

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

SECTION 07 92 00 - JOINT SEALANTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Preparation of substrate surfaces.
- B. Sealant and backer rod.

1.2 REFERENCES

- A. The Specification of the manufacturer whose material is selected, including installation instructions, and all ASTM and/or Federal Standards included therein.
- B. SWRI - Sealant and Caulking Guide Specification.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01 10 00.
- B. Color selection samples, of the actual materials.
- C. Manufacturer's Certificate: Certify that products meet or exceed specified requirements; provide instructions for substrate preparation and installation.

1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with reference documents.
- B. Maintain one copy of each application related reference document, on site.

1.5 QUALIFICATIONS

- A. Manufacturer: A company specializing in the manufacture of the materials specified in this Section, with a minimum of 10 years documented experience.
- B. Applicator: A subcontractor specializing in performing the work of this Section, with a minimum of 10 years documented experience.

1.6 COORDINATION

- A. Coordinate this work with other related Sections of Work.

1.7 WARRANTY

- A. In accordance with the General Conditions of the Construction Contract.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Joint Backer Rod: Backer Rods by W.R. Meadows, or "Ethafoam" by the Sealed Air Corporation.
- B. Sealant at Exterior Concrete Flatwork: Rubberized asphalt material which will not bleed or run when exposed to sunlight.
 - 1. Two component, self-leveling, fuel-resistant, non-priming material; "MasterSeal CR 125", by BASF or an approved alternate.
- C. Joint Sealant Interior Concrete Floors: Two components, 100% solid, self-leveling, gray semi-rigid epoxy having a minimum Shore "D" hardness of 50.

1. "MasterSeal NP 1", by BASF
 2. "MasterSeal NP 2", by BASF
 3. "MasterSeal CR 125", by BASF
 4. "MM-80", as manufactured by Metzger/McGuire.
- D. Sealant at Non-Traffic Joints: Floor slab perimeter joints, joints around columns, etc., where joint filler material is called for. Single component, pourable, gray polyurethane material.
1. "MasterSeal CR 125", by BASF
- E. Interior Concrete Curb Sealant: USDA approved, white, non-toxic, mildew resistant, single component polyurethane material.
1. "Weathermaster Sealant", by Titebond
- F. Wall Joint Sealant: Insulated metal panel joints, joints at door and window frames, etc.
1. "Weathermaster Sealant", by Titebond
- G. Wall Joint Sealant: Concrete masonry joints, joints at door and window frames, etc.
1. "MasterSeal NP 1", by BASF
 2. "MasterSeal NP 2", by BASF
- H. Fire Rated Joints: At tilt-up concrete wall panel joints, as detailed; no substitutions.
1. Pure ceramic fiber, free of binders and organic materials; "Cerablanket", by Morgan Thermal Ceramics.
 2. Elastomeric Sealant:
 - a. "MasterSeal NP 1", by BASF
 - b. "MasterSeal NP 2", by BASF
 - c. "Dymeric 240FC", by Tremco
 3. Backer Rod; as called for at 2.1.A., of the foregoing.
- I. All sealants shall match contiguous material surface colors, or paint colors; sealants shall not be painted unless specifically noted as "paintable" in the manufacturer's literature.
- J. Joint Cleaning Solvent:
1. "Toluol", by Sunnside Corporation
 2. "KEMCO MEK", by KEMPEROL
- *Unless otherwise specifically recommended by the sealant material manufacturer.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.

3.2 PREPARATION

- A. All joints shall be cleaned prior to sealant application; joints must be free of dirt, dust, oil, grease, bond breaker, etc. Joints shall be brushed, vacuumed, cleaned by air pressure, or otherwise treated as necessary.

- B. Joint cleaning solvent shall be used in accordance with the sealant manufacturer's written instructions.

3.3 APPLICATION

- A. Typically, sealant depths are to be approximately 1/2 of the width; depths may vary from $\pm 1/4"$ to $\pm 1/2"$.
- B. Sawn joints must be filled to full depth, including joints requiring repeated applications.
- C. Semi-rigid epoxy material is to be over-filled and ground smooth; this work must be done by a thoroughly experienced applicator to prevent grinding damage to the floor surface.
- D. Wall panel joints shall have a backing rod of proper diameter to provide a tight, friction fit. Care must be exercised to install the rod to the correct uniform depth so as to insure the proper depth to width ratio for sealant application.
- E. Where joints between dissimilar materials are of excessive depth, a backing rod shall be installed, prior to sealant application, as called for in D. of the foregoing.
- F. Sealants shall be gun applied, or poured, as required by the specific material; materials shall be applied to full depths required; skim beads will not be accepted.
- G. Excess sealant shall be struck off with a tool or knife and removed as the work progresses; finished beads shall be made flush with adjoining surfaces.
- H. Sealant materials shall not be applied to damp surfaces, nor at temperatures lower than those recommended by the material manufacturer. Refer to manufacturer's recommendations for materials to be used in refrigerated areas.
- I. For multiple component materials, joints shall be masked with tape, at both sides, to prevent staining of adjoining surfaces.
- J. Unacceptable joint work shall be raked clean and redone. Any necessary corrective measures are to be at no extra cost to the Owner.

PART 4 COMPLETION

4.1 CLEAN UP

- A. All work shall be left clean and undamaged.
- B. Refer to pertinent portions of Section 01 10 00.

END OF SECTION