

HYGROSMART®-IMPER-C-1K-ELASTIC

One-Component, Fibre-Reinforced, Flexible Cementitious Mortar for Waterproofing & Protection.

DESCRIPTION

HYGROSMART®-IMPER-C-1K-ELASTIC is a one-component waterproofing mortar based on cementitious binders, water repellent polymers and high technology additives. It has excellent workability, easy application and very strong adhesion. Its special synthesis protects from humidity and displays outstanding mechanical properties.

Apply with trowel, brush or roller in two coats of thickness 1.0-2.0 mm each.

COMPLIANCE - CERTIFICATION

The product is **CE** certified according to the European Standard **EN 14891:2012**

RECOMMENDED FOR

Flexible waterproofing and protection of:

- Fountains, bathrooms, wet rooms, roofs & balconies, swimming pools (under tiles) and any mineral surface exposed
- Water tanks
- Concrete structures, such as roof tops, terraces etc.
- Pre-cast panels
- Underground structures
- Retaining walls

FEATURES AND BENEFITS

- Completely waterproof
- High flexibility
- One-component product, mix only with water
- Excellent workability

- Highly resistant to positive and negative pressures
- Easy to apply
- Very powerful adhesion to various substrates
- High weather and UV resistance
- Good mechanical properties
- Slows down the process of carbonation
- Covers completely capillary/hairline cracks
- Compatible with the application of cementitious microcement, pasty microcement, ceramic tiles, rocks and quartz stones and epoxy-based paints and primers

LIMITATIONS

- Temperature during application limited in the range of +5°C to +35°C.
- Avoid applying the product when the surface is directly exposed to sunlight or strong winds
- Do not add water, cement or any other aggregate that might affect the properties of the mortar
- Protect the application surface from rain or frost the first 24-48 hours
- Avoid direct contact with chlorinated water e.g. in swimming pools

APPLICATION PROCEDURE

Clean the substrate using a high-pressure washer, if possible. Remove oil, grease, paint, rust and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities or cracks should also be filled with **EPOXY RESIN-21-T** or **HYGROSMART®-BUILDING-F**.

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Priming:

Simply dampen the substrate with water.

Application:

The mortar is mixed mechanically (500 rpm) with the adequate quantity of water for around 3-5 minutes and until a smooth and homogeneous mix has been reached. Apply with trowel, brush or roller in minimum two equal coats of thickness 1.0-2.0 mm each.

For trowel application, mix 20kg of the product with 3.8kg of water and for roller applications mix 20kg of the product with 6.6kg of water. The mixture should be thick enough, to be suitable for each application method. The mixture remains workable for 40-60 minutes, under normal conditions. Low temperatures extend the life of the mortar, while high temperatures reduce pot life and workability.

The second coat is applied approximately 3 hours after the first. In case the product remains on the surface longer and dries, re-soak the surface. Protect the product for the next 24-48 hours, after its application completion, from high temperatures, rain and frost.

CONSUMPTION

Depends on the substrate roughness.

As a guide: 1,2 kg/m² per 1mm thickness. Coat thickness of 1.0-2.0 mm.

PACKAGING

Mortar: 20 kg.

Colour: Grey.

CLEANING

It is recommended to clean tools with water before the material starts to set. Once the material has dried, cleaning can only be done with mechanical means.

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

The product contains Portland cement. The MSDS (Material Safety Data Sheet) is available on request.

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TECHNICAL SPECIFICATIONS

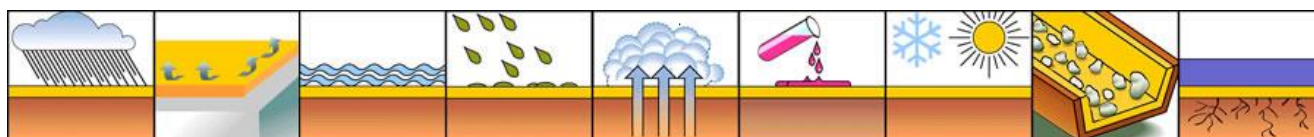
PROPERTY	UNIT	RESULT
Consistency/Color	-	Grey powder
Density of dry mortar	Kg/lt	1.4 ± 0.2
Density of freshly mixed mortar (6.6kg water in 20kg of mortar)	Kg/lt	1.55 - 1.60
Water requirement	-	3.8-6.6kg of water per 20kg of the product
Application temperature	°C	+5 to +35
Pot life	min	40-60
Foot traffic	days	>3


21
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EN 14891:2012 2085 HYGROSMART IMPER-C-1K-ELASTIC Liquid applied water impermeable products for use beneath ceramic tiling bonded with adhesives
www.alchimica.com

HYGROSMART®-IMPER-C-1K-ELASTIC

Essential characteristics	Performance	Requirement	Harmonized technical specification
Initial tensile adhesion strength	1.4 N/mm ²	≥0.5	EN 14891:2012/AC:2012
Durability of initial tensile adhesion against climate/heat ageing action	1.1 N/mm ²	≥0.5	
Durability of initial tensile adhesion against water/humidity action	1.2 N/mm ²	≥0.5	
Durability of initial tensile adhesion against contact with lime water	1.0 N/mm ²	≥0.5	
Durability of initial tensile adhesion against freeze and freeze-thaw cycles	0.9 N/mm ²	≥0.5	
Water tightness (water penetration at 150kPa for 7 days)	no penetration weight gain=7.6g	no penetration at 150kPa for 7 days, weight gain<20g	
Crack bridging ability	1.85 mm (class A4)	≥0.75	
Tensile adhesion strength after contact with chlorinated water	0.8 N/mm ²	≥0.5	
Crack bridging ability at low temperature (-5°C)	1.05 mm	≥0.75	

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