<u>CONTRACT NO. 21-540</u> <u>DIVISION 7 – THERMAL AND MOISTURE PROTECTION</u>

SECTION 079200 - SEALANTS

PART 1 - GENERAL

- 1.1 WORK OF THIS SECTION:
 - A. General sealant systems.
- 1.2 RELATED SECTIONS:
 - A. Sealants as part of other systems see various SECTIONS.

1.3 SUBMITTALS:

- A. Make submittals in accordance with SECTION 013300.
- B. Submit product data describing assembly proposed at each location.
- C. Submit color samples for each sealant.

1.4 QUALIFICATIONS:

- A. Subcontractors, superintendents, workers and other persons or entities involved in managing or performing the work shall be qualified as specified and shall not be permitted to perform the work if not so qualified.
- B. Submit qualifications of subcontractors, fabricators or suppliers proposed for the work for approval prior to employment.
- 1.5 QUALITY ASSURANCE:
 - A. In general, all sealant materials shall be products of the single manufacturer selected for sealant systems or shall be products specifically recommended by that manufacturer for the sealant assembly.
- 1.6 TEMPERATURE AND WEATHER:
 - A. Surfaces to receive sealants shall be dry and sealants shall not be installed until thirty-six hours minimum following a rainfall.
 - B. Do not apply sealants when the air temperature or the temperature of the surface to be sealed is less than 50 degrees F. or greater than 85 degrees F.

PART 2 - PRODUCTS

2.1 SYSTEM MANUFACTURERS:

A. The sealant systems manufacturer for specified products is Sonneborn Building Products, BASF Corp. Other acceptable manufacturers include Pecora, Tremco and Bostik..

2.2 SEALANTS:

- A. In general, use only paintable sealants on the project. Sealants shall be one component urethane sealants. Colors shall be selected to suit specific adjacent materials and applications.
- B. Use backer rods and bond breakers at weathertight joints. Follow good sealant installation practice. Use masking tape and finish sealant joints smooth and uniform.
- C. Do <u>not</u> use silicone or other non-paintable sealants where painting is required or without prior approval.

2.3 SEALANT PRODUCTS:

- A. For <u>Sealants</u>: Sonneborn 'Sonolastic NP 1' complying with Federal Specification TT-S-00231C, February 2, 1970, Type II, Class A: ASTM C-920, Type S, Grade NS, Class 25, use NT, M and A.
- B. Primers for NP 1: Sonneborn #733 primer.
- C. Solvents for cleaning surfaces: Toluene or Xylene.
- D. Solvent for drying wet surfaces: Methyl Ethyl Ketone.
- E. <u>Backer Rod:</u> Sonneborn 'Sonofoam backer-rod', in correct size for joint to be sealed.
- F. Bond breaker tape: 3M tape #470 or #481.

PART 3 - EXECUTION

- 3.1 COORDINATION WITH OTHER WORK:
 - A. Coordinate sealant installation with other work so that each portion of work is performed in the proper sequence, with minimum possibility of damage or disturbance to other work and so that sealant work can be completed as soon as possible after the sealant joint is ready to

be finished.

3.2 PREPARING SURFACES AND JOINTS:

- A. Surfaces to receive sealants shall be clean and dry.
- B. Clean concrete and masonry surfaces with wire brush or other mechanical means to remove laitence and expose sound concrete.
- C. Clean all aluminum surfaces with solvent cleaner.
- D. Clean all surfaces which may be damp with Methyl Ethyl Keytone to remove residual moisture.
- E. Prime all concrete and masonry surfaces to receive sealant unless specifically permitted to omit priming; apply primers neatly, masking if necessary, so that primers cover only the area in contact with the sealant, without overruns or ragged edges.
- F. Joint backing shall be used to control the depth of the joint to recommended thicknesses; for deep joints install back-up rod; for shallow joints and 90 degree angle joints, install bond-breaker tape.
- 3.3 PREPARING DEEP SEALANT JOINTS:
 - A. Prepare and prime surfaces.
 - B. Install back-up rod so that depth of sealant joint will be as follows:
 - 1. Equal or less than the width of the joint for joints from 1/4" to 2" wide.
 - 2. 2" to 5/8" maximum for joints wider than 2".
 - C. The minimum joint width shall be 1/4".

3.4 PREPARING SHALLOW SEALANT JOINTS:

- A. Where joints cannot contain the foam rod or where the joint will be shallower than specified, install back-up tape to form a bond break with the back surfaces of the joints.
- B. At 90 degree angle joints install back-up tape on the inside corner of the joint.
- C. Back-up tape shall be carefully sized and placed to allow a full bond of the sealant with joint faces at the edges.

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3.5 INSTALLING GENERAL SEALANTS:

- A. Prepare, mix and install general sealants using the tools and techniques specified by the manufacturer.
- B. Mask joints to prevent overruns.
- C. Place sealants to provide a full, secure bond with the surfaces without air bubbles, voids, excessive overlap or other faults so that the finished sealant joint will be neat and uniform.
- D. Tool the finished sealant joint to a smooth, slightly concave configuration. Use liquid soap lubricant on tool. Strip masking.
- E. Finished joint shall be smooth and regular. Redo sealant joints that are sloppy, sagging or otherwise defective.
- F. At extended pipe railings, Bed pipe splices and pipe joints in sealants; clean off surplus.
- G. At relocated pipe railings, bed mounting plates in sealant and seal old anchor holes.

3.6 CURING:

- A. Prepare general sealant work at times which will minimize the risk of damage to new sealants.
- B. Protect new sealant joints from surface damage from tools or fingers until fully cured.
- C. Replace sealant joints which are damaged before fully cured.

END OF SECTION 079200