

Product Description

LAMBCO® V4 SYSTEM is a two-component polymer-modified high-strength concrete patching compound packaged as a dry powder coupled with a specially-formulated liquid admixture. **LAMBCO® V4 SYSTEM** is designed for full depth horizontal structural repairs ranging from 0 to 4-inches (10.16-cm). **LAMBCO® V4 SYSTEM** is used to repair many types of construction repair and/or resurface projects such as bridges, industrial surfaces, parking structures, and walkways.

Installation

Before using this product, please refer to the 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. Transportation, storage, means of utilization, and methods of application are not the responsibility of, nor within the scope of control of Lambert Corporation, and any question regarding the appropriate application of these products must be addressed with Lambert Corporation representatives prior to use. Field visits by Lambert Corporation personnel are for the purpose of making technical recommendations only, and not for supervising or providing quality control on the jobsite.

Surface Preparation

Remove all unsound concrete and roughen the surface, if necessary, to a minimum 1/8-inch (3.2-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® V4 SYSTEM**. The concrete substrate should be saturated surface-dry (SSD), free of all standing water, prior to application. Where exposed rebar warrants use of a surface applied bonding agent / corrosion-resistant rebar primer, use Lambert Corporation's EPIWELD® 90 CI. Refer to relative technical data sheets for complete application instructions.

Mixing and Placement

Product and appropriate water amount must be mixed via mechanical means; manual agitation is not acceptable. A paddle type mixer or a revolving concrete mixer can be used. Use a container that will facilitate continuous placement. Liquid to Dry component mixture ratio varies based on project requirements. Always maintain between 7-pints (3.3-liters) and 1-gallon (3.8-liters) of V4 System Liquid Component for every 50-lbs (22.7-kg) bag of V4 System Dry Component. Place between 7-pints (3.3-liters) and 1-gallon (3.8-liters), based on project requirements, of V4 System Liquid Component admixture into mixer before adding 50-lbs (22.7-kg) of dry component. Blend may require addition of 1-pint (0.47-liters) to 1-quart (0.95-liters) of clean potable water to reach desired final mixture consistency given project application demand. Product must be blended with correct ratios to insure best performance. Blend for 3- to 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. 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. Care should be exercised in finishing very thin toppings.



Packaging:

2
Component

50-lb (22.7-
kg) Bag &
1-gal (3.8-L)
Jug

Sold in Sets
of 4 ONLY

Limitations

Keep liquid component from freezing. Do not store liquid component at temperatures below 45°F (7.2°C). **LAMBCO® V4 SYSTEM** 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 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.

Technical Information

The following technical information was obtained using a liquid-component to dry-component **LAMBCO® V4 SYSTEM** ratio of 7-pints (3.3-liters) to 50-lbs (22.7-kg) at 72°F (22.2°C).

Set Time (minutes) - ASTM C-191	Initial	60
	Final	120
Compressive Strength (psi) - ASTM C109	24-hours	>2,500
	3-days	>3,500
	7-days	>5,500
	28-days	>8,000

Coverage

One mixed-unit of **LAMBCO® V4 SYSTEM** 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 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

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

Liquid Component - 10-g/L or 0.08-lbs/gal less exempt content

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