



LEVELDECK-250

Self-Leveling Calcium Aluminate Cement Based Underlayment

Description

LEVELDECK-250 is a self-leveling, non-shrinking, fast cure calcium aluminate cement based underlayment that is used to eliminate defects and smooth floors that are to receive additional flooring systems. It is receptive to all floor coverings and most adhesive and floor bonding systems. **LEVELDECK-250** can be installed at thicknesses from feather edge to 1½ inches and up to 5 inches when extended with aggregate. LEVELDECK-250 can accept ceramic tile and natural stone within 3-4 hours. Finished floor coverings such as carpet, VCT, vinyl sheet, rubber, epoxy and engineered wood plank can be installed in 24 hours.

Features and Benefits

- ☑ Fast self cure with rapid compressive strength build
- ☑ Single component – Just add water and mix
- ☑ Can be applied at temperatures from 50°F to 95°F
- ☑ 30 minute work time at 75°F
- ☑ Can be hand or mechanically mixed and poured
- ☑ Cost effective treatment for unlevel, damaged floors
- ☑ Excellent bond strength to concrete

Areas of Application

LEVELDECK-250 has been used in hospitals, schools, shopping malls, food markets, warehouses, large retail stores, residential construction, and in most environments where a level surface is required. It can be used in conjunction with ENDURIT MVC products that treat new or existing concrete floors with moisture and/or alkaline conditions that are to receive additional flooring systems.

Product Properties

Set Time:	30 minutes (work)	ASTM C191
	50 minutes (Initial)	ASTM C 191
	55minutes (Final)	ASTM C 191
Compressive Strength:	3000 psi 1 day	ASTM C 109
	5000 psi 28 day	ASTM C 109
Flexural Strength:	1100 psi 28 day	ASTM C 348
Appearance:	Light grey powder	
Density:	16.27 pounds per gallon	
Shelf Life:	12 months, when stored in dry, cool environments in unopened packages	

Surface Preparation

LEVELDECK-250 should not be installed over gypsum, latex patches, asphalt, coal tar, or lightweight insulating concrete. **Concrete Floors:** Substrate must be well-bonded and completely clean; free of oil, wax, grease, sealers, curing compounds, asphalt, paint, dirt, loose surface material and any contaminate that will act as a bond-breaker. Weak concrete surfaces must be cleaned down to solid sound concrete by mechanical means.

Expansion Joints in the concrete substrate must be reflected through the applied layer of **LEVELDECK-250**

Over Cutback and Adhesive Residue: Cutback and adhesives may contain asbestos fibers whose inhalation is harmful. Consult government agencies for rules concerning the removal of asbestos containing flooring and adhesives. Mechanically remove adhesive residue to a translucent, clean, well bonded film.

LEVELDECK-250 can be installed over non-asbestos adhesives if the residue is solid, well bonded to the substrate and not affected by water. Avoid applications where heat may soften the adhesive causing de-lamination.

Wood: Wooden sub-floors such as 3/4" (2 cm) tongue and groove, APA rated Type 1, Exterior Exposure plywood and parquet must be clean, free of varnish, shellac or any contaminant that hinders bond. If needed, sand down to bare clean wood. Do not use chemical cleaners. The substrate must be solid and secure to provide a rigid base. Any moving boards should be renailed and open joints filled with a feather edge patch. Prime the substrate as outlined in "Substrate Priming". Then anchor a thin galvanized expanded diamond metal lath (3.4 plaster lath) to the sub-floor, securing every 6" (15 cm) to prevent movement, over lapping adjacent pieces by 1" (2.5 cm).

Non Porous Substrates: Terrazzo, ceramic and quarry tile, burnished concrete, and epoxy coatings must be solid, well bonded, clean and free of any bond breaking contaminates such as glazes, wax, oil, sealers etc. Surfaces must be mechanically abraded until a "profile" is obtained. Vacuum all debris, dust and loose material prior to installing the primer.

