



GUARD PU FLEX

Guard PU Flex is two component, high build flexible polyurethane coating for a multi-layer car park deck system with high mechanical properties suitable for heavy movement traffic to provide a durable flooring system.



FEATURES/BENEFITS

- Rapid Installation
- High mechanical strength
- Excellent bond strength
- Waterproof & Crack bridging
- Non-slip finish for traffic
- Flexible & Tear resistant

MANUFACTURER

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USES

- Car parking structure floors, traffic decks, and ramps
- Garages
- Loading bays
- Food and beverage industries
- Production shop floors
- Chemical and pharmaceutical industries

STANDARDS

ASTM C 1305, ASTM D4060, ASTM D412

Packaging:

4.5 Liter set: 5.18 kg Part A & 1.0 kg Part B,
Commercial unit (2 set in a single carton)
16 Liter set: 18.4 kg Part A & 3.68 kg part B.

Suitable Substrates

- Concrete
- Screed

Approximate Coverage:

System theoretical estimate

Guard Prime EPM	0.20 – 0.25 liter/m ²
Antislip grain no. 1/2/3	0.5 kg approx.
Guard PU Flex @ 1 mm DFT	1.0 - 1.2 liter/m ²
Guard PU (pigmented), UV resistant	0.16 – 0.20 liter/m ²

The thickness of the complete system would be approx. 1.0 -1.2 mm.

Actual coverage may vary due to the texture and level of the substrate, surface porosity, surface profile, variation in level or wastage, etc.

Shelf Life

Factory-sealed containers of this product are guaranteed to be of first quality for 6 months if stored in a conditioned area. Extreme storage conditions will reduce the shelf life.

Storage: Store in dry and cool conditions below 30° C.

Cautions

Before using any LATICRETE product:

- Consult SDS for detailed safety information.
- Check www.laticrete.me for any technical bulletins or updated information about the product and its application.
- Contact your local Technical Sales Representative with any questions.

Limitations:

Cannot be applied over substrate having rising dampness and damp surface or having relative humidity greater than 75% as measured in accordance with BS 8203. The moisture content of the substrate shall not be higher than 5%. For higher moisture a suitable moisture barrier like Guard Prime EPM is recommended.

Freshly applied Guard PU Flex must be protected from damp, condensation and water for at least 24 hours. Uncured material reacts in contact with water. During application care must be taken that no 'sweat' drops into freshly applied Guard PU Flex (wear head and wrist bands).

All previous cracks must be assessed thoroughly and treated with suitable crack filling resin (Recommended Crack Repair LVE).

For external areas or areas exposed to UV, use Guard PU (pigmented) as Topcoat.

For anti-slip surface and to minimize slip and skid risks, recommended broadcasting of Anti-slip grains 1/2/3 to provide positive textured surface.

TECHNICAL DATA**Physical Properties**

Components	Two: Base & Hardener,
Color	Standard colors
Solid content	~98%
Mix Density	1.35 ± 0.05
Recoat time	12 – 24 hrs.
Full cure	5 - 7 days 30°C - 20°C
Pot life	20 – 30 mins @ 30°C - 20°C
%, Elongation at break, ASTM D412, 7 days	100 – 120%
Tensile strength, ASTM D412, 7 days	≥ 6 N/mm ²
Bond strength, ASTM D4541, 7 days	> 3.0, Concrete failure
Tear resistance, ASTM D624, 7 days	≥ 20 N/mm
Crack bridging ability, ASTM C1305, 7 days	Pass
Abrasion resistance (ASTM D4060) CS17 wheel, 1000 gms, 1000 cycle)	< 0.1 gm mass loss
Application temperature	+10 to +32°C

The technical data shown are typical but reflect laboratory test procedures conducted in laboratory conditions at 23±2°C and 55±5 % relative humidity.

INSTALLATION**Surface Preparation**

The concrete substrate must be 28 days old and have compressive strength (minimum 25 N/mm²) with a minimum pull-off strength of 1.5 N/mm². Ensure the substrate is clean, dry, and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. Concrete substrates must be prepared mechanically or by scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blow holes and voids must be fully exposed. Remove all dust, and loose and friable material from surfaces preferably by brush or vacuum. Honeycombs or voids exposed due to mechanical preparation must be treated with the Laticrete® Mastic.

The provision of Expansion joints shall be reflected on the screed and filled to the required level with a suitable sealant as per the designed movement accommodation factor (MAF). For traffic grade MAF (±10 %), recommended Latasil EPU.

Cracks & Joints

Inspect the substrate to identify all moving and non-moving cracks/joints. The method of repair for moving cracks/joints should be designated by local onsite project engineer. All non-moving cracks/joints should be addressed and infilled prior to the application of surface coating. Epoxy-based repair product Laticrete® Mastic is recommended.

Primer: Apply Guard Prime EPM over the prepared concrete surface and allowing to cure for 16 - 24 hours.

Mixing

Guard PU Flex is supplied as a pre-weighed kit consisting of Part A-Base & Part B- Hardener.

Mix Part A to a homogenous mix with a low speed (300 – 400 rpm) drill and paddle. before adding part B. Mix for 2 minutes to a uniform colour and homogenous mix. Allow the mix to stand for 1 minute to de-aerate.

Application

Prior to application, confirm substrate moisture content, relative humidity, and dew point. Apply mixed Guard PU Flex with the serrated trowel or a squeegee at 1 mm wet film thickness in single application and allow to cure for 16- 24 hrs.

For the anti-slip finish, apply Guard Primer EPM and broadcast antislip grains while wet, at the rate of 0.5 - 1.0 kg/m². Allow to cure for 16 - 24 hours and remove the loose sand with brush/vacuum for subsequent topcoat.

Apply Guard PU (Pigmented) UV resistant wear coat/topcoat over the cured Guard PU Flex at a coverage rate of 5 - 6 liter/m². Allow to cure for 3 - 5 hrs for next coat of Guard PU (Pigmented).

Allow the final application to cure for 24 hrs. for foot traffic and 7 days for vehicular traffic.

Traffic marking lines may be applied using Guard PU (pigmented) after 2- 3 days of final application.

Cleaning: Clean tools and mixer with suitable cleaning solvent immediately after use. Once the material is cured it can only be removed mechanically.

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

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 application, 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. The results shown are typical but reflect the test procedures used. Actual field performance will depend on the installation method and site conditions.