

SEMENT PATCH SYSTEM™

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Supersedes all previous publications



Product Description

LAMBCO® SEMENT/PATCH SYSTEM™ is a portland cement based polymer-modified patch and repair system. Designed specifically for resurfacing and leveling concrete surfaces where the repair can be 3/4-inch (19.1 mm) thick and down to a thin edge 1/8-inch (3.2 mm). The dry powder ingredients in LAMBCO SEMENT PATCH SYSTEM™ are blends of portland cements, specially graded silica aggregates, and chemical additives. The liquid acrylic polymer (LAMBCO® SEMENT PATCH LIQUID™) is a high solids acrylic latex emulsion. This latex modified cementitious blend gives thin section repairs better bond, increased water resistance, chemical resistance, tensile strength, and improved flexibility over standard portland cement concretes. SEMENT PATCH SYSTEM™ gives long lasting repairs to below grade, on grade, interior or exterior concrete surfaces. It is a durable, efficient, and proven system that bridges the cement and epoxy gap in price and performance for concrete repairs.

LAMBCO SEMENT/PATCH SYSTEM™ is used to repair exterior and interior concrete surfaces. Uses include: correction of "bird bath" type areas (high/low areas); level and smooth rough or rained on concrete; return floors to level before installation of carpet or tile; or for repairing concrete surfaces that have been damaged by heavy traffic or abuse.

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

Improper surface preparation can result in less than acceptable LAMBCO SEMENT PATCH SYSTEM™ performance. It is very easy to blame adhesion problems that occur on the patching material being applied when poor surface preparation is really where the fault lies. Concrete substrates should be cured properly and structurally be sound. To ensure proper adhesion, the surface must be thoroughly cleaned of all dirt, dust, grease, oil, wax, release agents, curing and sealing compounds, loose, "punky" concrete or anything other situation that would interfere with the normal concrete bond or the chemical action bonding of cementitious products. Concrete removal and substrate preparation should provide a minimum depth of 1/8-inch (3.2 mm) for best repairs.

Where hard trowelled, glassy smooth concrete is encountered, it is recommended that the surface be scarified, acid etched, or sandblasted, then thoroughly rinsed with clean water. Surface should have a profile of miniature ridges and valleys that give concrete "teeth" to form a successful bond. Concrete substrates to be repaired must be pre-dampened but no standing water should remain. Insufficient moisture at the bond or glue line can result in a weakened bond.

When bonding to steel or other metal surfaces remove all scale, rust, and paint and place wire laths around metal surface. Remove any loose or weak concrete.

Priming Concrete Surfaces

Moisten substrate with clean water using brush or fine spray. Allow substrate to absorb moisture for several hours with several applications if possible. This procedure will prevent dry porous concrete from absorbing or wicking the LAMBCO SEMENT PATCH LIQUID™ out of the patch mixture prior to its final set thus causing a potential bond failure, shrinkage cracking, or a soft and weak SEMENT PATCH SYSTEM™. The application of SEMENT/PATCH LIQUID™ as a coating to the substrate and in the mix in place of water will enhance bond and strength qualities while also reducing porosity at the glue line. THE SEMENT/PATCH LIQUID™ MUST REMAIN TACKY, NOT DRY, WHEN MIXED SEMENT PATCH SYSTEM™ MATERIAL IS APPLIED.

Mixing and Placement

Use a mortar mixer or mixing box depending on amount of material to be used. Mix an 80 pound (36.3kg) unit SEMENT PATCH POWDER™ with 1 1/4 gallons (4.7 liters) of LAMBCO SEMENT PATCH LIQUID™. Always add dry powder to correct amount of liquid and mix to a workable, smooth, lump-free consistency. CARE SHOULD BE TAKEN NOT TO MAKE MIXTURE TOO "SOUPY". MIXING TIME SHOULD NOT EXCEED FIVE (5) MINUTES. FOR BEST RESULTS USE ONLY LAMBCO SEMENT PATCH LIQUID™ FOR MIXING. Apply mixture to the prepared surface and trowel into place using enough pressure to force the SEMENT PATCH SYSTEM™ into the concrete substrate. Force material against edge of repair, working toward center. After filling repair, consolidate, then screed. Finish with trowel until smooth and level with surrounding surface. DO NOT OVER TROWEL BEFORE INITIAL SET OR SPRINKLE WATER ON SURFACE TO AID IN FINISHING. Should mixture become stiff, dip trowel in SEMENT PATCH LIQUID™ for easier working.

