



WATERBAN® 90

**Transparent
concrete water-
repellant and
penetrating sealer**

Advantages:

- Protects from moisture penetration
- Prolongs surface life
- Reduces the formation of salt efflorescence, lime erosion, and mildew
- Protects against deterioration from chloride ions
- Reduces the formation of cracks from swelling and shrinkage

Coverage:

- Varies, dependant upon project, from 60-200 ft² per gallon (1.5-4.9m²/L)

See Coverage

Packaging:

5 gal (18.9L) pail
55 gal (208.2L) drum



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Product Description

WATERBAN® 90 is a clear liquid water repellent sealer designed for maximum protection of concrete and masonry surfaces. It is a blend of aliphatic solvents and siloxane resin. The siloxane resin is hydrophobic in nature that results in excellent water repellency. WATERBAN® 90 has been designed for use on above grade exterior vertical or horizontal concrete. It is characterized by excellent penetration, high alkali resistance, low volatility, provides water repellency, exhibits droplet effect, and suitable for alkaline and neutral substrates.

WATERBAN® 90 contains a built-in catalyst that reduces the system's dependency or reaction with an alkaline substrate for maximum efficiency. The product reacts with the surface and humidity and is transformed into a water repellent compound that is chemically bonded to the substrate. The siloxane solids have an extremely small molecular structure resulting in exceptional penetration. The surface after treatment of WATERBAN® 90 does not affect the vapor permeability of the concrete or masonry. The surface is allowed to "breathe" preventing damage by entrapped moisture and prolonging the service life of the siloxane treatment. WATERBAN® 90 is not a vapor barrier.

WATERBAN® 90 can be used to protect concrete parking decks, garages, ramps, roads, bridges, pool decks, prestressed and precast concrete products, brick and stone veneers.

Installation

Before using this product, please refer to the Material Safety Data Sheet for additional information. Proper handling precautions MUST be followed. The conditions of use, handling, and application of this product and information (whether verbal or written), including any suggested formulations and recommendations, are beyond Lambert

Corporation's control. Therefore, it is imperative that testing be performed to determine satisfaction and suitability for intended use and health, safety, and environmental issues. The following information is meant as a guideline of best industry practices. While Lambert Corporation does suggest adherence to these guidelines, unforeseeable variables and/or developed successful installer practices may cause variation in methods and/or results.

Surface Preparation

Surface cracks and voids should be patched prior to application. All caulks and sealants should be in place and cured completely. Concrete surfaces must be structurally sound, clean, and oil free.

Surface Preparation-Old Concrete

Remove existing coatings, oils, greases, dirt, efflorescence and other contaminants by abrasion or acid etch. Remove unsound concrete. Fill voids and cracks with Lambert's vinyl patching compound.

Surface Preparation-New Concrete

Cure fresh concrete with Lambert compatible curing compounds. Membrane curing compounds must be totally dissipated (oxidized) off the concrete or mechanically removed by wire brush or light sandblast prior to application. Cure concrete 28 days or more before application of WATERBAN® 90. Efflorescence and other contaminants should be removed by water blast or chemical cleaners. Surfaces to be treated may be damp but should be absorbent to assure good penetration.

Caution

Do not spray on windy days. All surfaces not to be treated should be protected from overspray. In very dry environments, the surface should be lightly water fogged prior to application.

Application

WATERBAN® 90 should be applied as packaged; do not dilute material. Surface and air temperatures should not be below 40°F (4.4°C) or above 100°F (37.8°C). The

recommended application equipment is a low-pressure (20 PSI / 0.14MPa) type sprayer or a heavily saturated brush or roller – 3/4-inch long-nap (19.1 mm). Sprayers should be fitted with solvent-resistant hoses and gaskets.

Application -Vertical Surfaces

Apply WATERBAN® 90 in a flood application from bottom up with sufficient material applied to produce a 6" to 8" (152.4-203.2mm) rundown below the spray pattern before penetrating the surface. It is advisable to apply the solution freely and uniformly. Allow the first application to penetrate the surface (20-30 minutes) and reapply (wet on wet) in the same saturating manner. Applications require 2-4 hours to dry. Avoid rain exposure during this period. When using brushes or rollers, make sure sufficient WATERBAN® 90 is applied. Brush out heavy runs or drips that do not penetrate. In the case of extremely dense, gloss finished concrete or similar surfaces, it may be necessary to restrict the amount of solution applied to one application in order to prevent surface darkening. In all cases small test applications should be made to determine best application methods and color results.

Horizontal Surfaces

For horizontal surfaces, apply sufficient WATERBAN® 90 so it stands for a few seconds before penetrating into the masonry. Pools and puddles should be thoroughly worked into the surface and not allowed to stand.

