

# HYGROSMART®-DUR CEM 3K

## Three-component, epoxy modified mortar

### DESCRIPTION

**HYGROSMART®-DUR CEM 3K** is a revolutionary epoxy modified mortar formulated by **ALCHIMICA™** research and development laboratory as a solution to the problems arising in waterproofing applications on porous and/or humid concrete. Waterproofing over such substrates with standard epoxy or polyurethane primers may not be sufficient and craters, ballooning and other defects will arise on the polyurethane membrane.

**HYGROSMART®-DUR CEM 3K** is a low viscosity, self leveling mortar that will effectively seal the substrate allowing a defect free curing of **HYPERDESMO®** or other polyurethane based products.

**HYGROSMART®-DUR CEM 3K** is a very hydrophobic material and can be used in itself as a first line waterproofing mortar.

The material is available as SELF LEVELLING or THIXOTROPIC,

**HYGROSMART®-DUR CEM 3K SL** or **HYGROSMART®-DUR CEM 3K THIXO**

### RECOMMENDED FOR

- Primer for **HYPERDESMO®** range of products
- Waterproofing of foundation walls
- Floor leveling compound

### FEATURES & BENEFITS

- Effective primer for very porous concrete.
- Strong adhesion even on damp or green concrete.
- Prevents osmotic blistering of resin based coatings over damp substrates.
- Very long open time of over 50 minutes.
- Easy mixing ratio ( liquid components 1:1 by

volume).

- Quick curing even at lower temperatures.
- Low-odor, safe and non-flammable (zero VOC).
- Suitable for application in closed spaces.
- Good mechanical properties and abrasion resistance.
- Easy coloring with water based pigment pastes.

### APPLICATION PROCEDURE

#### Mixing:

Mix the two components well manually or using a low speed (300 rpm) mixer and add under mixing the third cementitious component. Do not add additional water.

Can be applied on green or damp concrete, without any standing water. Although the product can be applied onto green concrete surfaces (> 24 hours), it is advised to allow at least 3 days for early shrinkage of concrete to occur in order to prevent concrete shrinkage cracks from appearing on the screed surface.

Recommended thickness: 2-5 mm.

Consumption: 2 Kg/m<sup>2</sup>/mm.

Minimum consumption: 1kg/m<sup>2</sup>.

### CLEANING

Clean tools and equipment first with paper and then using water. Under no circumstances should they be re-used to mix/apply polyurethane products.

### PACKAGING

Component A: 3,5 kg

Component B: 3,5 kg

Component C: 25 Kg

### SHELF LIFE

## HYGROSMART<sup>®</sup>-DUR CEM 3K

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

**HYGROSMART<sup>®</sup>-DUR CEM 3K** is free of solvents. Nevertheless, you are advised to observe the standard safety rules: Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. The M.S.D.S. (Material Safety Data Sheet) is available on request.

### SAFETY INFORMATION

### TECHNICAL SPECIFICATIONS

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	5-40
Adhesion to concrete	(N/mm <sup>2</sup> )	ASTM D4541	>2
Dry time (for HYPERDESMO application)	Hrs.	-	4-6
Full cure	hrs	-	24
Compression strength	Mpa	EN 13892-2	>45
Flexural strength	Mpa	EN 13892-2	>12

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