Care should be exercised in finishing very thin toppings. It is impossible to produce a highly polished, finished surface without jeopardizing the strength of the bond or glue line in thin topping repairs. Excessive steel trowelling will cause more than normal surface bleeding and shrinkage. This surface bleed water is usually drawn from the glue line causing dehydration, resulting in a possible bond failure. In thin toppings, wood floating only immediately after screeding, will produce maximum bond and minimum shrinkage. Resort to steel trowelling only when necessary. Any steel trowelling should be very light with a minimum number of passes.

In hot weather applications, substrates should be protected from direct sunlight and wind. Frequent misting of the substrate with water will significantly lower its temperature prior to application.

Packaging:

#3 Unit –
40 lb (18.1kg)
pail and 1 gal
(3.8 liter) jug

#4 Unit –
80 lb (36.3kg)
bag and 2 gal
(7.6 liter) jug

RESURFACE REPAIR
HORIZONTAL

SEMENT PATCH SYSTEM™

MASTER FORMAT: 03 01 30 . 72
32 01 29



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Limitations

SEMENT PATCH SYSTEM™ is not recommended for thin applications less than 1/8-inch (3.2mm), where the surfaces are continually immersed or "ponded" in water, or covered by products which retain water for long periods. The SEMENT PATCH SYSTEM™ is a moderate to hardwearing surface but is not suitable to extremely heavy-duty wear such as steel wheel traffic.

During periods where the temperature is or will be above 100°F (37.8°C) within 24 hours of application, patching repairs should be undertaken with caution because of rapid LAMBSCO SEMENT PATCH LIQUID™ loss in the

SEMENT PATCH SYSTEM™ material creating a potential bond failure due to poor cement hydration. In general, SEMENT PATCH SYSTEM™ should not be applied to a hot substrate, in hot direct sunlight, or in high wind areas without paying proper attention to the potential problem of rapid mixing liquid loss. Do not use the SEMENT PATCH SYSTEM™ on areas where the temperature is or will be below 50°F (10°C). During cold weather, it is suggested to store product at room temperature for 24 hours before application. Do not retemper or add other cement additives. Cracks in substrate will generally telegraph through repair areas unless properly repaired.

Never apply where efflorescence is present on the concrete surface. Efflorescence is a white soluble surface salt that breaks down the bond of any cement-based product. LAMBERT strongly suggests applying test samples under job conditions to be sure you get the results your job requires.

Curing

This product is self-curing under most conditions. In exposed locations where rapid drying conditions exist - high temperatures, low humidity, strong winds, coat the repaired area with LAMBSCO SEMENT PATCH LIQUID™ immediately after finishing. After 3-4 hours, lightly mist with water for 24 hours.

Crack Repair

Substrate cracks should be dug out or saw cut and widened to a minimum of 1/4-inch (6.4mm) wide and 1-inch (25.4mm) deep for best results. If this is impossible or undesirable, fill the depths with a flowable consistency of SEMENT PATCH SYSTEM™. Top the surface of the crack with a compacted layer of no slump LAMBSCO SEMENT PATCH SYSTEM™.

Technical Data

Compressive Strength	2" Cubes (ASTM C-109)
1 Day	1230 PSI (08.5 MPa)
3 Days	3380 PSI (23.3 MPa)
7 Days	5780 PSI (39.9 MPa)
28 Days	5800 PSI (40.0 MPa)

Coverage

- #3 Unit will yield/cover 50 square feet (4.6m²) at 1/8-inch (3.2mm)
- #4 Unit will yield/cover 100 square feet (9.3m²) at 1/8-inch (3.2mm)

Clean-Up

SEMENT PATCH LIQUID™ - In case of spillage, scoop into appropriate container, and dispose of in accordance with applicable local regulations. Flush area with large amounts of water. Uncured material can be removed with water. Cured material can only be removed by mechanical methods.

SEMENT PATCH POWDER™ - shovel into appropriate container, and dispose of in accordance with applicable local regulations.

First Aid

Avoid skin and eye contact. Safety goggles, rubber gloves, and the use of a NIOSH/MSA approved dust respirator is recommended. In case of skin contact, flush with water. For eyes, flush immediately with plenty of water for 15 minutes, and contact a physician. Wash clothing before re-use.

Cement powder or freshly mixed concrete may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with water. If any cement powder or mixture gets into eyes, rinse immediately and repeatedly with water and get prompt medical attention. Product contains some silica sand that can cause SILICOSIS. Avoid over-exposure to the airborne dust. Practice good housekeeping. Any food, drink or chewing product should be protected from the dust.

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