

## HYGROSMART®-FIX & FINISH

**One-Component, rapid-setting shrinkage-compensated, thixotropic, fibre-reinforced, cementitious mortar applied in a single layer from 3 to 40 mm thick, for repairing and smoothing concrete**

### DESCRIPTION

**HYGROSMART®-FIX & FINISH** is one-component thixotropic mortar used for structural repairs and smoothing layers on internal and external, horizontal and vertical concrete surfaces, suitable for repairing structures exposed to the open air and in permanent contact with water.

After mixing, the product forms mortar with good workability and with setting and hardening time. It is applied by trowel in a single layer from 3 to 40 mm thick to repair and smooth over concrete. **HYGROSMART®-FIX & FINISH** hardens without shrinking and is characterised by its excellent adhesion to concrete substrates.

### COMPLIANCE-CERTIFICATION

**CE** certified as **Class R4** repair mortar according to European Standard **EN 1504-03**.

### RECOMMENDED FOR

- Quick repairs to deteriorated parts in concrete, the corners of beams, pillars, buffer walls, cornices and the front edges. Wet rooms, roofs & balconies, swimming pools (under tiles)
- Quickly smoothing over surface defects in cast concrete, such as honeycombs, spacer holes, construction joints, etc., before painting the surfaces
- Repairing and smoothing over concrete mouldings on civil buildings, such as skirt roofs and protruding decorative elements.
- Repairing pre-cast concrete structures.

### LIMITATIONS

- Temperature during application limited in the range of 5°C -35°C.
- Do not add water, cement or any other aggregate.
- Do not add water to the mix to make it more workable once it starts to set.
- Do not apply on smooth substrates: roughen surfaces beforehand.
- Do not apply on dry substrates.
- Do not leave bags of **HYGROSMART®-FIX & FINISH** exposed to the sun before use.

### APPLICATION PROCEDURE

Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed.

#### Mixing:

**HYGROSMART®-FIX & FINISH** (25 Kg) is gradually added to 4.2 – 4.5 Kg water and mixed mechanically until you reach a smooth and homogeneous mix.

#### Application:

Apply a layer of mortar from 3 to 40 mm thick with a trowel or putty knife; no formwork is required. As soon as the mortar starts to set, tamp the surface with a sponge float. The waiting time required before carrying out this operation depends on surrounding weather conditions. During summer do not expose the product to the sun and use cold water to prepare the mix. At a lower temperature use water at +20°C and store the product in a heated room otherwise the beginning of the setting and hardening is delayed. Pot life is approximately 20' at 20oC.

## HYGROSMART®-FIX & FINISH

### CONSUMPTION

Minimum consumption: 17.5 kg of powder to cover an area of 1m<sup>2</sup> per 1cm thickness.

### PACKAGING

5kg, 25kg

**Colour:** Grey.

### SHELF LIFE

Can be kept for 12 months minimum in the original unopened bags in dry places and at temperatures of 5-25 °C.

### SAFETY INFORMATION

Contains cement: May cause skin irritation due to alkaline reaction. Use protective gloves and goggles. The MSDS (Material Safety Data Sheet) is available on request.

### TECHNICAL SPECIFICATIONS

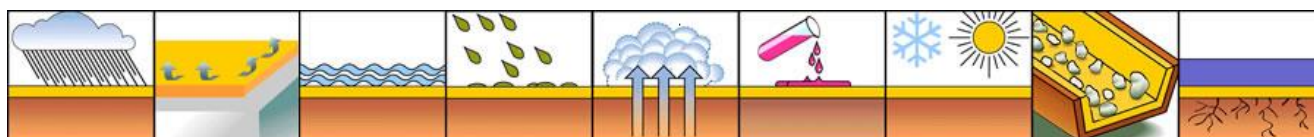
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| <b>ALCHIMICA UK</b><br>Unit 2, Dairy Park, Spring Gardens, SA34 0HN                                                            |                                         |
| 2928-CPR-55                                                                                                                    |                                         |
| EN 1504-03:2005<br>2928<br>HYGROSMART- FIX & FINISH<br>Concrete repair product for structural repair (CC) mortar R4, class III |                                         |
| www.alchimica.co.uk                                                                                                            |                                         |
| Capillary absorption                                                                                                           | 0.1 kg/m <sup>2</sup> .h <sup>0,5</sup> |
| Compressive strength                                                                                                           | >45 MPa                                 |
| Chloride ion content                                                                                                           | 0.004%                                  |
| Adhesive bond                                                                                                                  | 2.68 N/mm <sup>2</sup>                  |
| Thermal compatibility                                                                                                          | 2.21 N/mm <sup>2</sup>                  |
| Modulus of elasticity in compression                                                                                           | >20 GPa                                 |
| Carbonation resistance                                                                                                         | pass                                    |

## HYGROSMART®-FIX & FINISH

|         | Flexural Strength (MPa) | Compressive Strength (MPa) |
|---------|-------------------------|----------------------------|
| 3 hours | 2                       | 6                          |
| 1 day   | 7                       | 30                         |
| 7 days  | 8                       | 50                         |
| 28 days | 10                      | 60                         |

| PROPERTY               | UNITS | SPECIFICATION                       |
|------------------------|-------|-------------------------------------|
| Mixing ratio           | -     | 100kg of product:17kg-18kg of water |
| Pot life               | min   | 20                                  |
| Setting time           | min   | 30                                  |
| Colour                 |       | grey                                |
| Maximum aggregate size | mm    | 1.2                                 |
| Density of mix         | kg/l  | 2,1                                 |
| Bulk density           | kg/l  | 1.26                                |

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Certified quality, environmental and occupational health & safety management systems:  
ISO 9001/14001 & ISO 45001.

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