



CEMENT & MODIFIERS

LD-81 ACRYLIC CEMENT MODIFIER

Description

LD-81 is a high solids acrylic-polymer modifier that will give increased strength, flexibility and adhesion to most cement based products. LD-81 makes the cement product more waterproof, more stain resistant and will extend its life.

Abrade and clean the surface, then-rinse clean and free of debris. An acid wash may be necessary to help create a profile on concrete. Life Deck Acid Gel may be used as well. If you use acid, make sure to properly neutralize with ammonia and/or

Advantages when added to cement products

- * Increases strength and psi
- * Allows optimum working time
- * Allows cement products to be feathered
- * Increases adhesion to concrete surfaces
- * Helps to waterproof and increase water resistance
- * Water based safety, user friendly
- * Adds flexibility
- * Improves freeze-thaw stability
- * Non-yellowing, unlike SBRs
- * More Strength than PVA modifiers

Uses

LD-81 is primarily used as an additive to the Life Deck cement products so that they can be used to help waterproof decks, resurface and patch concrete and for a variety of exterior decorative concrete treatments. Please read the complete system information sheets on Life Deck Specialty Coatings Waterproofing and Overlay Systems if choosing to apply these systems.

- * Use with Life Deck Cementitious Systems
- * Patch and repair applications
- * Flooring overlayments
- * Carpet Underlayments
- * Bond Coats
- * Floor Toppings
- * Stucco Application

Packaging

1 gallon & 5 gallon pails

Inspection

Surface must be clean, dry and free of grease, paint, oil, dust or curing agents. It should have a rough finish, be porous and feel like 30-grit sandpaper.

Surface Preparation for Primer Coat

Abrade and clean the surface, then-rinse clean and free of debris. An acid wash may be necessary to help create a profile on concrete. Life Deck Acid Gel may be used as well. If you use acid, make sure to properly neutralize with ammonia and/or baking soda and rinse, and scrub several times. Sand blasting, shot blasting or grinding may be necessary if the surface has paint or other foreign material on the surface that may prevent proper adhesion. Pressure wash the surface to remove all debris.

Application For Small Patches

Cut or chip open cracks or voids and clean as described in previous section. Mix one gallon of LD-81 with about 50 lbs of your chosen cement mortar, stucco or LD Cement such as LD-1, 2, 3, or 5. Combine the LD-81 and powder and add water to desired consistency. Mix thoroughly with a low rpm drill motor. Place the material into the area to be patched and smooth or finish to desired effect using a trowel or float. This remedial approach to patch cracks is not going to keep the crack from reoccurring.

For Larger Patches

Use as noted above and add small clean aggregate to the mix to strengthen and minimize shrinkage. Do not exceed 50% of the volume of the cement mix. It is suggested that the amount of LD-81 be reduced by up to 50% and to increase the water accordingly to aid in workability.

As a Stucco Additive

LD-81 is an excellent additive to most stucco products. The stucco will bond better, weather better, reduce cracking and be more waterproof. When adding to stucco simply mix 1 qt to 1/2 gallon per bag of stucco. Add water to desired consistency, Mix thoroughly with a low rpm drill motor. The LD-81 will make the stucco a bit stickier and will cause it to cure more rapidly.

Freshen Concrete

Combine 1 bag of LD 5 cement into 1/2 gallon of LD 81 acrylic and up to 1 gallon of water to achieve the desired consistency. Mix thoroughly with a low rpm drill motor. Pour the mix onto the surface and squeegee or trowel into place, generally as thin as possible. Immediately, using a push broom, broom through the material leaving the desired finish. A small paintbrush may be used to pre-brush and feather edges. Be sure to feather to all expansion joints. If no broom finish is desired, surface may be simply troweled smooth or to the desired texture. After the surface has hardened enough to walk on (usually I-4 hours)scrape the surface to remove unwanted material. Surface should be sealed with LifeDeck 4001. See complete Texture Crete Broom-On system information sheet.

As a Decorative or Waterproof Coating

Combine the LD-81 as prescribed in the system information sheets for Life Deck AL waterproof decking system and Texture Crete concrete resurfacing system. For more information on these systems ask your distributor for an instructional video to view.

Drying Time

Allow 4 to 6 hours drying time before permitting light pedestrian traffic. For best results, allow to cure 24 hours before direct traffic is permitted or additional coats are applied. Allow an additional 24 hours before heavy objects are placed on the surface.

Limitations

- * Please read manufacturers complete system information sheet before beginning your project.
- * Do not use the LD-81 if the temperature is below 55 or above 95.
- * Rain will wash away uncured Life Deck acrylic products. If inclement weather threatens, cover deck to protect new application. Do not allow any Life Deck product to FREEZE.

Clean Up

Uncured material can be removed with water or solvent. Cured material can only be removed mechanically.

Repair

Repairs may be done by grinding off the damaged area and replacing the material as written in this product information sheet

PHYSICAL PROPERTIES LD81 All Acrylic Modifier

Appearance white milky liquid

Solids content by weight 50-53% Freeze-thaw stability 5 cycles Min. film formuation temperatures 53° F

Maximum V.O.C. = 0

TIPS & AND IMPORTANT INFORMA-TION

Hydration (Curing of Concrete)

Concrete contains various compounds that react with a plentiful supply of water to produce the solid elements of cement. The curing process of cement is called hydration. If there is not an adequate supply of water or RH (relative humidity) to support hydration, then the ultimate strength of the cement product is compromised.

The Problem

In construction applications of cement products cast in thick sections, hydration is usually no problem, but in thin sections of concrete we have an entirely different problem. Water will evaporate too fast to complete the hydration (curing) process in these thin sections of concrete, resulting in poor performance such as brittleness and poor adhesion.

The Solution 100% Acrylic Cement Modifiers

When a thin section of concrete (even at 1/16" thickness) has been modified with a 100% Acrylic Resin Cement Modifier, the modifier traps the water in the formulation so that the water does not evaporate as fast and hydration curing can take place with superior results.

Performance Superiority

Test results from 100% Acrylic Modifiers vs unmodified air cured used in concrete has shown major improvements in both adhesion and strength. Flexural Strength:

160% higher Bond Strength

1200% higher

Using 100% Acrylic Modifiers replaces the amount of water used in the formulations of concrete, stucco and underlayments, grouts, thin set mortars and other products. The proper amount of modifier depends upon the performance requirements. Always refer to specification guide lines.