

PRODUCT NAME

Deck-Seal® 100

Waterproofing Membrane

MANUFACTURER

Gemite® Products Inc.

Toll Free: 888-4-GEMITE (888-443-6483)

E-mail: techinfo@gemite.com

Web Site: www.gemite.com

USA

160-3480 East Robinson Rd.
Amherst, New York 14228
Phone 888-443-6483
Fax 888-443-6329

CANADA

1787 Drew Road
Mississauga, Ontario L5S 1J5
Phone 905-672-2020
Fax 905-672-6780

FEATURES

- self - adhesive
- superior toughness
- reinforced, does not require protection board
- excellent flexibility at low temperatures
- superior durability
- highly freeze/thaw resistant
- easy and fast application
- very low sensitivity to substrate moisture
- torch application not required

PRODUCT DESCRIPTION

Basic Use

Deck-Seal 100 is an excellent waterproofing composite for concrete decks, that are overlaid with concrete or mortar course. Deck-Seal 100 can be used on new construction or repair projects. Deck-Seal 100 provides long lasting waterproofing and protection of reinforcing steel.

Composition and Materials

Deck-Seal 100 is a proprietary, self adhesive waterproofing membrane, specifically designed for use for concrete or mortar overlays. It also allows direct bonding of tile setting mortars. Deck-Seal 100 is 1.5 mm (60 mils) thick, consisting of a tough, internal spun bonded polyester reinforcement combined with glass reinforcement, which provide superior strength, puncture and tear resistance. The proprietary SBS modified asphalt surfacing is uniquely formulated to provide high adhesion to primed concrete surface under a broad range of application conditions. The sticky, elastic adhesive layer is covered with release sheet that is removed during installation. The membrane is self adhesive and cold-applied. No special adhesive, heat or equipment is necessary to form laps.

Limitations

The new concrete must be cured and dried for at least seven (7) days under normal conditions prior to installation of Deck-Seal 100 Membrane. Deck-Seal 100 must be applied to a properly prepared substrate in ambient and deck temperatures of 4°C (40°F) and in fair weather.

Health and Safety

Refer to Material Safety Data Sheet for toxicity and safe handling information. Keep product out of reach of children. FOR INDUSTRIAL USE ONLY.

Color

Deck-Seal 100 is black in color.

Packaging

Deck-Seal 100 membrane is supplied in rolls, 18.6 m² (200 ft²), 20.3 m long x 0.92 m wide (66.6' x 3'). The roll weighs 27.68 kg, (61 lbs), 20 rolls per pallet. Packaged in cardboard boxes.

Coverage

In calculating actual coverage, the overlaps must be taken into consideration.

Storage

Pallets with of membrane shall not be stacked.

TECHNICAL DATA

Property, Test Method	Minimum Value
Thickness	1.5 mm (60 mils)
Tensile Strength ASTM D 2523	(MD)750N/5 cm (84.4 lbs/in) (CMD) 467 N/5 cm (52.5 lbs/in)
Ultimate Elongation ASTM D2523	(MD) 40.8 % (CMD) 49.8 %
Pliability, 180 °, 25mm (1 in)Mandrel -32°C (-25°F) ASTM D146	Pass
Low Temperature Flexibility ASTM D 1970 (-32°C; -25°F)	Unaffected
Trapezoidal Tear Strength, ASTM D 4830	(MD) 58 Nm, (43 lbsft) (CMD) 72.8 Nm, (54 lbsft)
Adhesion to primed concrete, ASTM D 903	89 N/5 cm, (10 lb/in)
Permeance ASTM E96 B	0.01 g/m ² /24 hrs

INSTALLATION

Surface Preparation

Concrete surfaces should be smooth, clean, dry and free of voids, spalled areas, loose aggregate and sharp protrusions with no coarse aggregate visible. New broom or wood float finishes are acceptable. Thoroughly clean all surfaces. Surface defects should be repaired with Fibre-Patch ST or Adi-Con BA AC modified mortar concrete. New concrete should be fully cured

and dry for a minimum of seven (7) days. Forms should be removed as soon as possible to allow proper cure of concrete. Immediately before priming, thoroughly clean the surface to remove dust, dirt and loose debris. New concrete should be cured with clear, resin based curing compound. DO NOT USE curing compounds which contain oil, wax, silicone or pigments.

