

LAMBCO® SPE-D-PATCH

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Supersedes all previous publications



Product Description

LAMBCO® SPE-D-PATCH is a premium-grade rapid-setting high-strength concrete patching compound packaged as a dry powder requiring only the addition of clean potable water or Lambert's liquid acrylic resin concrete admixture. LAMBCO® SPE-D-PATCH is formulated for extreme workability and is the ideal product for vertical/overhead patch and repair projects requiring repairs between feather-edge $\frac{1}{16}$ -inch (1.6-mm) and 4-inches (10.2-cm) such as, but not limited to, the repair of pre-stress panels, concrete pipe, culverts, beams, catch basins, and concrete floors.

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

Remove all unsound concrete and roughen the surface, if necessary, to a minimum $\frac{1}{16}$ -inch (1.6-mm). Concrete substrates should be cured properly and structurally sound. Remove all laitance, oil, grease, curing compounds, and other contaminants that may negatively affect the bonding capability of the LAMBCO® SPE-D-PATCH. The concrete substrate should be saturated surface-dry (SSD), free of all standing water, prior to application.

Mixing and Placement

A paddle type mixer or a revolving concrete mixer can be used. Use a container that will facilitate continuous placement. Place water into mixer before dry mortar. LAMBCO® SPE-D-PATCH will require approximately 8.25-pints (3.9-liters) potable water or Lambert's liquid acrylic resin per 50-lbs (22.7-kg) bag to achieve correct mixture. Blend for 4-minutes before placing material.

Application / Placement

Apply the mixed material onto the prepared saturated surface-dry (SSD) substrate by gloved-hand, trowel or screed. Ensure proper consolidation of the mortar and compaction around reinforcing steel. Minimum application thickness is $\frac{1}{16}$ -inch (1.6-mm). Finish the completed repair, as necessary, preventing overworking of the surface. After filling repair, consolidate, then screed. Finish with trowel until smooth and level with surrounding surface. LAMBCO® SPE-D-PATCH can be shaved following initial set where required. Care should be exercised in finishing very thin toppings.

Limitations

LAMBCO® SPE-D-PATCH is cement based. Follow ACI recommended practices. Do not add cement, plasticizer or accelerator. Avoid placement when temperatures are, or will be below 45°F (7.2°C) within 24 hours. If it is placed with excess water or at low temperature, both the compressive strength and expansion properties may be adversely affected. For applications greater than 4-inches (10.2-cm) in depth, use 25 – 50-lbs (11.4 – 22.7-kg) of $\frac{3}{8}$ -inch (10-mm) washed, graded, rounded, low absorption, high-density aggregate per 50-lb (22.7-kg) bag. Do not retemper after initial mixing.

	<p>Packaging:</p> <p>50-lbs (22.7-kg) Bag</p> <p>50-lbs (22.7-kg) Pail</p>
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Technical Information

The following technical information was obtained using a water to non-extended LAMBCO® SPE-D-PATCH ratio of 8.25-pints (3.9-liters) to 50-lbs (22.7-kg) at 72°F (22.2°C).

Flow (%) - ASTM C-1437	96	
Set Time (minutes) - ASTM C-191	Initial	123
	Final	165
Compressive Strength (psi) - ASTM C109	24-hours	>6,000
	7-days	>9,750
	28-days	>12,000
Length Change (%) - ASTM C-157	28-days (Water-Cured)	0.004
	28-days (Air-Cured)	-0.072
	Difference between water-cured and air-cured	0.076
Bond Strength (psi) - FDOT FM 5-587	24-hours	>750
	7-days	>1,250
Flexural Strength (psi) - ASTM C-580	7-days	>750

Coverage

One 50-lbs (22.7-kg) bag of LAMBCO® SPE-D-PATCH will yield 0.47-ft³ (0.013-m³) of mortar or cover 5.6-ft² @ 1-inch (0.5-m² @ 25-mm) thick.

Clean-Up

Product can be cleaned up by sweeping, paying attention to minimizing the creation of excess dust. Use water to clean tools and equipment immediately following application. Finished/cured product must be removed with mechanical means.

First Aid

Cement powder or freshly mixed concrete may cause skin injury. Avoid contact with skin and wash exposed skin areas promptly with soap and water. If any cement powder or mixture gets into eyes, rinse immediately and repeatedly with water and get prompt medical attention. Avoid overexposure to the airborne dust. If inhalation occurs, remove to fresh air area. If any discomfort or breathing issues occur, seek immediate medical attention. Refer to product Material Safety Data Sheet for further information.

U.S. State of California Proposition 65

This product contains material listed by the State of California as known, when treated improperly, to cause cancer, birth defects or other reproductive harm.

VOC Content

0 -g/L or 0-lbs/gal less exempt content

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