



**PRIMER SN**  
**Two-Component, Filled, Epoxy Primer**

**SECTION 03 53 00**  
**CONCRETE OVERLAYMENT**

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Products for topping for concrete, including the following:
  - 1. Primer.

**1.2 RELATED SECTIONS**

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

**1.3 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.

**1.4 QUALITY ASSURANCE**

- A. Manufacturer Qualifications: Minimum 5 years' experience manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience installing similar products.

**1.5 PRE-INSTALLATION MEETINGS**

- A. Convene at least two weeks prior to starting work of this section.

**1.6 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.

**1.7 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.



## 1.8 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 MANUFACTURERS

- A. Product Performance:

Solids content	About 100%
VOCs	27 g per L
Viscosity	1,500 cps
- 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 PRIMERS.

- A. Epoxy Primer: Two-component, filled, epoxy primer specifically designed to enhance adhesion of cement-based decorative and multi-layer flooring, such as MAPEI Mapefloor products.
  - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Primer SN.

### 2.3 MISCELLANEOUS MATERIALS

- A. Portland Cement: ASTM C150, 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 shovels or trowels as units 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. All substrates must be structurally sound, stable, clean and free of any bond-inhibiting or bond-breaking materials such as adhesives, tar, cure-and-seal compounds, curing compounds and mastics.

### **3.2 PREPARATION**

- A. Mechanically prepare the surface by engineer-approved methods to obtain an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #3. Construction, expansion, control and isolation joints must be honored through the finish flooring system. To ensure product performance, repair all cracks greater than 1/32" (1 mm) in width and treat joints using engineer-approved methods.
- B. Concrete substrates should have a minimum tensile pull-off strength of 200 psi (1.38 MPa), and a minimum compressive strength of 3,000 psi (20.7 MPa) for pedestrian traffic and 4,000 psi (27.6 MPa) for vehicular traffic.

### **3.3 MIXING**

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

- A. Premix all the Part A resin to a homogeneous consistency (for up to 3 minutes) using a low-speed drill (at 300 to 450 rpm) and appropriate paint-mixing paddle to minimize trapped air.
- B. Pour all the Part B hardener into the Part A container and mix thoroughly to a smooth and homogeneous consistency. Do not mix at high speeds, which can trap air within the mixed material.

### **3.4 INSTALLATION**

Read all installation instructions thoroughly before installation.

- A. Pour mixed Primer SN onto the substrate in a continuous, pore-free coat. If necessary, Primer SN for particularly porous surfaces, two priming coats may be applied. To smooth out rough surfaces, Primer SN may be mixed with quartz silica sand of 16/30 mesh at a rate of 2 parts of Primer SN and 1 part of sand.
- B. Spread Primer SN using a brush, roller or squeegee. The preferred application method is to use a squeegee and back-roll crosswise, ensuring that the minimum required thickness is maintained.
- C. Apply the entire content of the mixed unit, working the material aggressively into the concrete substrate to cover the substrate entirely with a wet film thickness (WFT) needed for the appropriate MAPEI system. Use a quality paintbrush for the hard-to-reach areas.
- D. Alternatively, sand may be broadcast into Primer SN to increase mechanical bond. Contact MAPEI's Technical Services Department for the proper gradation size of aggregate and the application rate for the intended use. When Primer SN is tack-free (see the "Waiting time" data in the "Application Properties" table on the technical data sheet), remove loose, excess aggregate by blowing, sweeping and vacuuming.

**END OF SECTION**