Priming

Prime all concrete surfaces with Gemite *Deck-Prime 100* at a rate of 0.25-0.7L/m² (0.05-0.15 US Gallon/yrd²), depending on surface porosity. Primer may be applied by roller or a low pressure sprayer. Primer should be dry one hour or until tack free. Prime only the area that will be covered with *Deck-Seal 100* in one work day. Primed areas not covered within 24-hours may require additional primer. Metal does not require additional primer but must be clean, dry and free of grease, oil, dirt, loose paint, rust of other contaminants. Dried asphalt slurry seals or *Fibre-Patch* does not require priming. For cool temperatures, consider the use of solvent borne *Deck-Prime 200*.

Slab Drainage and Joint Treatment

Provide proper pitch to gutters and drains. *Deck-Seal 100* should be laid from the low point to the high point with each composite overlapping the previous a minimum 75 mm (3 in), lower sheet in shingle fashion. Weep holes or drainage openings should be provided at the structural deck level to drain water which penetrates the asphalt concrete.

A 200 mm (8 in) wide reinforcing strip of *Deck-Seal 100* must be applied over joints or cracks over 5 mm (3/16 in) wide before applying the full coverage of composite. Terminate *Deck-Seal 100* at expansion joints and seal terminations with *Deck-Seal 100 Mastic*. At steel expansion dams, terminate *Deck-Seal 100* on the concrete deck and apply *Deck-Seal 100* at the termination to assure a tight seal. Steel joints or other expansion joint assemblies should be placed to the level of the concrete overlay.

Placement of Membrane

Deck-Seal 100 is applied by removing the release sheet as the membrane is unrolled with the tacky surface in contact with the primed concrete. Place composite such that the side overlaps are parallel to the direction of concrete placement. Stagger end laps. Overlap all edge side laps a minimum of 64 mm (2.5 in) and end laps a minimum of 150 mm (6 in). Place membrane carefully to assure uniform laps and to minimize wrinkles and fish-mouths. Roll the entire composite immediately after placement.

Curbs and Terminations

Curb flashing strips should be applied to a point just below the anticipated height of the concrete overlay and a minimum of 150 mm (6 in) out onto the deck. Apply the first field sheet as close as possible to the curb. Irregularities on rough granite curbs should be smoothed with *Fibre-Patch ST*. A fillet should be provided at curbs and parapets to avoid a sharp break at these points.

The fillet material should be *Fibre-Patch ST* or *Adi-Con BA AC* modified mortar well adhered to the deck and curb. Preformed cant strips are not recommended. Seal all terminations with a trowel width of *Deck-Seal 100 Mastic*, 13 mm (1/2 in) to 26 mm (1 in) wide and 3 mm (1/8 in) thick. All terminations at the end of the day shall be sealed with a thin trowelling of *Deck-Seal 100 Mastic*. Areas around drains or protrusions must be double covered with *Deck-Seal 100*. Apply flashing pieces UNDER the full sheets of *Deck-Seal 100* to minimize damage from the paving operation.

Inspection and Repair

Prior to concrete placement, inspect the composite and make appropriate repairs. Tears and inadequately lapped seams must be patched. Fish mouths must be slit, the flaps overlapped and repaired with a patch. Blisters over 100 mm (4 in) in diameter should be punctured and repaired.

Concrete Placement

The concrete overlay should be placed as soon as possible after the application of *Deck-Seal 100*.

THE THICKNESS AND COMPOSITION OF THE CONCRETE OVERLAY IS A FUNCTION OF THE ANTICIPATED SERVICE CONDITIONS AND IS THE RESPONSIBILITY OF THE DESIGN ENGINEER. Do not use protection courses. Concrete placement must not be started following rain, until the composite sheet is completely dry. Concrete should be pumped or brought on the deck in hand dolies.

Precautions

Deck-Seal 100 strips over joints in T beam structures will not provide complete waterproofing. For such structures, place an 200 mm (8 in) wide strip over each joint, followed by full coverage over the entire surface.

AVAILABILITY AND COST

Deck-Seal 100 is available worldwide. Contact the manufacturer for the name of the nearest Representative/Distributor and current pricing information.

WARRANTY

A limited twelve (12) month Material Replacement Warranty is available. For complete details contact Gemite's Head Office.

TECHNICAL SERVICE

Technical advice on suitability of *Deck-Seal 100* for specific application, Specification assistance and application advice, contact Gemite Products Inc. Technical Service in the USA at (888) 443-6483, in Canada at (905) 672-2020.

Short Specification

The waterproofing preformed membrane will be self-adhesive, polyester fabric and glass reinforced deck membrane *Deck-Seal 100* manufactured by Gemite Products Inc., (888-443-6483 (USA) or (905) 672-2020 (Canada).