevent sealant from adhering to these surfaces. Carefully apply the bond breaker to avoid contamination of adjoining surfaces or breaking bond with surfaces other than those covered by the bond breaker.
- E. Sealants: Provide sealant compatible with the material to which it is applied. Do not use a compound that has exceeded its shelf life or has become too jelled to be discharged in a continuous flow from the gun. Apply the compound in accordance with the manufacturer's instructions with a gun having a nozzle that fits the joint width. Force sealant into joints to fill the joints solidly without pockets. Sealants shall be uniformly smooth and free from wrinkles. Upon completion of sealant application, roughen partially filled or unfilled joints, apply sealant, and tool smooth as specified.

3.04 PROTECTION AND CLEANING

- A. Protection: Protect areas adjacent to joints from compound smears. Masking tape may be used for this purpose if removed 5 to 10 minutes after the joint is filled.

- B. Cleaning: Immediately scrape off fresh compound that has been smeared on masonry and rub clean with a solvent as recommended by the compound manufacturer. Upon completion of compound application, remove all remaining smears and stains resulting therefrom and leave the work in a clean and neat condition.

PART 4 – MEASUREMENT AND PAYMENT

4.01 BASIS OF MEASUREMENT AND PAYMENT

- A. Work under this section will not be measured nor paid for separately, but shall be considered incidental to and included in the price bid for the various items of work in this project.

END OF SECTION