

# GUIDE SPECIFICATION FOR POURTHANE® NS: ONE-COMPONENT NON-SAG, ELASTOMERIC, POLYURETHANE JOINT SEALANT

SECTION 07 92 13

ELASTOMERIC JOINT SEALANTS

Revision Date: February 6, 2020

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 NS is an elastic, low-modulus, one-component, moisture-curing, non-sag, polyurethane sealant. It maintains flexibility and waterproofing joint sealing with high bond strength and provides outstanding durability in the civil and industrial construction markets. The product requires no mixing and typically requires no priming to bond to many materials, including concrete and masonry.

POURTHANE NS has very good adhesion to most construction materials. It is particularly recommended for expansion joints between precast concrete panels and seams on wooden, aluminum, and PVC joinery. POURTHANE NS is highly recommended for bonding concrete and baked clay roof tiles.

## PART 1 GENERAL

### 1.01 SECTION INCLUDES

- A. Concrete joint preparation.
- B. Application of one-component, non-sag 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 D412: Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers—Tension.
- C. ASTM D2240: Standard Test Method for Rubber Property—Durometer Hardness.
- D. Federal Specification TT S-00230C.
- E. ISO 7390: Building Construction -- Jointing Products -- Determination of Resistance to Flow of Sealants.

- F. ISO 8339: Building Construction -- Sealants -- Determination of Tensile Properties (Extension to Break).

#### 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. Website: [www.wrmeadows.com](http://www.wrmeadows.com).

#### 2.02 MATERIALS

- A. Horizontal Joint Sealant: One-component, cold-applied, non-sag polyurethane joint sealant.
  - 1. Performance Based Specification: Horizontal joint sealant shall have the following characteristics:
    - a. ASTM C 920-11: Type S, Grade NS, Class 35, Use T1, T2, NT, O, M, G.
    - b. Federal Specification TT S-00230C, Type II, Class A.
    - c. Consistency: Thixotropic.
    - d. Skin Formation Time (74° F - 50% RH): 60-90 minutes.
    - e. Salt Water Resistance: Excellent.
    - f. Shore Hardness, ASTM D2240: Shore A 25 - 30.
    - g. Modulus at 100% Elongation, ISO 8339: 0.3 MPa.
    - h. Elongation at Break: 800%.
    - i. Sagging, ISO 7390: None.
    - j. UV Resistance: Good.

- k. Resistance to Dilute Acids and Bases: Medium.
- l. Temperature Resistance: -40° - 176° F (-40° - 80° C.).
- m. VOC: 35 g/L.

- 2. Proprietary Based Specification: POURTHANE NS non-sag 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® 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. Remove foreign substances, incompressibles, and free water from joint opening.
- D. Concrete joints must be clean and dry.
- E. Dust, dirt, and laitance should be removed prior to application.
- F. Install backer rod or joint filler to control depth of joint sealant.
- G. Protect adjacent surfaces not designated to receive joint sealant.

### 3.03 PRIMING

Specifier Notes: POURTHANE NS 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. Tool the joint sealant as required, minimum tooling is necessary.
- E. Joint sealant will form a skin after approximately 60 - 90 minutes with air and surface temperatures above 74° F (23° C).

#### 3.05 CLEAN-UP

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

END OF SECTION