



Planiseal[®] LVB[®]

**Low-Viscosity,
Epoxy Healer/
Sealer for Elevated
Concrete Decks**



Sand broadcast of
Planiseal LVB after application

DESCRIPTION

Planiseal LVB is a two-component, very low-viscosity, epoxy healer/sealer designed to penetrate into new or worn cracked concrete surfaces. *Planiseal LVB* seals hairline cracks against further moisture penetration and chloride intrusion.

FEATURES AND BENEFITS

- Very low viscosity for penetrating and filling the finest hairline cracks
- Impedes the intrusion of moisture and chlorides
- Easy to mix (1:1 ratio)

INDUSTRY STANDARDS AND APPROVALS

LEED v4 Points Contribution

LEED Points

Health Product Declaration (HPD)*Up to 2 points

** Using this product may help contribute to LEED certification of projects in the category shown above. Points are awarded based on contributions of all project materials.*

WHERE TO USE

- Use on elevated, interior/exterior concrete surfaces.
- Use on bridges.
- Use on pedestrian walkways and parking decks.
- Use as a primer before use of an ASTM C881 Type III epoxy.

LIMITATIONS

- Substrate application temperature must be between 55°F and 95°F (13°C and 35°C).
- Application should not exceed more than one flood coat.
- Do not apply over curing compounds.
- Due to low viscosity of this material, it may penetrate through entire depth of crack. Precautions should be taken to protect areas below the deck.
- Product must be sand-seeded when left exposed.

SUITABLE SUBSTRATES

- Fully cured and prepared concrete
- Concrete substrates must demonstrate a tensile pull strength exceeding 250 psi (1,72 MPa).

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION

- Mechanically prepare to an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #2 or greater.
- Surface must be dry and free of frost.
- Repair spalls, delaminations, potholes and cracks with a suitable MAPEI repair product before the application of *Planiseal LVB*.



- 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.

MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

1. Precondition *Planiseal LVB* to 65°F to 80°F (18°C to 26°C) before use.
2. Mechanically mix Part A with Part B at a 1:1 ratio by volume with a Jiffy mixer and low-speed variable drill at 300 rpm for 3 minutes. Mix only the quantity that can be used within its gel time.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Within 5 minutes of mixing Parts A and B together, flood-coat *Planiseal LVB* onto the concrete.
2. Immediately distribute *Planiseal LVB* evenly and work it into concrete for at least 5 minutes for maximum penetration. Continue to flood the product into cracks until refusal. Remove all excess material with a straight-bladed squeegee on smooth surfaces and a broom on textured surfaces. Surface should appear damp but with no film buildup or ponding.
- 3a. If *Planiseal LVB* is used as a primer, an ASTM C881 Type III epoxy must be applied within 60 minutes of application.
- 3b. Broadcast oven-dried silica sand to refusal (typically 20 to 30 mesh) over all areas where material is applied. Allow the material to cure and then remove excess sand.

CLEANUP

- Clean tools with a suitable solvent such as xylene.
- Once cured, *Planiseal LVB* can only be removed mechanically.

Product Performance Properties

Laboratory Tests	Results
Viscosity at 77°F (25°C) – ASTM D2196	55 cps
Total solids – ASTM D1644	77%
Ash – ASTM D482	0.3%
Filler content – ASTM C881	0.0%
Tensile strength – ASTM D638	185 psi (1,28 MPa)
Tensile elongation – ASTM D638	82%
Bond strength – ASTM C882	80 psi (0,55 MPa)
Thermal compatibility – ASTM C884	Pass
Absorption – ASTM D570	0.2%
Shrinkage – ASTM C883	Pass
VOCs (Rule #1168 of California's SCAQMD)	< 55 g per L

Shelf Life and Application Properties

Shelf life	2 years in original unopened container. Store at 50°F to 80°F (10°C to 26°C).
Gel time, 200 grams mixture – ASTM D2471	45 minutes
Curing time	About 6 hours at a substrate temperature of 72°F (22°C)

CSI Division Classification

Traffic Coatings	07 18 00
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Packaging

Size
Part A: 5 U.S. gals. (18,9 L)
Part B: 5 U.S. gals. (18,9 L)
Part A: 55 U.S. gals. (208 L)
Part B: 55 U.S. gals. (208 L)

Approximate Coverage*

150 to 200 sq. ft. per U.S. gal. (3,67 to 4,9 m ² per L)

* Coverage rate depends on profile and porosity of concrete.

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Refer to the SDS for specific data related to health and safety as well as product handling.

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at

www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use,

and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

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