

# DESMOCRETE WPU1K

Single Component Moisture Curing Polyurethane Waterproofing System

## Introduction

DESMOCRETE WPU1K is a single component moisture-curing polyurethane based liquid applied waterproofing system. When fully cured, DESMOCRETE WPU1K forms a seamless, tough, permanently flexible, UV stable waterproof membrane. DESMOCRETE WPU1K can be applied on most building material substrates 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 against stagnant water and corrosive chemicals allows effective waterproofing even in most demanding conditions. DESMOCRETE WPU1K offers cost effective waterproofing for some of the most challenging waterproofing conditions in a commercial building like podium gardens or swimming pools.

## Application Area

- Water bodies like swimming pool, fountain
- Terrace garden and planters
- Podium level slab
- Basement from positive side
- Expansion joints

## 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 root penetration
- Excellent resistance to oxidation, UV degradation and embrittlement

## Technical Data

Skin formation time at 30°C	60 minutes
Recoat time	12 hours
Full cure time	7 days
Solid content	>85 %
Adhesion with concrete	2 MPa
Tensile strength (100 GSM Fleece)	5 MPa
Maximum elongation (100 GSM Fleece)	30 %

## Application Instructions

### Preparatory Steps

Make sure plumbing line, pipe fittings, core-cut pipe penetrations, sanitary fitting, brick work etc are done before proceeding for waterproofing. Once a waterproofing job is completed, breaking or damaging the waterproofing layer, protective screed/ plaster layer generally leads to poor performance.

### Surface Preparation

The surface of application must be clean, smooth and sound. Concrete surface should be free from dust, laitance, oil, debris, loose concrete etc. presence of which results in poor bonding between concrete surface and waterproofing membrane.

Remove loose concrete, cement laitance and other friable material. Grind the concrete surface to obtain a smooth and sound surface. Grinding will remove high spots and reduce surface roughness.

Surface dust must be removed using vacuum/ air blower followed by washing/ moping.

Steel surface (if any) should be free from rust and oil. PVC pipe surface should be roughened using suitable emery paper.

Perform patch work on concrete using polymer modified cement mortar (CM 1:1) admixed with DESMOCRETE DEXTR polymeric cement modifier 5-10 % by weight of the cement content. For more details, refer to DESMOCRETE DEXTR product data sheet.

#### Priming

Apply one coat of DESMOCRETE POXY-205 on dry surface. Allow it to dry for 12 hours before proceeding further. Kindly refer technical data sheet of DESMOCRETE POXY-205 for more details and application methodology.

#### Membrane application

Open the DESMOCRETE WPU1K container and stir it rigorously for couple of minutes. Apply the base coat/ first 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).

Apply fleece coat of DESMOCRETE WPU1K over the cured base coat. To do so thin down the as supplied DESMOCRETE WPU1K with 8-10 % of PU thinner. Soak the precut pieces of reinforcing non woven fabric completely with the 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 non woven fabric is well attached to the surface with no loose or unsupported membrane. Use additional DESMOCRETE WPU1K mix to properly saturate the fabric surface (if required). Allow the membrane to cure for 24 hours.

Apply the final/ top coat of DESMOCRETE WPU1K same as base coat and allow it to cure for 24 hours.

For bonding with cementitious protective screed, sprinkle quartz aggregate of particle size 1-2 mm on the wet top coat of DESMOCRETE WPU1K to enhance bonding with subsequent cementitious protective layer.

Pond test should be done after at least three days of air curing under normal sunny environment.

#### Coverage

2.5-2.7 Kg/ Sq.m. with DESMOCRETE 100 GSM non woven fabric. Practical consumption will vary depending upon the surface condition

#### Packaging

25 Kg Pails

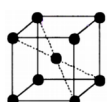
#### Storage

Store in cool, dry and under shed. Avoid extreme temperatures. DESMOCRETE WPU1K performs well for at least 6 months from the date of manufacture. Packs once opened have to be consumed immediately.

#### Health and Safety

Wear safety goggle and hand gloves while handling the product.

**PRODUCT DISCLAIMER:** The information given in this document, in particular recommendations related to application are given in good faith based on our best knowledge and experience. However, it is not binding and if required, has to be adjusted depending upon the site conditions. Moreover, no specific guarantee can be given since the application of the product (prevailing site and environmental condition while applying etc.) is beyond our control. We therefore welcome consultation in the event of doubt about application performance.



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