

Globally Proven
Construction Solutions

GUARD EP

GUARD EP is a three-component, colored, solvent-free, high build epoxy floor coating system. Guard EP is based on a special epoxy resin and curing agent combination. After curing it develops high abrasion resistance, high compressive strength, and can withstand the most commonly used chemicals. It is low VOC, so very less odor. It is available in large number of colors.

Three types of surfaces are possible with GUARD EP systems.

A top coat of **GUARD PU** can be applied with one smooth top and two anti-slips *for extra UV Resistance in exposed areas*.



FEATURES/BENEFITS

- Simple, fast installation
- Long pot-life, especially suitable for hot climate
- Excellent abrasion and chemical resistance
- Low VOC
- Very low odor
- Low permeability
- Durable, Easy maintenance
- Superior substrate adhesion
- Available in wide variety of colors
- Available in smooth and anti-slip versions

MANUFACTURER

LATICRETE Middle East LLC.

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www.laticrete.me

USES

- Light Manufacturing
- Warehouses
- Car Dealerships
- Offices
- Retail
- Parking Garages
- Schools

Suitable Substrates

- Concrete
- Properly prepared existing floor coating

Packaging:

GUARD EP (3 component Unit: A, Color Paste & B)

Single Unit

(1 Component A (Neutral), 1 Color Paste & 1 Component B)= 6.45 Kg (4.2 L)

Double Unit [packed in Box]

(2 Component A, 2 Color Paste & 2 Component B) = 12.9 Kg (8.4 L).

Anti-slip Grain-1: 25 Kg Bag Solvent X: 5 L metal can

Approximate Coverage

GUARD EP:

5.5 Sq. Meter per L.

Anti-slip Grain:

As per the slip-resistance texture required.

Always mix component A with B thoroughly to ensure a complete chemical reaction. After mixing, apply immediately. Avoid direct sunlight

Shelf Life

<u>GUARD EP</u>: 1 Year. The temperature of the storage area should be between 8°C and 35°C, avoid excessive heat and freezing of the material.

Anti-slip Grain: Un-limited

This product must be stored in its original packaging on pallets in clean, dry, ventilated areas, and out of direct sunlight.

Limitations

Substrate and air temperature must be between 10°C (50°F) and 35°C (95°F). Substrate temperature must be 3°C (5°F) above the dew point. The prepared surface should have a nominal tensile strength of 225 psi (1.6 MPa) per ASTM D7234. Moisture vapor emission rate (MVER) must be under 3 lbs. /1000 ft² / 24h. The relative humidity of the slab must not exceed 75% as tested per ASTM F2170. If there is a moisture emission situation in excess of the above rate, we recommend using LATICRETE® Moisture Vapor Barrier.

Note: Prior to application, sound out existing substrate to identify any hollows or non-solid areas. All non-solid concrete should be removed and repaired. It is very important that the finished product is applied over sound, solid, and suitable concrete substrate and/or coating.

Cautions

Health and safety

- Follow the warning signals in packaging & SDS
- Wear protective gloves, clothing, safety shoes, and eye wear.
- May cause skin irritation
- May cause an allergic skin reaction. If rash occurs, remove individual from the work area and seek physician's care for dermatitis.
- May cause serious eye irritation. In case of eye contact, flush with water for at least 15 minutes and consult a physician.
- If contact with hardeners occurs, remove any clothing involved and flush the skin with flowing water. Do not attempt to wash and reuse it. This material can be removed with soap and water. Do not use acetone.
- If swallowed, do not induce vomiting; call a physician immediately.
- Keep out of reach of children.
- Consult SDS for more safety information.

Chemical resistance

Fully cured GUARD EP coating is resistant to many chemicals. Please ask for a detailed chemical resistance table from us.

TECHNICAL DATA

Characteristics at 25C	Values	Methods
Compressive Strength	> 80 MPa	ASTM C579
Abrasion Resistance	< 0.040 gm	ASTM D4060
Tensile Strength	> 35 MPa	ASTM D638
Thermal Tolerance (Continual)	< 50°C	
Thermal Tolerance (Intermittent)	< 80°C	
UV Resistance	Very Good	-
Chemical Resistance	See table	ASTM C 267
Permeability	0, 1 (%)	ASTM C413-01
Pot Life	40 - 45 min	
Maximum time between two coats	36 hours	
Foot Traffic	24 hours	-
Light Traffic	48 hours	-
Full Cure	7 days	-

The data in the above table shall be used by the Project Design Professional to determine suitability, placement, building code conformance and over-all construct appropriateness of a given installation assembly.

