

PRODUCT NAME

Deck-Seal® 200

Waterproofing Membrane

MANUFACTURER

Gemite® Products Inc.

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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 200 is an excellent waterproofing composite for structural concrete decks, split slab construction above and below grade, tunnels, foundation walls, earth shelters, plaza decks, parking decks and approved insulating foams. Deck-Seal 200 can be used on new construction or repair projects.

Composition and Materials

Deck-Seal 200 is a proprietary, self-adhesive waterproofing membrane, specifically designed to provide high strength, low temperature adhesion and high temperature stability. A tough 4 mils cross-laminated polyethylene film forms a resilient barrier against physical damage and water migration. The high performance, rubberized asphalt provides superior waterproofing integrity and high adhesion to primed concrete surface under a broad range of application conditions.. This product offers a silicone coated, high temperature release paper for easy installation Deck-Seal 200 is self adhesive and cold applied, 1.5 mm (60 mils) thick membrane. No special adhesives, heat or equipment are necessary to install

Limitations

The new concrete must be cured and dried for at least seven (7) days under normal conditions prior to installation of Deck-Seal 200 Membrane. Deck-Seal 200 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 200 is black in color.

Packaging

Deck-Seal 200 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	Values
Thickness	1.5 mm (60 mils)
Tensile Strength - Composite ASTM D 412	2.24 MPa (325 psi)
Tensile Strength - Film ASTM D 412	34.5 MPa (5,000psi)
Elongation to Break, ASTM D 412, rubberized asphalt only	500%
Pliability, 180 °, 25mm (1 in)Mandrel -32°C (-25°F) ASTM D146	Pass
Cycle over crack -32°C (-25°F)	Pass
Peel Adhesion, Dry - Concrete (ASTM D 903)	89 N/5 cm, (10 lbs/in)
Peel Adhesion, Wet - Concrete (ASTM D 903)	80 N/5 cm, (9 lbs/in)
Puncture Resistnace (ASTM E 154)	311.4 N, (70 lbs)
Hydrostatic Resistance, (ASTM D 751)	70 M (230 ft.)
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

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07200 Waterproofing
07110 Membrane Waterproofing

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 dried for a minimum of seven (7) days. Lightweight structural concrete must be dried at least 14 days. Forms should be removed as soon as possible to allow proper cure of concrete. Use *Deck-Prime 100* to ensure good adhesion. New concrete should be cured with clear, resin based curing compound. DO NOT USE curing compounds which contain oil, wax, silicone or pigments.

Priming

Immediately before priming, thoroughly clean the surface to remove dust, dirt and loose debris. 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 200* 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 or 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 200* 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 200* must be applied over joints or cracks over 5 mm (3/16 in) wide before applying the full coverage of composite. Terminate *Deck-Seal 200* at expansion joints and seal termination's with *Deck-Seal 200 Mastic*. At steel expansion dams, terminate *Deck-Seal 200* on the concrete deck and apply *Deck-Seal 200* 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

On horizontal surfaces *Deck-Seal 200* is applied to the primed substrate starting at the low point. Successive sheets of *Deck-Seal 200* must overlap preceding sheets by 60 mm (2.5 inches). Remove silicone coated release tapes for uniform lap adhesion. *Deck-Seal* should firmly load as soon as possible to insure uniform contact with the substrate. Place membrane carefully to assure uniform laps and to minimize wrinkles and fish-mouths. Roll the entire composite immediately after placement. For vertical surfaces apply a 23 cm (9 inches) strip of *Deck-Seal 200* centered horizontally over the joint over the joint of the foundation all and footing. Apply full sheets of *Deck-seal 200* starting at the bottom of the footing up to what will be 15 cm (6 inches) below grade. On walls over 2.4 m (8 feet) high, it may be necessary to overlap adjoining sections. In such instances the upper section should overlap the lower section by at least by 63 mm (2.5 inches). On successive vertical courses remove silicone coated release tapes for uniform lap adhesion. Use hand

rollers or heavy hand pressure to insure good contact. If *Deck-Seal 200* is terminated on a vertical surfaces, use reglet, termination bar or a flashing. For complete installation instructions and Guide Specification, please contact Gemite Technical Service.

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 200 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 200*. Apply flashing pieces UNDER the full sheets of *Deck-Seal 200* 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 200 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 200*. 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 dollies.

Precautions

Deck-Seal 200 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 200 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 200* 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.