



Cementitious waterproofing mortar

DESCRIPTION

Cementitious mortar composition, suitable for waterproofing repairs, under direct and indirect hydrostatic pressure..

APPLICATIONS

- Drinking water waterproofing repairs in drinking water facilities.
- Water retaining structures.
- Interior tunnel walls.
- Water treatment plants.

ADVANTAGES

- Watertight cementitious coating. Withstands high hydrostatic pressures.
- Water vapour permeable
- Applicable onto wet supports
- Drinking water approved (BS 6920.2000)
- Durable
- Protects concrete against chloride and carbonates
- High chemical, abrasion and UV resistance.
- Easy application.

CERTIFICATIONS

CE marking, as per EN 1504-2



TECHNICAL DATA

PRODUCT INFORMATION BEFORE APPLICATION

Colour and description	White or gray powder
Grain size (max)	0.63 mm
Density	1.00-1.20 g/cm3
Mixing ratio	water: 25-28%
Density of cure product	1.65-1.85 g/cm3
Water resistance	800 kPa (direct pressure) EN 12390-8 250 kPa (indirect pressure)

Water vapour resistance	78 g/m2 day (Class I: permeable)
EN ISO 7783-1/2	

Liquid water permeability	0,07 kg/m2 h
EN 1062-3	

Compressive strength	40.7 (after 28 days)
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Adhesion on concrete	1.8 (after 28 days)
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Abrasion resistance	0.56
Taber, 1000 cycles, CS-17, 1kg	

Packaging	Sacks, 25 kg Available colours: white and gray
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Storage	Keep in a cool, dry place, away from sunlight, moisture and frost. Use before 12 months after manufacturing date.
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SUPPORT REQUIREMENTS

In order to achieve a good penetration and bonding, support must be:

1. Solid, firm, rough, free of dust, loose particles, oils, organic residues or laitance

2. Fissures must have a minimum depth of 2 cm and be repaired before using Rayston Cem Imper Rigid.
Before application, gently wet the support, avoiding excess of water.

MIXING

Pour Rayston Cem Imper Rigid in a clean bucket and add slowly the recommended amount of water (25 to 28 parts for 100 parts of mortar). Mix gently at low stirring speed for 3 minutes or until a homogeneous appearance is achieved. Allow standing for 5 minutes and remix briefly. The product is then ready.
One sack (25 kg) of Rayston Cem Imper Rigid requires 6.2 to 7 litres of water.

Do not add water if product goes too thick for application. Remix if necessary, and, in any case, do not mix more material than the amount that is intended to be used within 20-30 minutes.

APPLICATION CONSUMPTION

Apply the product forming a continuous and uniform layer. Avoid use the product as paint. Apply two layers, 1 to 1,5 kg/m2 each (total consumption 2 to 3 kg/m2). Layer thickness must be approximately, 1 mm. Once spreaded, regularize with a brush. Second layer must be applied after 12 hours and before 24 hours. Second application can be finished with a roller.

It can also be applied by spray equipment using 3-4 mm nozzles and a pressure of 3,5 to 5 bar. Use a brush on the still fresh product to ensure a smooth surface is achieved.

If an upper layer of mortar or ceramics is intended afterwards, apply the second Rayston Cem Imper Rigid layer horizontally. Inside pipes, apply layer in the direction of water flow.

Keep the applicated product moist for the first 24 hours.

Estimated consumption is 1 to 1,5 kg/m2 each coat. This may vary according to surface roughness.

Do not use on bitumen, water-repellent, or resin -treated surfaces.

AMBIENTAL CONDITIONS

Avoid outdoor application if rain is expected within next 24 hours.

Temperature limits are 5°C to 35°C. Do not use on frost or soaked supports.

At higher temperatures, low humidity, keep the support moist and avoid direct sunlight exposure.

CURING TIME

Rayston Cem Imper Rigid can be covered with other gravel, cementitious or ceramic products after 3 days. Permanent water immersion is allowed after 7 days (at 20°C, 50% rh). Lower temperatures make these times longer.
Before return to service, clean the surface with water.

CLEANING

Rayston Cem Imper Rigid can be cleaned with water when still liquid/paste. Once hardened, only mechanical means are effective.

SAFETY

General precautionary measures when handling chemicals are advisable. Rayston Cem Imper Rigid is not toxic but it is abrasive. Refer to the Material Safety Data Sheet for more information. In general, suitable protective clothing and eye protection is advisable. Avoid dust inhalation. This product is not suitable for DIY applications and it is reserved for professional users.

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled with the same precautions as if they were full. Dispose of the container according to the local



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RAYSTON CEM IMPER RIGID

RAYSTON
products



Cementitious waterproofing mortar

OTHER INFORMATION

The information contained in this Technical Data Sheet, as well as our advice, both written as verbal or provided through testing, are based on our experience, and they do not constitute any product guarantee for the installer, who must consider them as simple information.

We recommend to study deeply all information provided before proceeding to the use or application of any of our products, and strongly advise to conduct tests "on-site" in order to determine their convenience for a specific project. Our recommendations do not exempt of the obligation of installers to deeply study the right application method for these systems before use, as well as to conduct as many preliminary tests as possible should any doubt arise. The application, use and processing of our products are beyond our control, and therefore under the exclusive responsibility of the installer. In consequence, the installer will be the only responsible of any damage derived from the partial or total in-observation of our indications, and in general, of the inappropriate use or application of these materials.

This Data Sheet supersedes all previous versions.



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