INSTALLATION

Surface Preparation

Concrete must be prepared mechanically to remove all surface contamination. Use one of the following tools to mechanically profile applied. Then Anti-slip Grain-1 should be evenly broadcasted the concrete surface to achieve a homogenous ICRI CSP 2 or 3:

- Diamond Grinding Machine
- **Shot Blast Machine**

Honeycombs or voids exposed due to mechanical preparation must be treated with the appropriate filler from our selection of complementary products.

Cracks & Joints

Inspect substrate to identity all moving and non-moving cracks/joints. Method of repair for moving cracks/joints should be designated by local onsite project engineer. All nonmoving cracks/joints should be addressed and infilled prior to application of surface coating. Epoxy based repair product LATICRETE® MASTIC and/or fast setting Cementitious repair product NXT PATCH is recommended.

Application

Ensure surface is prepared and completely dry.

Priming

Priming is not normally required if the substrate is Sound, good quality and nonporous. If required post examination of substrate then PRIMER EP can be used.

Please refer to PRIMER EP technical data sheet

GUARD EP MIXING

Mix full unit as supplied. Always mix entire Part A well with color and entire Part B to ensure a complete reaction. Take the Part A and Color Pack, mix well, then add the Part B and mix for further 30 seconds, until an even color and texture is obtained. After mixing apply quickly to prevent loss of material. The mixture and the application must always be done in the shade to avoid high product or surface temperatures.

SMOOTH TOP APPLICATION

1st Laver

The first layer of GUARD EP should be applied using a good quality medium haired pile roller, suitable for epoxy application, or squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use.

2nd Laver

When the base coat has reached initial cure (12 hours @ 20°C or 5 hours at 35°C). The top coat can be applied by medium haired roller. Care should be taken to ensure that a continuous film is achieved.

ANTI-SLIP APPLICATION

1st Laver

For slip resistant textured top, the 1st Layer of GUARD EP shall as quickly as possible.

For light slip resistance apply lightly less grains, for dense and high slip resistance apply in excess so that the coat of GUARD EP is fully covered.

When the coat has reached initial hardness (hours @ 25°C or hours at 35°C), the excess aggregate should be vacuum cleaned from the surface.

2nd Laver

The top coat can now be applied by medium haired roller. Care should be taken to ensure that a continuous film is achieved and the rough surface, caused by the aggregate, is completely sealed. This top coat must be applied within 36 hours @ 25°C of the application of the first coat.

CLEANING AND WASTE DISPOSAL

All tools and equipment shall be cleaned immediately after use with" Solvent X".

Dispose empty containers, waste solvent, other used items as per local government regulation.

Spillages should be absorbed with sand or sawdust and disposed of as per local regulations.

Consult Safety data sheet

Note: Mock-ups and field test areas are required in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti-dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system. Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of LATICRETE products may lead to fisheyes, blistering, pinholes, wrinkling, or outgassing of air in the concrete and are not product defects.

AVAILABILITY AND COST

Availability

LATICRETE® materials are available worldwide.

For distributor information,

please contact us by email at: enquiry@laticrete.me
or, visit www.laticrete.me

Cost

Contact a LATICRETE® closer distributor to obtain complete information and cost.

WARRANTY

The supplier warrants this product will not deteriorate under normal conditions and use, the warranty validity of one (1) year. The product subject to the terms and conditions stated in the LATICRETE® Product Warranty. Please consult our technical support for further information.

MAINTENANCE

The long-term performance, appearance, and life expectancy of wear surface products are critically dependent upon a good routine maintenance program designed specifically for the installed wear surface. LATICRETE floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. The use of properly placed walk-off mats, inside and outside, will help increase the life of the floor. Recommended maintenance program consists of frequent and thorough cleaning utilizing a neutral pH cleaner. Frequency of washing will vary depending on floor usage type, traffic and age.

TECHNICAL SERVICES

Technical assistance

For information contact us by email at:

enquiry@laticrete.me

Technical and safety literature

To obtain technical and safety literature, please visit our website at: www.laticrete.me

Warning: The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® unable to directly control the installation conditions and modalities of application of products, do not assume any liability arising from their implementation. Those who want to use the LATICRETE® products must conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.