Testing & Maintenance

Proper application may be ascertained after overnight dry. Sprinkle impregnated surface with coarse spray of water. Area should "bead" water droplets, not "wet out", and darken. Any areas found that were skipped or not thoroughly impregnated should be resaturated with WATERBAN® 90. When area fails to shed water, surface may be reimpregnated after cleaning. Little maintenance should be required for many years for most applications.

Paint Adhesion

Surfaces treated with WATERBAN® 90 may be painted over with most solvent-based paints. Latex water based paints should be tested for bond. Testing is always necessary to assure adhesion due to the wide variety of paint formulations. Adhesion of cementitious-based paints, topcoats, or stucco coats will not permanently bond to a WATERBAN® 90 treated surfaces.

Cautions

WATERBAN® 90 is a combustible material and should not be used near fire or extreme heat. Provide good ventilation to avoid build-up of solvent fumes. When applying, applicators should wear rubber gloves, eye protection and NIOSH/OSHA approved respirators. When applying to exterior of occupied buildings, all exterior air conditioning vents should be covered during application. Air handling equipment should be turned off to avoid carrying odors within the building. Avoid contact with all food products. Contaminated clothing should be changed as quickly as possible. Containers must be kept closed tightly at all times and protected against direct heat and sunlight. Avoid opening and closing of container since material is moisture-sensitive.

Limitations

WATERBAN® 90 may not be suitable for application to some types of natural stone or suitable for application to gypsum plaster, asphaltic/tar surfaces or joints, and some resin based paints. Always test for compatibility prior to application to

assure results are acceptable. WATERBAN® 90 is not effective on close to pure limestone type materials.

Protect mill finish aluminum, reflective glass, asphaltic-based products, shrubbery and plant life from overspray. It is not recommended as a water repellent under hydrostatic pressure conditions

Technical Data

Properties

- Solids: 15%
- Flash Point: 105°F (40.6°C)
- Active Substance: Siloxane
- Solvent: Mineral Spirits
- VOC'S: 600 g/liter (5.8#/gal)
- Weight/Gal: 6.7 lbs (3.1 kg)
- Appearance: Opalescent Liquid

NCHRP 244 report*

- Application Rate: 125 ft² per gallon (3.1m²/L)
- % Reduction in Water Absorption: 85.1% Improvement relative to control sample
- % Reduction in Chloride Intrusion: 92.1% More effective than untreated sample

***National Cooperative Highway Research**

- SCALING RESISTANCE ASTM C 672 (50 CYCLES) No scaling
- WET SKID RESISTANCE % Change, max. 0
- SURFACE APPEARANCE (After 2 coats) No change

Coverage

Coverage is dependent on the nature of the concrete or masonry to be protected. This will vary from 60 ft² per gallon (1.5 m²/L) for porous concrete block to 200 ft² per gallon (4.9 m²/L) for smooth, dense concrete, with most brick and stone falling somewhere in between. The following is a guide for estimating; always test on actual surface to get coverage rates.

Two - COAT APPLICATION (ft²/gal)

- Smooth concrete(steel trowel) 150-200 ft²/gal
- Smooth concrete(precast) 125-175 ft²/gal
- Stucco 125-175 ft²/gal
- Concrete Block 60-80 ft²/gal
- Cement Brick 80-120 ft²/gal
- Exposed Aggregate 100-150 ft²/gal
- Bridge Decks 100-150 ft²/gal

Two - COAT APPLICATION (m²/L)

- Smooth concrete(steel trowel) 3.6-4.9 m²/L
- Smooth concrete(precast) 3.0-4.3 m²/L
- Stucco 3.0-4.3 m²/L
- Concrete Block 1.5-2.0 m²/L
- Cement Brick 2.0-2.9 m²/L
- Exposed Aggregate 2.4-3.6 m²/L
- Bridge Decks 2.4-3.6 m²/L

Because the porosity of similar substrates varies greatly, Lambert Corporation is not responsible for any shortfalls or excess consumption based on the above estimates.

Clean-Up & First Aid**Clean-Up**

Application equipment may be cleaned with solvents (lacquer thinner). Thoroughly wash clothing with soap and water after use.

First Aid

Skin & Eyes - Repeated or prolonged contact may cause injury to skin or eyes. If contact occurs, flush area thoroughly with plenty of water.

Inhalation - Prolonged inhalation of vapor may cause respiratory irritation or intoxication with possible central nervous system depression. Avoid breathing vapors. If effects occur, remove to fresh air. If breathing is difficult, give oxygen. If not breathing administer artificial respiration.

Ingestion - Do not take internally. If ingested, DO NOT induce vomiting. Liquid aspirated into lungs may cause serious lung injury. Use only with adequate ventilation.

Safety Equipment

Solvent resistant gloves, goggles and if applied in areas of poor or inadequate ventilation, use mine safety mask and canister (Organic Vapor Canister No. 77705 GMA).

**KEEP OUT OF REACH OF CHILDREN.
FOR INDUSTRIAL USE ONLY.**