

LAMBCO[®] ANCHOR SEMENT

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Supersedes all previous publications



Product Description

LAMBCO[®] ANCHOR SEMENT is an ideal product to permanently anchor bolts, rods or posts into concrete, brick, stone, tile or terrazzo. It may be used to patch and repair cracks, breaks and holes in concrete floors.

LAMBCO[®] ANCHOR SEMENT is a hydraulic type cement compound of more than twice the strength of fully cured conventional concrete. It is a dry powder that is mixed with water to produce a permanent anchoring material or repair that does not shrink when setting. As it hardens, it expands to fill all voids and locks itself securely in place. When mixed with water to a pourable consistency, it flows and seeps into place as though it were paint. It reaches an initial set within 15 minutes. Within one hour LAMBCO[®] ANCHOR SEMENT develops a compressive strength of 3000 PSI (20.7MPa).

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

Cleaning, roughening, and presoaking the concrete substrate with water are essential steps to be taken before grout placement. Cleaning and roughening will ensure a proper bond of the LAMBCO[®] ANCHOR SEMENT to the substrate. An even more critical step is presoaking (for 2-4 hours if possible) with water. Only this procedure will prevent a dry porous concrete substrate from absorbing or wicking water rapidly out of the LAMBCO[®] ANCHOR SEMENT mixture prior to its final set. A dry concrete substrate could cause shrinkage of any cement especially when placed at a plastic or stiff consistency. Plates should be mechanically cleaned to "bright shiny metal". Boltholes should be blown clear of dust and debris. Defective concrete, loose material, oil, grease, dirt and other laitance must be removed. This may be done by bush-hammer, chipping hammer, acid wash, or sandblasting depending on conditions. A moderate amount of roughness is desired.

Mixing and Placing

Anchoring: Drill and clean out a hole to receive the object to be anchored. Make hole large enough for LAMBCO[®] ANCHOR SEMENT to flow readily around the object when it is placed. Mix 1-gal (3.8 liters) water per 50 lbs (22.7 kg) LAMBCO[®] ANCHOR SEMENT. Add cement powder to water, adding powder slowly while mixing quickly. Do not use more than 7 quarts (6.7 liters) of water per 50 lbs (22.7 kg) pail of powder. A mechanical mixer is preferred. Mix to a thick pourable solution and when thoroughly mixed, place object in hole and pour LAMBCO[®] ANCHOR SEMENT mixture around it. In approximately 15 minutes, the setting is firm. Within 30 minutes, lightweight fixtures and equipment may be fastened in place. For bolt anchoring, pour ANCHOR SEMENT into space and tamp bolt into place. For vertical application, mix to a putty consistency. If cement becomes too fluid, let stand for a few minutes and it will stiffen. Smooth out the surface around the object with a spatula. Set time can be slightly retarded by using cold mixing water less than 45°F (7.2°C).

Concrete Accelerator

LAMBCO[®] ANCHOR SEMENT may be used as an additive to accelerate portland cement based ready-mixed or bagged concrete. Add one 50 lb (22.7 kg) pail of LAMBCO[®] ANCHOR SEMENT with 1 to 4 bags (94 lb / 42.6 kg) portland cement. Increase the ratio of LAMBCO[®] ANCHOR SEMENT for faster set time.

Mixed with Aggregate

LAMBCO[®] ANCHOR SEMENT can be mixed with 1/4-inch (0.6 mm) pea gravel or 1/8-inch (3.2mm) coarse sand. Mix to a pourable consistency and pour into holes. Holes must be clean. Roughen the surface of the hole with a stiff wire brush on the end of a drill. Saturate the hole for a minimum of one hour before filling. Remove all standing water. Aggregate mix ratio is 20 lbs (9.1kg) aggregate to each 50 lb (22.7 kg) pail of LAMBCO[®] ANCHOR SEMENT.

Curing - No special curing required.

Limitations - Hot temperatures will speed up the set time. Cold temperature, below 45°F (7.2°C), slows or retards set time. It is best to seal exposed surfaces of LAMBCO[®] ANCHOR SEMENT if material is to be exposed to repeatedly moist, damp conditions.

Technical Data

| Average Expansion: | 0.0405 | Compressive Strength ASTM C-109 | |
|--------------------|------------------------------|---------------------------------|---------------------|
| Initial Set Time: | 70°F (21.1°C) / 12 – 15 Mins | 2 Hours | 3000 PSI (20.7 MPa) |
| Final Set Time: | 70°F (21.1°C) / 50 – 60 Mins | 24 Hours | 3500 PSI (24.1 MPa) |
| Flexural Strength: | 1446 PSI (10.0 MPa) | 7 Days | 5700 PSI (39.3 MPa) |
| Tensile Strength: | 605 PSI (4.2 MPa) | 28 Days | 8500 PSI (58.6 MPa) |
| Color | Gray | | |

Coverage

50 lbs (22.7 kg) of LAMBCO[®] ANCHOR SEMENT powder mixed with approximately 1 gallons (3.8 liters) water will yield approximately 750 cubic inches of LAMBCO[®] ANCHOR SEMENT. Reduction of water will allow a putty-like consistency for vertical applications. Do not add water after LAMBCO[®] ANCHOR SEMENT has started to harden. May be mixed with aggregates when placed into voids requiring large amounts of material.

Clean-Up & First Aid -- KEEP OUT OF REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY!

When mixing or applying this product, use waterproof gloves, adequate eye protection and a respirator which has been approved by the U.S. Bureau of Mines for toxic nuisance and pneumoconiosis - producing dust.

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. Avoid over-exposure to the airborne dust. Practice good housekeeping. Protect food and drink.

Packaging:
50-lb (22.7-kg)
Pails