GUIDE SPECIFICATION FOR POURTHANE® SL: ONE-COMPONENT, SELF-LEVELING, ELASTOMERIC, POLYURETHANE JOINT SEALANT

SECTION 07 92 13

ELASTOMERIC JOINT SEALANTS

Specifier Notes: This guide specification is written according to the Construction Specifications Institute (CSI) Format. The section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project. Coordinate this section with other specification sections and the drawings.

Specifier Notes: W.R. MEADOWS POURTHANE SL is an elastic, one-component, self-leveling, premium-grade polyurethane sealant specifically developed to be used as a multipurpose horizontal joint sealant in applications where a high chemical resistance to fuels, oils, and hydrocarbons is required. The product is a moisture cure sealant with excellent adhesive properties and resistance to aging and weathering.

POURTHANE SL is used to seal horizontal expansion joints in concrete and cementitious slabs, such as sidewalks, balconies, pavement, terraces, warehouses, factories, civil structures, plazas, runways, and pitch pans.

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Concrete joint preparation.

B. Application of one-component, self-leveling, cold-applied horizontal joint sealant.

1.02 RELATED SECTIONS

Specifier Notes: Edit the list of related sections as required for the project. List other sections dealing with work directly related to this section.

A. Section 03 30 00 - Cast-in-Place Concrete.

B. Section 03 35 00 – Concrete Finishing.

C. Section 07 90 00 - Joint Protection.

1.03 REFERENCES

A. ASTM C920: Standard Specification for Elastomeric Joint Sealants.

B. ASTM D2240: Standard Test Method for Rubber Property—Durometer Hardness.

C. Federal Specification TT S-00230C.

1.04 SUBMITTALS

A. Comply with Section 01 33 00 - Submittal Procedures.

B. Submit manufacturer's product data and application instructions.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Use an installer and adequate number of skilled personnel who are thoroughly trained and experienced in joint sealing application techniques.

B. Obtain joint sealant materials and accessories from a single manufacturer regularly engaged in manufacturing the product.

C. Provide products which comply with all state and local regulations controlling use of volatile organic compounds (VOCs).

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Store materials in a clean, cool, dry area in accordance with manufacturer's instructions.

C. Do not open packaging until ready to use.

D. Protect materials during handling and application to prevent damage or contamination.

1.07 ENVIRONMENTAL REQUIREMENTS

A. Condition material to 65° - 75° F (18.3° - 23.9° C) before using.

B. Apply material at temperatures between 41 - 104° F (5 – 40° C).

C. Do not apply sealant in joints containing free water.

PART 2 PRODUCTS

2.01 MANUFACTURER

A. W.R. Meadows, Inc., PO Box 338, Hampshire, Illinois 60140-0338. (800) 342-5976. (847) 683-4500. Fax (847) 683-4544. Web Site www.wrmeadows.com.

2.02 MATERIALS

A. Horizontal Joint Sealant: One-component, cold-applied, self-leveling polyurethane joint sealant.
   1. Performance Based Specification: Horizontal joint sealant shall have the following characteristics:
      a. ASTM C 920-11: Type S, Grade P, Class 25, Use T1, T2, NT, O, M, G
      b. Federal Specification TT S-00230C, Type I, Class A
      c. Consistency: Liquid, Self-Leveling.
      d. Skin Formation Time (74° F - 50% RH): 60-120 minutes.
      e. Water and Salt Spray Resistance: Excellent.
      f. Shore Hardness, ASTM D2240: Shore A 35 ± 5.
      g. Modulus at Break, ASTM D412: >0.6 MPa.
      h. UV Resistance: Good.
      i. Resistance to Dilute Acids and Bases: Average.
      j. Temperature Resistance: -40 - 176° F (-40 - 80° C.).
      k. VOC: 24 g/L.
      l. Non-bubbling formula; may be applied to green concrete.

   2. Proprietary Based Specification: POURTHANE SL self-leveling joint sealant manufactured by W.R. MEADOWS.

2.03 ACCESSORIES

A. Backer Rod: KOOL-ROD or CERA-ROD manufactured by W.R. MEADOWS.

B. Joint Filler: CERAMAR®, DECK-O-FOAM®, FIBRE EXPANSION JOINT with SNAP-CAP® manufactured by W. R. MEADOWS.

C. Primer System: P/G PRIMER manufactured by W.R. MEADOWS.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine areas to receive joint sealant. Notify Consultant if surfaces are not acceptable. Do not begin joint preparation or sealant application until unacceptable conditions have been corrected.

B. Ensure accessory materials are compatible with joint sealant and approved by membrane manufacturer.

C. Ensure joint sealant is compatible with all materials and surfaces that will be in direct contact prior to proceeding.

3.02 JOINT PREPARATION

A. Ensure proper joint design practices are followed allowing for a 2:1 width to depth ratio.

B. Joint dimensions should allow for ¼" (6.35 mm) minimum and ½" (12.7 mm) maximum thickness for sealant.

C. Joint depth should not exceed 3/8" (10 mm).

D. Remove foreign substances, incompressibles, and free water from joint opening.

E. Concrete joints must be clean and dry.

F. Dust, dirt and laitance should be removed prior to application.

G. Install backer rod or joint filler to control depth of joint sealant.

H. Protect adjacent surfaces not designated to receive joint sealant.

3.03 PRIMING

Specifier Notes: POURTHANE adheres well to unprimed concrete and so priming is not usually necessary. Substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure. If priming is required, use P/G PRIMER from W.R. Meadows. If the joint does not require priming, delete Section 3.03.

~~A.~~ Mix all material in both containers.

B. Pour part A into part B and mix thoroughly with a clean wooden or metal paddle for approximately 3 - 4 minutes.

C. Scrape container sides and bottom for complete integration.

D. Apply primer system to properly prepared joint surfaces by brush, depositing a light, continuous film.

E. Apply an additional coat to very soft, porous surfaces.

F. Allow primer to become tacky to the touch prior to application of the joint sealant.

3.04 APPLICATION

A. Condition material to 65° - 75° F (18.3° - 23.9° C) before using.

B. Apply joint sealant in accordance with manufacturer's instructions.

C. Gun sealant into joint opening in one direction and allow sealant to flow and level out as necessary.

D. Joint sealant will form a skin after approximately 60-120 minutes with air and surface temperatures above 74ºF (23ºC).

3.05 CLEAN-UP

A. Clean tools with xylene or toluene and remove masking tape before sealant cures.

END OF SECTION