

ITEM 53

JOINT SEALANTS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification sections, apply to work of this section.

1.02 DESCRIPTION OF WORK

A. The extent of each form and type of joint sealant is indicated on drawings and by provision of this section.

B. Sealing: Seal all joints on exterior surfaces as called for herein or as required to produce a finished watertight job.

1.03 SUBMITTALS

SEE SECTION 01300.

Product Data: Submit to the Engineer manufacturer's product specifications, handling/installation/curing instructions, and performance tested data sheets for each elastomeric product required.

1.04 JOB CONDITIONING

Weather Conditions: Do not proceed with installation of liquid sealants under unfavorable weather conditions. Install elastomeric sealants when temperature is in lower third of temperature range recommended by manufacturer for installation.

PART 2 - PRODUCTS

2.01 MATERIALS

General Sealant Requirements: Provide colors indicated or, if not otherwise indicated, as selected by Engineer from manufacturer's standard colors. Select materials for compatibility with joint surfaces and other indicated exposures, and except as otherwise indicated, select modules of elasticity and hardness or grade recommended by manufacturer for each application indicated.

2.02 SINGLE-COMPONENT SILICON RUBBER SEALANT

Except as otherwise indicated, provide manufacturer's standard, non-modified, one-part, silicone-rubber-based, air-curing, nonsag, elastomeric sealant, complying with either ASTM C 920 Type S Class 25 grade NS, or FS TT-S-001543A Class A Type Non-sag.

2.03 MISCELLANEOUS MATERIALS

A. Joint Primer/Sealer: Provide type of joint primer/sealer recommended by sealant manufacturer for joint surfaces to be primed or sealed.

B. Bond Breaker Tape: Provide polyethylene tape or other plastic tape as recommended by sealant manufacturer, to 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.

C. Sealant Backer Rod: Provide compressible rod stock of polyethylene foam, polyurethane foam, polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable nonabsorptive material as recommended by sealant manufacturer for backup of and compatibility with sealant.

PART 3 - EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

Comply with manufacturer's printed instructions except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

3.02 JOINT PREPARATION

A. Clean joint surfaces immediately before installation of sealant or caulking compound. Remove dirt, insecure coatings, moisture and other substrates which could interfere with seal of gasket or bond of sealant or caulking compound. Etch concrete and masonry joint surfaces as recommended by sealant manufacturer. Roughen vitreous and glazed joint surfaces as recommended by sealant manufacturer.

B. Prime or seal joint surfaces where indicated, and where recommended by sealant manufacturer. Confine primer/sealer to areas of sealant bond. Do not allow spillage or mitigation onto adjoining surfaces.

3.03 INSTALLATION

A. Set joint fill units at depth or position in joint as indicated to coordinate with other work, including installation of bond breakers, backer rods and sealants. Do not leave voids or gaps between end of joint filler units.

B. Install sealant backer rod for liquid-applied sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for application indicated.

C. Install bond breaker tape where indicated and where required by manufacturer's recommendations to insure the liquid-applied sealants will perform as intended.

D. Employ only proven installation techniques, which will ensure that sealants are deposited in uniform, continuous ribbons without gaps or air pockets, with complete "wetting" of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and vertical surface, fill joint to form a slight cove, so that joint will not trap moisture and dirt.

E. Install sealant to depths as shown or, if not shown, as recommended by sealant manufacturer but within the following general limitations, measured at center (thin) sections of bead.

F. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but never more than 1/2" deep nor less than 1/4" deep.

G. Spillage: Do not allow sealants or compounds to overflow from confines of joints or spill onto adjoining work, or to migrate into voids of exposed finishes. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage. Recess exposed edges of gaskets and exposed joint fillers slightly behind adjoining surface, unless otherwise shown, so that compressed units will not protrude from joints.

3.04 CURE AND PROTECTION

Cure sealants in compliance with manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability. Advise Contractor of procedures required for cure and protection of joint sealants during construction period so that they will be without deterioration or damage (other than normal wear and weathering) at time of substantial completion.

END OF DOCUMENT