SECTION 07920
CAULKING AND SEALANTS

PART I - GENERAL

1.01 DESCRIPTION:
A. Scope: Work of this Section shall include all materials and installation necessary to provide Caulking and Sealants, as shown and detailed on the drawings and specified herein.

1.02 QUALITY ASSURANCE
A. References:
B. QUALIFICATIONS:
   1. General: The manufacturer of the sealant used shall have been in the business of manufacturing the specified types of such sealants for not less than ten (10) years.
   2. Applicator: Installer specializing in the work of this Section with minimum five (5) years documented experience
   3. Volatile Organic Compounds (VOC): Use only products in compliance with VOC content limits required by Federal and State EPA regulations.
C. Compatibility With Substrate: Verify that caulking and sealants used are compatible with joint materials.
D. Joint Tolerances: Comply with manufacturer’s joint width/depth ratio limitations.

1.03 SUBMITTALS
A. General: Refer to Section 01330 – SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
B. Samples: Submit manufacturer’s standard colors prior to application.
C. Product Data: Submit manufacturer’s specifications, data, and installation instructions for review prior to purchase or application.
D. Certificates: Submit certification that sealants proposed for use, comply with the Contract Documents.

1.04 PRODUCT HANDLING
A. General: Refer to Section 01310 – COORDINATION.
B. Storage: Per manufacturer's recommendations for proper precautions for shelf life, temperature, humidity and similar storage factors to ensure the fitness of the material when installed.

1.05 SITE CONDITIONS

A. Environmental Requirements: Do not apply materials when temperature is below 40°F, nor under extreme temperature conditions when joint openings are at maximum or minimum width.

1.06 MAINTENANCE

A. General: Refer to Section 01770 – CLOSEOUT PROCEDURES.

B. Guarantee: On form provided at end of Section 01780 – CLOSE OUT SUBMITTALS, provide five (5) year written guarantee commencing from date of final acceptance by University's Representative.

PART II - PRODUCTS

2.01 MATERIALS

A. Caulking And Sealants:

1. Manufactured by Tremco, Inc., unless otherwise noted.

2. Pecora Chemical Corp., or equal.

3. Color to be selected by University's Representative.

B. Exterior Joints:

1. Vertical Surfaces: Non-sag polyurethane; by Dymeric or equal.

2. Precompressed Expanding Sealant Tape:
   a. PC-SA manufactured by Emseal Joint Systems, Ltd.
   b. Pecora Chemical Corp., or equal.

3. Horizontal Paving Joints: Self-leveling polyurethane; THC 900; interior and exterior.

C. Interior Joints: Acrylic Latex.

D. Joint Cleaner: Provide cleaner recommended by sealant manufacturer for specific joint surface and condition.

E. Joint Primer and Sealer: As recommended by sealant manufacturer for each condition.

F. Bond Breaker Tape: Pressure sensitive polyethylene tape.

G. Other Materials: Manufacturer's standard for items required or type best suited for intended use.
PART III - EXECUTION

3.01 PREPARATION

A. General: Refer to Section 01310 – COORDINATION.

B. Conditions Of Work In Place:
   1. General: Carefully examine before beginning work; report defects.
   2. Substrate: Inspect surfaces to insure that no bond-breaker materials contaminate the surface to which the sealant is to adhere and to ensure that unsound substrates are repaired.

C. Preparation Of Surfaces:
   1. Surfaces: Prepare joints in accordance with manufacturer's recommended instruction to ensure maximum adhesion. Prime as required, protecting adjacent exposed surfaces.
   2. Sealants: Prepare sealant as required, including proper mixing of multicomponent sealants.

3.02 APPLICATION

A. General: Install in conformance with referenced standards, manufacturer's written directions, as shown, and as specified.

B. Protection: Protect surfaces adjacent to joints to receive sealant. Cover joints in walking surfaces with heavy duty, non-staining tape, until material has dried.

C. Installation:
   1. General: Install sealant materials per manufacturer's instructions. Prevent three-sided adhesion. Provide sealant depth of ½ joint width; minimum depth of ¼", maximum of ½", unless otherwise required by the manufacturer.
   2. Backer Rod: Install using blunt or rounded tools to insure uniform (±¼") depth without puncturing material. Use oversize backer rod; minimum of 33% for closed cell type; minimum of 50% for open cell type, unless otherwise required by the manufacturer.

3.03 CLEANING

A. General: Upon completion, thoroughly clean exposed surfaces per manufacturer's instructions. Perform cleaning in a manner that will not affect the appearance of the sealant or the adjacent finish material.

END OF SECTION 07920