



# **SHELD-SCREED** A PU screed with top-of-the-line chemical resistance

#### **Typical Areas of Application:**

- Chemical Plants
- Factories
- Breweries

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- Food Production Areas
- Workshops
- Bottling Plants

### Curing Schedule @ 20°C:

Pot Life	15 mins
Pedestrian Traffic	12 -16 hours
Light Wheeled Traffic	24 hours
Full Traffic	48 hours
Full Cure	7 days

**PLEASE NOTE:** At lower cure temperatures the above cure times will be increased

#### Technical Data after 28 days @ 20°C:

Compressive Strength	>50 N/mm <sup>2</sup>
Bond Strength	>3 N/mm <sup>2</sup>
Slip Resistance Pendulum	Dry> 60
Test to BS7976-2	Wet> 40
VOC	<12g/L Based on a fully mixed unit
Chemical Resistance	Excellent general chemical resistance
Temperature Resistance	6mm: Serviceable to +80°C 9mm: serviceable to +120°C

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What is shield screed? Shield-Screed is a 3 pack, heavy duty polyurethane-based screed floor screed, designed for application at 4-6mm thickness. This product provides excellent resistance to abrasion, chemical attack, and other physical aggression. On full cure, it's also stable to steam cleaning and hot water exposure at a thickness of 9mm and can be applied to falls.

Shield-Screed contains a base component, a curing agent, and a specially graded aggregate component.

#### **Benefits and Features:**

- 3 component kit
- Hard wearing
- Easily maintained
- Brilliant adhesion to concrete
- Seamless floor finish
- Excellent chemical resistance
- Steam cleanable at 9mm thickness
- Abrasion and impact resistant
- Slip resistant finish

## **Surface Preparation:**

To maximise the performance of the epoxy screed resin, you must ensure maximum adhesion to the application surface. The concrete surface should be cleaned, degreased, and dried, making sure that the area is free of other contaminants such as dirt, dust, and loose debris. The concrete should be free of previously applied coatings or damp-proof membranes.

The concrete substrate should be a minimum of 28 days old, and the residual moisture content must be a maximum of 75% RH. The substrate should be sound with a minimum compressive strength of 25 N/mm2 and a minimum pull-off strength of 1.5 N/mm2. If previous coatings are present, concrete substrates should be mechanically prepared using vacuum enclosed abrasive blast cleaning or diamond grinding equipment to remove laitance and previous surface treatments, followed by thorough vacuuming leaving an open textured surface. Weak concrete must be removed and repaired.

In order to ensure the finished system remains fully bonded to the sub-floor it is essential that all terminating edges are rebated to produce a minimum cross-section of 10 mm deep by 10 mm wide, running at 150mm from and parallel with the walls, day joints, movement joints, floor edges, drains, door thresholds etc.

#### **Priming:**

The use of a primer with this product is recommended, as to maximise the screeds adhesion to the concrete. Inquire to our sales team for the perfect matching primer.

#### **Mixing:**

Open the tin of Shield-Screed Part A. Pre-mix the coloured liquid content, making sure to scrape up and stir thoroughly. This is essential to ensure any pigment that has settled at the bottom is reincorporated. Empty both Part A coloured base and Part B hardener into a rotary drum mixer and mix for a minimum of 1 minute, then slowly add the aggregate component in stages, mixing for a minimum of 2 minutes until a lump free consistency is obtained.

#### **Application:**

Pour the mixed material immediately onto the substrate and spread evenly with a trowel to the required thickness achieving a flat surface. Care must be taken to ensure chases and toe in groves are fully filled, and each mix is blended into the previous mix, avoiding the disturbance of materials that have started to set up.

The ambient temperature of the substrate and works area should be a minimum of 15°C during the application and curing period, if not adhered to this can adversely affect the cure, colour, and appearance of the system.

Materials and substrate temperature must be above 10°C.

#### **Application:**

- Protect the installed floor from damp, condensation and water for at least 24 hours.
  - All MDI based polyurethane products are adversely affected by exposure to UV light and will be prone to cosmetic yellowing of the surface. This does not affect its performance or function.
- Shield-Screed contains a white aggregate which imparts a slip resistant profile to the finished floor. When first installed, the floor has a uniform coloured surface. However, with general use, the white aggregate will begin to show through giving a decorative, mottled appearance.

#### **Coverage Rate:**

Approximately 12kg/m2 at 6mm. Coverage dependant on surface profile, texture, substrate temperature and porosity.

#### Storage:

Store in dry conditions at temperatures between 10°C and 25°C. Do not expose to freezing conditions. Shield-Screed has a maximum of 12 months shelf life when stored in the original, unopened containers. Keep aggregates warm and dry.

#### **Cleaning Equipment:**

All equipment used should be cleaned immediately after with xylene.

#### Health & Safety:

Always read and understand the label, and Safety Data Sheet provided, before using this product. Always wear recommended PPE when using this product. The SDS and this Technical Data Sheet is also available on our website, www.img-limited.co.uk.

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