

DECK PU 1K

Single Component Moisture Curing Polyurethane Waterproofing System

INTRODUCTION

Deck PU 1K is single-component moisture-curing polyurethane based liquid applied waterproofing system. When fully cured Deck PU 1K forms a seamless, tough, permanently flexible, UV stable waterproof membrane on most building materials surface including reinforced concrete, block/ brick works, cement render, plaster board and fiber reinforced cement. Properties like excellent bonding with concrete, high elasticity, good crack bridging ability and stability to water allows effective waterproofing even in most demanding conditions. It is an advanced state of water proofing system which offers cost effective solution for some of the most challenging waterproofing conditions in a commercial building like podium garden or swimming pools.

KEY FEATURES

- Liquid applied system - seamless membrane
- Single component – no weighing and mixing at site
- Easy application – by brush, roller or airless spray
- Highly elastic – good crack bridging ability
- Excellent adhesion over wide range of construction materials
- Resistant against plant/ grass root penetration
- Excellent resistance to oxidation, UV degradation and embrittlement

TECHNICAL DATA

Workable time	40 – 60 min
Tack free time	12-15 hours
Full cure time	7 days
Tensile strength	>2 MPa
Elongation	>600 %
Bond strength	>3 MPa (concrete failure)

APPLICATION PROCEDURE

Surface Preparation

1. New concrete surfaces should be fully cured. Make sure the moisture content in the concrete is less than 5%.
2. Substrate should be free from dust, oil, curing agent residues, laitance and other contaminants.

3. Grind the concrete surface using hand held grinder or concrete polishing machine (for larger areas) properly. It will expose the sound concrete for best bonding and will also help in locating cracks (if any).
4. Repair voids, cracks, broken edge and honeycombs properly using epoxy based concrete repair products.
5. Allow the patched area to cure before applying the membrane.
6. Avoid any sharp change in surface profile. For example joint edge between horizontal and vertical surface must be smoothed using appropriate mortar.
7. All metal surfaces should be made clean of paint, oils, rust and other contaminants.

Priming

8. Apply the first coat of Deck Prime EP and allow it to absorb for 20-30 min. Apply the second coat if necessary.
9. Lightly sprinkle selected quartz aggregate of particle size 1-2 mm on construction joint/ cracks on vertical concrete surface and joint edge between horizontal and vertical surface
10. Allow the primer to cure for 12 hours before further application.

PU 1K application

11. Open the Deck PU 1K container and stir it gently for couple of minutes.
12. Apply the base coat on well primed surface using suitable brush or roller. Move the brush/ roller in one direction only throughout the base coat. Allow it to cure overnight (12 to 15 hours).
13. Apply the second coat of PU 1K over base coat by moving brush/ roller perpendicular to base coat. Allow it to dry cure overnight.
14. Apply fleece coat of Deck PU 1K over the base coat on construction joints, cracks and vertical horizontal surface edge. To do so thin down the as supplied PU 1K with 8-12 % of Deck Thinner. Soak the pre-cut pieces of Deck Fleece completely with the PU 1K mix and apply on the base coat. Squeeze out air pockets (if any) left between the fleece and base coat surface using brush/ roller. Make sure the fleece is well attached to the surface with no loose or unsupported membrane. Use additional PU 1K mix to properly saturate the fleece surface if required. Allow the membrane to cure for 24 hours.
15. Apply the top coat of Deck PU 1K and allow it to cure for 24 hours.

For bonding with cementitious protective screed, apply Deck Prime EP and sprinkle quartz aggregate of particle size 1-2 mm to enhance bonding with subsequent cementitious protective layer.

17. Pond test can be done after at least 48 hours of Deck PU 1K top coat curing.

COVERAGE

1.2 Kg per m² depending upon the surface roughness and 2.5 Kg per m² with Deck Fleece.

PACKAGING

25 Kg Tin can and 5 Kg. Tin can

STORAGE

Store in the original container with the lid closed appropriately. Avoid extreme temperatures and direct exposure to sunlight for several days. Keep in cool, dry and under shed. Deck PU 1K performs well for at least 6 months from the date of manufacture if stored following aforesaid method.

HEALTH AND SAFETY

Kindly wear hand gloves and safety goggles while handling the product. Any contact with eyes should be washed immediately with clean water and seek medical advice. Do not swallow, avoid contact with food or cooking utensils and keep away from children's reach. If splashed on to cloth or any other fabric, wash immediately otherwise it may leave permanent stain.

PRODUCT DISCLAIMER

This product is manufactured with utmost care and precautions using best available materials, techniques and keeping in view the end use and assured performance. However, no specific guarantee can be given since the application of the product (prevailing site and environmental conditions while applying etc.) is beyond our control. We therefore welcome consultation in the event of doubt about application performance.