Steel Decking: All metal sub-floors must be clean and free of rust, oil, grease, and all other contaminants. Steel decking must be structurally sound and properly anchored. Metal foils must be completely bonded to the substrate. Sandblast, wire brush or use other mechanical methods to remove rust and other contaminants from the surface of the metal. For steel decking, paint the surface with an anti-corrosive coating to prevent rust from recurring. Aluminum, copper and lead do not require this treatment.

Priming:

Concrete: All substrates must be clean and dry before primer is applied. Sub-floor temperature must be at least 50°F (10°C). One gallon (3.8 L) of PRIMER B (for non-porous surfaces use PRIMER A) mixed with one gallon of clean potable water will cover approximately 350-400 sq. ft. of floor area. Primer must be applied evenly with a nylon push broom with exploded tips. DO NOT use paint rollers, mops, or spray equipment. Apply a thin primer layer leaving no bare spots, puddles or excess primer. Allow to dry to a clear, thin film (usually 3 hours, but less than 24 hours).

IMPORTANT: LEVELDECK-250 must be applied within 48 hours of priming to insure that a good bond is achieved between primer and substrate.

Non-porous Sub-floors, Wood, and Cutback: Prime with PRIMER A. Apply one coat of undiluted PRIMER A using a 3/8" nap roller. Apply a thin film, leave no puddles or bare spots. Allow primer to dry (minimum 2 hours, maximum 24 hours).

On concrete slabs that have had prior flooring failures, it is strongly recommended that core samples be taken to identify the cause of failure.

Product Mixing

Add 6 quarts of water into a clean mixing drum. Then slowly add one 50 pound bag of **LEVELDECK-250** while mixing with a paddle mixer at low RPM. Mix for two minutes, the result should be a lump free consistency.

For machine mix operation, consult the equipment manufacturer for recommendations.

Application Instructions

Pour mixed **LEVELDECK-250** on the prepared floor and spread smooth using a gauge rake and spiked roller. It is recommended to use two or more mixing drums to apply **LEVELDECK-250**. This is to keep a "wet edge" where the batches of mixed material will meet. The **LEVELDECK-250** will self-level for up to 30 minutes. Using spiked shoes is recommended to eliminate footprints. Protection from freezing is required for a minimum of 5 days.

LEVELDECK-250 should be installed at temperatures between 40°F to 95°F. Do not over-water, re-temper, or add any additional additives to mix. Do not install over gypsum based surfaces or products. **LEVELDECK-250** is not intended as a final wear surface. Always install a test area to insure suitability for intended use. If applying to concrete substrate, concrete should have 28 days of cure or more.

Coverage Rates

LEVELDECK-250 should be installed from 1/8 to 1 1/2 inches in thickness.

Each 50 Pound bag will cover:

<u>Spread Rate</u>	<u>Approx.Coverage</u>
1/8 inch	48 ft ²
1/2 inch	12 ft ²
1 inch	6 ft ²

Use water to clean all tools and mixing equipment immediately after use. All cured and uncured material should be removed to avoid getting hardened material in subsequent batches.

Safety Precautions

Consult the **LEVELDECK-250** material safety data sheet (MSDS) for more complete information on product health, safety, and handling.

Avoid skin and eye contact.

Eye Contact: Flush immediately with water and consult a physician. Do not rub eyes.

Skin Contact: Wash immediately with soap and water.

Contains Portland cement and silica sand, avoid contact with eyes or prolonged exposure to skin. Minimize exposure and avoid breathing dust. The use of safety goggles and gloves is recommended.

Warranties

BESSERN warrants that its product shall be in accordance with the specifications published in the current product data sheet. *BESSERN* will, in the event any of its products fail to meet their published specifications, replace those products proved to be defective.

BESSERN shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, *BESSERN's* sole liability hereunder shall not exceed the cost of the defective product originally purchased.

EXCEPT AS SET FORTH ABOVE, *BESSERN* MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

www.bessern.com

BESSERN Building Products
1400 North Providence Road, Media PA 19063
Tel: 484-234-5035 • Fax: 484-234-5037



Clean Up