

## POLYSCREED MD



### MEDIUM DUTY 3 - 4 MM POLYURETHANE FLOORING

#### DESCRIPTION

POLYSCREED MD is a heavy duty flow applied polyurethane floor topping based on a 3-part liquid polyurethane resin system. The product incorporates antimicrobial silver ion protection to prevent bacterial growth. The floor surface results in a smooth textured, slip resistant surface of uniform colour designed for excellent resistance to abrasion, chemical attack, impact and thermal shock.

#### ADVANTAGES

- Fast installation
- Fluid consistency
- Excellent adhesion
- Anti-Microbial Silver Ion protection
- Easy maintenance
- Seamless flooring
- Heat resistant to 80°C
- High resistance to chemicals, abrasion, impact and thermal shock
- Non-slip Matt finish
- Environmentally friendly
- Solvent free

#### APPLICATION

- Chemical processing plants
- Wet or dry process areas
- Breweries
- Food processing plants
- Packaging plants
- HACCP environments
- Non odour and non-tainting to food articles
- Engineering & fabrication workshops
- Laboratories

#### TECHNICAL DETAILS

|                      |                                |
|----------------------|--------------------------------|
| Compressive Strength | 55 N/mm <sup>2</sup>           |
| Tensile Strength     | 6.5 N/mm <sup>2</sup>          |
| Flexural Strength    | 40 N/mm <sup>2</sup>           |
| Bond strength        | >1.5MPa (concrete failure)     |
| Colours              | Please refer to chart          |
| VOC                  | 8g/Lt                          |
| Water Absorption     | <0.2%                          |
| Elastic Mod.         | 1350 N/mm <sup>2</sup>         |
| Impact Resistance    | Drop Test <3mm                 |
| Heavy traffic        | 24 hours                       |
| Light traffic        | 12-16 hours                    |
| Abrasion Resistance  | Accelerated <0.03mm            |
| Chemical Resistance  | Acids and sugars               |
| Kit yield            | 11.6 L                         |
| Pot life             | 6-10 minutes                   |
| Coverage at 3.0mm    | 3.8 m <sup>2</sup> (8mm rake)  |
| Coverage at 4.0mm    | 2.9 m <sup>2</sup> (10mm rake) |

#### PACKAGING

|                    |        |
|--------------------|--------|
| Part A (Resin)     | 2.9Kg  |
| Part B (Hardener)  | 2.4Kg  |
| Part C (Aggregate) | 16.5Kg |
| Total Kit          | 21.8Kg |

#### WATCH POINTS

Application conditions must be between 5-25°C with a maximum relative humidity of 75%. Allow primer to cure for 48 hours in cold weather.

#### COLOUR STABILITY

The colour of the system will fade when subject to direct sunlight and high intensity lighting. The rate of colour change is unpredictable.

#### STORAGE

Store in a cool, dry place on pallets off of the ground. Avoid direct sunlight and high humidity. Shelf life is 6 months in original unopened packaging.

## APPLICATION DIRECTIONS

### SUBSTRATE REQUIREMENTS

Concrete substrates are to be minimum 20-25 MPa compressive strength, free of dust and friable materials. There must be no moisture vapour rising from the concrete and moisture content must be less than 5%.

### SYSTEM PRODUCT REQUIREMENTS

1. Primer – Polyscreed PU Primer or Solidkote MB Primer if moisture >5%.
2. Screed Topping – Polyscreed MD

### TOOL REQUIREMENTS

1. Schmidt hammer & Moisture meter
2. Mechanical mortar mixer or pan mixer
3. Notched screed rakes or trowels
4. Spike rollers
5. Spike shoes, knee pads

### PREPARATION

Remove all previous coatings and concrete laitance to an exposed aggregate appearance. Diamond grind, shot blast or scarify concrete surfaces in order to obtain a sound, dry and dust free, surface. All dust and loose debris to be removed by sweeping followed by vacuuming. The prepared concrete must have a surface texture of 80 grit sand paper.

### PRIMING

Prime concrete surfaces with Polyscreed PU Primer or Solidkote MB Primer if moisture is greater than 5%. Allow primer to cure for at least 16 hours prior to application of POLYSCREED MD with a maximum over coating time of 48 hours. Ensure application conditions are between 5-25°C and at a maximum of 75% Relative Humidity.

### MIXING

Set up the mixing station as close to the floor surface as possible. Open the bags before starting to ensure no time is wasted between mixes. Use two mixing vessels to ensure time between mixes is correct. Before mixing, turn

the resin bottle upside down and shake vigorously to homogenize and emulsify. Decant into mixing vessel and begin mixing. Then add the hardener while mixing and mix for 1 minute until uniform. Then, while mixing add the aggregate portion to the mix and mix for a further 2 minutes until uniformly wetted out.

### PLACING

Pour out the mix onto the demarcated area in a long ribbon and pull the mix with the notched rake or trowel. As soon as the first mix is placed, the following mix must be delivered to the floor and placed into the previous mix. Spike roll out trowel, rake marks as well as where two mixes meet. Allow the surface to settle and cure.

### MAINTENANCE

Regular cleaning will maintain the Polyscreed system in a serviceable condition. Maintenance is to be carried out using LIQUID ACTION which complies with SANS 1344 - Medium Duty Solvent Detergent (2112/P3325/10/ID). Refer to technical datasheet for further details.

### ANTIMICROBIAL RESISTANCE

The Polyscreed range of products contain silver ion technology in which inhibits the growth of bacteria and fungi in contact with the product. The hygienic advantage is therefore not only derived from the daily use of the floor but in the longer life this technology affords in retarding the degradation of the floor by microorganisms.

### SEALING

Stain resistance is enhanced if the Polyscreed surface is sealed. Solidkote UV Super Satin recommended.

### SAFETY

Please read Material Safety Data Sheet and specific health and safety data for this product provided in compliance with the requirements of OHS Act No. 95 of 1993. The finished system is not hazardous to health or the environment.

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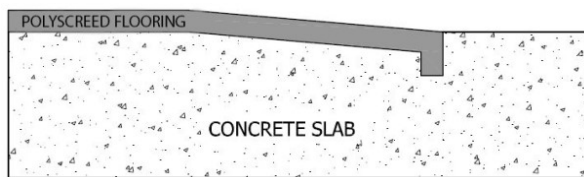
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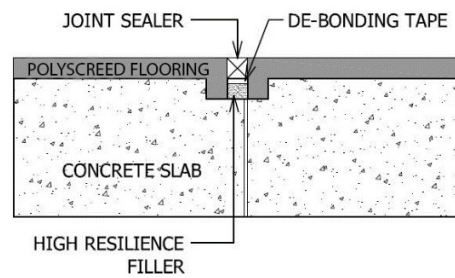


**JOINT DETAIL**

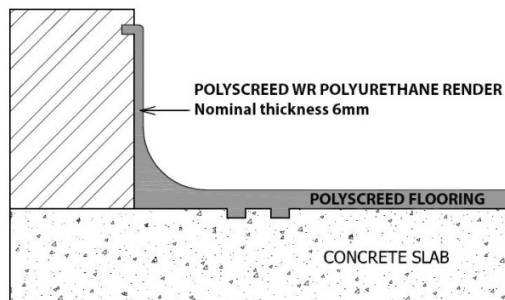
**Termination Detail**



**Low Movement Joint Detail**



**Coving Detail**



**Channel Linings**

