



**Planiseal SLV
Super Low-Viscosity, High-Modulus, Epoxy Healer/Sealer**

**SECTION 07 18 00
Traffic Coatings**

PART 1 GENERAL

1.1 SUMMARY

- A. A solvent-free, two-components, 100%-solids, low-modulus, super low-viscosity, epoxy healer/sealer designed to penetrate into hairline cracks of new or worn concrete surfaces.

1.2 RELATED SECTIONS

- A. Section 03 30 00 – Cast-in-Place concrete
- B. Section 03 40 00 – Pre-cast concrete

1.3 REFERENCES

- A. ASTM International:
 - 1. ASTM C881 - Standard Specification for Epoxy-Resin-Base Bonding System for Concrete.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 - Administrative Requirements.
- B. Product Data: Submit manufacturer's data sheets and safety data sheets (SDS) on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- C. Samples: Submit samples of specified traffic deck system. Samples shall be construed as examples of finished color and texture of the system only.
- D. Warranty: Submit copy of manufacturer's standard warranty.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Minimum 5 years' experience in manufacturing similar products.
- B. Installer Qualifications: Minimum 2 years' experience in 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 at least two weeks prior to starting work of this section.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Deliver: Materials shall be delivered in original sealed containers, clearly marked with supplier's name, brand name, type of material and legible lot number.
- B. Storage and Handling: Recommended material storage temperature is 75°F (24°C). Handle products to prevent damage to container.

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:

Gel time (200 grams) at 73°F (23°C)	60 minutes
Viscosity at 73°F (23°C) – ASTM D2196	–100 to 120 cps
Solids content – ASTM D1644	100%
Tensile strength at 7 days – ASTM C638	> 1,000 psi (6.9 MPa)
Tensile elongation at 7 days – ASTM D638	> 60.0%
Bond strength at 14 days – ASTM C882	> 500 psi (3.4 MPa)

- B. Acceptable Manufacturer:

MAPEI North America

1144 E. Newport Center Drive; Deerfield Beach, FL 33442

Toll-Free for CRS Technical Services: Tel. 888-365-0614

Email: CRS@mapei.com

Web: 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 POLYMER SEALER MATERIALS

- A. Epoxy polymer sealer: Low-viscosity epoxy penetrating sealer and crack filler designed for penetrating and sealing cracks in exterior concrete traffic surfaces.
 - 1. Product: Subject to compliance with requirements, provide MAPEI Corporation; Planiseal SLV.
 - 2. Bond strength – Not less than 500 psi (3.4 MPa) at 14 days when tested according to ASTM C882.

2.3 MIXES

- A. General: Mix products in clean containers according to manufacturer's written instructions.

PART 3 EXECUTION

3.1 PREPARATION

- 1. The surface must be dry and free of frost.
- 2. Repair surface spalls with a suitable MAPEI repair product before the application of Planiseal SLV.
- 3. Thoroughly clean the surface of substances that could affect the bond, including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, form-release agents, laitance, loose toppings, foreign substances, and any other residues that may interfere with proper penetration and bonding.
- 4. To enhance the proper penetration of Planiseal SLV, the surface of the substrate must be mechanically prepared by engineer-approved methods in accordance with ICRI Guideline 310.2R-2013 to obtain a minimum concrete surface profile (CSP) of #2 to #4.

3.2 MIXING

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

- 1. Precondition material to a temperature between 65°F and 80°F (18°C and 26°C) before use.
- 2. Premix Part A (clear epoxy resin) and Part B (amber curing agent) independently for 1 minute with a low-speed drill and appropriate mixing paddle.
- 3. Combine Part B into Part A and mix with a low-speed drill for 3 minutes, taking precautions to not aerate the mixture.

3.3 INSTALLATION

Read all installation instructions thoroughly before installation.

- A. Immediately after mixing Parts A and B together, flood-coat Planiseal SLV onto the concrete.
- B. Distribute Planiseal SLV evenly by squeegee at a rate of 100 to 200 sq. ft. per U.S. gal. (2.45 to 4.91 m² per L).
- C. Keeping a wet edge, continue to flood Planiseal SLV into cracks until refusal.
- D. Before Planiseal SLV becomes tacky, remove all excess material with a squeegee (on a smooth



surface) or a broom (on broom-textured or tined surface). The surface should appear damp but with no film buildup or ponding.

- E. Broadcast oven-dried silica sand to refusal (typically 20 to 30 mesh) at a rate of 0.2 to 0.8 lbs. per sq. yd. (0.11 to 0.43 kg per m²) over all areas where Planiseal SLV is applied.
- F. If Planiseal SLV is used as a primer, an ASTM C881 Type III epoxy should be applied between 3 hours and 24 hours after application of Planiseal SLV.
- G. After curing and before opening to traffic, remove all excess sand from the cured Planiseal SLV.

END OF SECTION