

LAMBCO[®] PLUG

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Supersedes all previous publications



Product Description

LAMBCO[®] PLUG is a dry powder product composed of hydraulic cement, silica sand, set accelerators and bonding enhancers. It sets in 3 to 4 minutes after being mixed with clean water. LAMBCO[®] PLUG is designed as a cementitious repair product that attains maximum strength rapidly. One of its main uses is to stop running or seeping water through the cracks or holes in concrete structures. Because LAMBCO[®] PLUG maintains its dimensional stability it ensures a tight/firm seal and bond that will not corrode or decompose. It is stronger and more durable than normal Portland cement mixes and is more resistant to solutions of sulfates. The heat producing function of LAMBCO[®] PLUG, which produces the fast set time. LAMBCO[®] PLUG is used for concrete repairs to active water leaks, hydrostatic pressure water leaks, and underwater concrete repairs. This makes it ideal for basement, tunnel, elevator pit, and sewer repairs. It is also used for grouting/anchoring and sealing around bolts, conduits, and pipes. LAMBCO[®] PLUG is compatible with other portland cement type mixes or mortars suitable for faster repair or anchoring.

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

To insure proper adhesion, the surface must be thoroughly cleaned of all dirt, dust, oil, wax, and loose concrete. Depending on the surface to be treated, the following should be considered. Roughen surface area with wire brush, chisel, etc. Remove loose or weakened concrete or mortar. If crack is less than 3/4-inch (19.1mm) in width or depth, widen or gouge to this dimension to allow enough material in the cavity for proper expansion, strength, and bonding of LAMBCO[®] PLUG. Inner portion of the crack should be undercut so that the depth of the crack is wider than the surface opening. The creating of an inner cavity allows LAMBCO[®] PLUG to expand into the crack and resist high water pressure. If hole or crack is not leaking at the time of the repair, soak area for at least 15 minutes prior to application.

Mixing

Add water to small amount of LAMBCO[®] PLUG. Mix and knead to the consistency of putty or thick mortar. Mixing time should not exceed 2 (two) minutes. Prepare no more than can be used in 3 (three) minutes. Warm water speeds set time, while cold water slows. To further extend setting time mix with portland cement. Do not add additional water once mixed.

Application

Surface should be damp. Once water has been added and material has attained a putty-like texture, shape to a form similar to the crack or cavity about to be repaired. At this point speed in working is essential. After forming to a suitable shape, force material into the crack or cavity compressing it firmly using a gloved palm, trowel, wood block, etc. Hold in place one minute. For long vertical cracks, patch with successive small amounts of LAMBCO[®] PLUG starting at the top of the crack. If there is a strong water flow, put material on a board and hold in place for longer period (5 to 6 minutes). Do not brush or trowel over surface, shave off excess material with knife or similar tool.

Limitations

Low temperatures will retard set time, while high temperatures will accelerate. Use only clean potable water for mixing. Do not mix LAMBCO[®] PLUG with water over 100°F (37.8°C), over mix, or retemper after being mixed. Product will generate heat when mixed with water, wear gloves when handling and mixing. Never apply where efflorescence is present, as this will cause bond breakdown of cement-based products. Not intended to be used as a load bearing patching material, or for overhead or vertical anchoring.

Technical Data

Compressive Strength		Coverage
2" Cubes (ASTM C-39)		
1 Day	3250 PSI (22.4 MPa)	One pound dry LAMBCO [®] PLUG will fill 17 in ³ (278.6cm ³) or a crack 3/4" X 3/4" X 30" (19.1mm X 19.1mm X 762mm)
3 Days	4900 PSI (33.8 MPa)	
7 Days	6700 PSI (46.2 MPa)	
28 Days	7100 PSI (49.0 MPa)	Approximately 1/2 ft ³ (0.014m ³) per 50 lb. (22.7 kg) pail

Caution

Generates heat when mixed with water. WEAR GLOVES WHEN MIXING AND HANDLING.

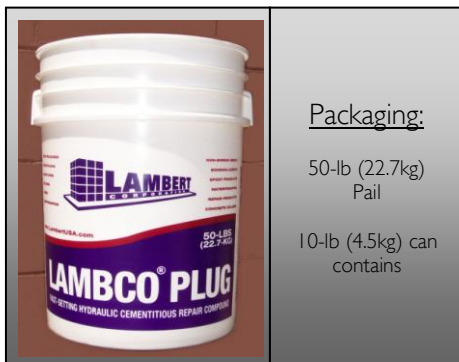
Clean-Up

In case of spillage, sweep into appropriate container, and dispose of in accordance with applicable local regulations. Flush area with large amounts of water. Cured material can only be removed by mechanical methods.

First Aid

Avoid skin and eye contact. Safety goggles, rubber gloves, and the use of a NIOSH/OSHA approved dust respirator is recommended. In case of skin contact, flush with water. For eyes, flush immediately with water for 15 minutes and contact a physician. Wash clothing before reuse. Cement powder or freshly mixed concrete may cause skin injury. Avoid contact with skin and wash exposed areas promptly with water. If any cement powder or mixture gets into eyes, rinse immediately and repeatedly with water.

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



Packaging:

50-lb (22.7kg)
Pail

10-lb (4.5kg) can
contains