



**MAPEFLEX™ P1 FT**  
**One-Part, Nonsag, Elastomeric Polyurethane Sealant**

**SECTION 07 92 00**  
**JOINT SEALANTS**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Products for maintenance of concrete, including the following:
  - 1. Elastomeric polyurethane sealants.

**1.2 RELATED SECTIONS**

- A. Section 07 92 13 – Elastomeric Joint Sealants.

**1.3 REFERENCES**

- A. ASTM International:
  - 1. ASTM C920 – Standard Specification for Elastomeric Joint Sealants.

**1.4 SUBMITTALS**

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square representing actual product, color and patterns.

**1.5 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Minimum of 5 years' experience manufacturing similar products.
- B. Installer Qualifications: Minimum of 2 years' experience installing similar products.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
  - 1. Finish areas designated by Architect.
  - 2. Do not proceed with remaining work until workmanship is approved by Architect.
  - 3. Refinish mock-up area as required to produce acceptable work.

**1.6 PRE-INSTALLATION MEETINGS**

- A. Convene a minimum of two weeks prior to starting work of this section.

**1.7 DELIVERY, STORAGE AND HANDLING**

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
- B. Handling: Handle materials to avoid damage.



## 1.8 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

## 1.9 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

# PART 2 PRODUCTS

## 2.1 MANUFACTURER

- A. Product Performance:
  - Movement capability – ASTM C719 ± 35%
  - Elongation at break – ASTM D412                      1,200%
  - Tensile strength – ASTM D412                      230 psi (1.59 MPa)
- B. Acceptable Manufacturer:
  - MAPEI North America
  - 1144 E. Newport Center Dr.; Deerfield Beach, FL 33442
  - Toll-Free for CRS Technical Services: Tel. 888-365-0614
  - Email: [CRS@mapei.com](mailto:CRS@mapei.com)
  - Web: [www.mapei.com](http://www.mapei.com)
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.
- D. Substitutions: Not permitted.

## 2.2 ELASTOMERIC JOINT SEALANTS

- A. High-performance, one-component, elastomeric, moisture-cured polyurethane sealant and adhesive.
  - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Mapeflex P1 FT.
  - 2. Not less than 35% movement when tested according to ASTM C719.

## 2.3 MISCELLANEOUS MATERIALS

- A. Portland Cement: ASTM C150/C150M, Type I, II or III unless otherwise indicated.
- B. Water: Potable.

## 2.4 MIXES

- A. General: Mix products, in clean containers, according to manufacturer's written instructions.
  - 1. Do not add water, thinners or additives unless recommended by manufacturer.
  - 2. When practical, use manufacturer's premeasured packages to ensure that materials are mixed in proper proportions. When premeasured packages are not used, measure



ingredients using graduated measuring containers; do not estimate quantities or use shovel or trowel as a unit of measure.

3. Do not mix more materials than can be used within time limits recommended by manufacturer. Discard materials that have begun to set.

## **PART 3 EXECUTION**

### **3.1 EXAMINATION**

- A. Interior/exterior horizontal and vertical applications above and below grade on concrete (at least 28 days old), masonry, brick, wood, steel, aluminum, painted metal, glass, PVC and natural stone.
- B. Adhesive to attach Idrostop and Idrostop B25.

### **3.2 PREPARATION**

- A. Surfaces must be sound, clean, dry and frost-free.
- B. Remove all dirt, loose particles, grease, oil, curing compounds and all bond-breaking matter.
- C. Clean joints of debris and contaminants – including oils, loose materials and dirt – to allow for good adhesion of the product. The substrate must be dry with no vapor transfer.
- D. If saw-cutting is used to clean the joint, remove all the dust from the prepared area. Vacuum or use oil-free compressed air to completely blow out all dust and debris.
- E. Before installations in cold-storage environments, ensure that the concrete is clean and frost-free. Precondition the sealant to at least 68°F (20°C) for 24 hours before application.
- F. Prepare nonporous surfaces by wiping them with a rag and appropriate residue-free solvent (xylene or acetone). Follow this immediately by wiping with a clean rag and allowing the solvent to evaporate before the application of Mapeflex P1 FT.
- G. Use on-site testing to verify adequate bond. Most surfaces will demonstrate a suitable bond strength. In the few cases where the bond is not sufficient or in immersed applications, use Mapeflex Primer before installation.

### **3.3 MIXING**

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

- A. No mixing is required. Precondition the sealant to at least 68°F (20°C) for 24 hours before application.

### **3.4 INSTALLATION**

Read all installation instructions thoroughly before installation.

- B. Mapeflex P1 FT may be applied by manual or pneumatic caulking gun.
- C. Apply Mapeflex P1 FT with a consistent, even pressure to force the sealant into the joint.
- D. Once sealant is in the joint, tool sealant into the joint to produce a concave joint shape to achieve maximum adhesion and flexibility. Dry-tool only; do not use soapy water or liquids when tooling.
- E. Close the area to the traffic for at least 3 hours or until the sealant is tack-free. In horizontal applications, allow the sealant to cure overnight before opening the installation area to



traffic.

- F. Mapeflex P1 FT may be painted with an elastomeric paint after it is tack-free.

### 3.5 JOINT DESIGN

- G. Expansion joints should be designed to move a maximum of  $\pm 35\%$ , with a typical width of between 1/2" and 2" (12 mm and 2.5 cm).
- H. The depth of Mapeflex P1 FT should be half the width of the joint – no less than 1/4" (6 mm) deep and no more than 1/2" (12 mm) deep.
- I. For use in traffic areas, the minimum depth is 1/2" (12 mm).

### 3.6 CLEANUP

Remove uncured sealant with an approved solvent such as xylene.

END OF SECTION