

Document type

Technical Data Sheet

Name

HYDROCEMENT

Description

HYDROCEMENT is a mineral-based micro-thickness coating developed for use in wet areas, such as shower walls and floors. The water does not penetrate this coating, preventing any stains on the finish when applied in wet areas. This material is used in combination with PASTELLONE: the first coat is completed with PASTELLONE MEDIUM and the two subsequent ones with HYDROCEMENT.

Composition

Portland cement, marble powder, quartz powder, binder, water repellent agents.

Versions

HYDROCEMENT

Appearance

Powder

Colour

White, it can be tinted to any colour with compatible colourants.

Grain size

500 microns

Packaging

16 kg net polyethylene containers

Application

By hand, with a steel trowel

Type of Surface

- Interior vertical surfaces, included wet areas such as showers
- Interior flooring of wet areas, such as: bathroom, saunas, and shower trays

New Wall Surface

Plaster: no priming necessary

Gypsum / Plasterboard / Medium Density: one coat of QUARTZ PRIMER

Old Wall Surface

Plaster: one coat of QUARTZ PRIMER

Fast drying / Limewash: brush down and apply one coat of QUARTZ PRIMER

Polished Lime: Abrade, brush down and apply one coat of QUARTZ PRIMER

Washable Paint: one coat of QUARTZ PRIMER

Floors

New Cement Screed*: Clean and apply one coat of UNIVERSAL PRIMER

Plywood Panels*: See notes below, 1 or 2 coats of QUARTZ PRIMER

Tiles*: See notes below, 1 or 2 coats of GLP

Marble: 1 coat of GLP

Dilution

To achieve the desired paste consistency, mix water with HYDROCEMENT at a ratio of 300 ml per 1 kg. For 16 kg of HYDROCEMENT, use 4.8 L of water. Wear protective mask and glasses when mixing.

Consumption

For 1 sqm: for the first coat use 850 g of PASTELLONE MEDIUM (powder weight)
For the second + third coat use 900 g of HYDROCEMENT (powder weight)

Drying

3-4 hours at 20°C / 68°F

8-14 hours at 20°C / 68°F

60 days

to the touch

below the surface

stable

Application temperatures

min 5 max 30°C – R.U. < 85% ca

Coat Thickness

1.2 – 2 mm for a total of 2-3 coats.

VOC Classification

EU Directive 2004/42/CE: EU limit value for this product (cat A/I – water-based decorative effect coating): 200 g/l (2010). This product contains less than 1 g/l of VOC.

pH after 30 days

9 ± 0.50

Pot life

12 hours on average if tub is closed between usages

Shelf life

24 months when stored according to the recommended guidelines

Storage

In original sealed packaging between 5° - 35°C in a dry, dark environment

Safety Norms

Irritating. / Risk of serious damage to eyes. / Irritating to the skin. / Keep out of children. / Avoid contact with eyes. / In case of contact with eyes, clean immediately with water without rubbing them, and consult a doctor. / Wear suitable gloves and eyes / face protection. / In case of ingestion of the products, consult immediately a doctor showing him the can or the label of the product. Danger labelling under directives 67/548/EEC and 1999/45/EC and following amendments and adjustments. The product must be transported, used and stored according to current standards of hygiene and safety.

Disposal

Product must be disposed of according to norms and regulations in force. Containers must be sent for recycling. Follow directions on the packaging

Application Instructions

WARNINGS

We recommend using materials from the same production batch for the same project. If you must use different batches, we suggest mixing their material together to avoid any slight variations in shading.

To ensure proper usage, dilution, and application of the products mentioned in these pages, please consult the corresponding technical data sheets.

When preparing the surface and applying the materials, we advise using appropriate tools and personal protective equipment (PPE).

During application and for the following 72 hours, protect the surfaces from sudden temperature change, direct sun light and water. Don't apply in temperatures below 8°C or above 35°. During application make sure that the work area isn't too damp to avoid problems with application times.

Remember to have a strong light parallel to the wall/floor and situated on only one of the two sides of the wall/floor you are working on (usually on the same side as other sources of light such as windows). In this way the shadow of the trowel allows you to see the actual state of the finish. Every so often the light should be moved so that the wall/floor doesn't dry out too much in one spot from the heat of the lamp.

APPLICATION on the Ideal Substrate: Cement-Sand Plaster

Substrate:

Apply a water-based primer like UNIVERSAL PRIMER with a roller on a clean surface free of dirt and grease.

First Coat:

Apply PASTELLONE MEDIUM, available in white or a colour similar to the final finish. Mix it with water to achieve a dense yet easy-to-apply consistency using a metal trowel—approximately 290ml of water per kg of PASTELLONE. Using PASTELLONE

MEDIUM as a base layer beneath HYDROCEMENT enhances both the speed and uniformity of moisture absorption.

A light source placed close to and parallel to the floor/wall is useful during application but be careful not to let the material dry too much before applying the final coat.

Approximate usage: 850 g of PASTELLONE MEDIUM per sqm. Let it dry until the next day.

Colouring:

If using pre-coloured material, the second and third coats will be easier to apply. If colouring manually, there are two options:

- Colour the white material after mixing with water, ensuring prior colour tests to determine the exact weight of liquid colourant needed. You can also prepare toners in advance.
- Tint all the water used in the mixture, stirring well before use to prevent pigment sedimentation.

Use STUCCO ITALIANO paste colourants or another colourant resistant to the alkaline environment of cement.

Second Coat:

Mix enough HYDROCEMENT for the second coat (approx. 650 g of powder per sqm) with water and apply using a metal trowel. Plan the application carefully, working in 40-50 cm strips, starting from the farthest point from the exit for floors or the top for walls. Ensure an even, smooth application.

Third Coat:

Once the second coat is applied, prepare the material for the third coat, which can be the same mix. The exact waiting time before applying the third coat depends on temperature and humidity—the right moment is when you can step on the floor comfortably or, for walls, when all shiny areas from surface moisture disappear. This could take between 25 minutes and an hour. For floors, it is best to go barefoot or wear socks to avoid imprints.

Approximate usage: 250 g/sqm of dry product.

If HYDROCEMENT is white or a light colour, it is preferable to use the BIANCO TROWEL, a titanium trowel that prevents dark marks.

For a smoother and harder finish, once the surface is complete and dry enough to step on, you can return with a spray bottle to lightly mist the surface and rework it with a trowel, polishing small sections at a time. This applies to both floors and walls.

A second compressing and polishing phase can be done later, as HYDROCEMENT remains compressible and polishable for up to 24 hours after the last coat.

⚠ Be careful not to leave drops or excess water on the floor, as they will cause lighter marks.

Polishing:

After 24-48 hours, gently sand the surface with a sanding machine to smooth it and enhance variations in tone. Start with P80 or P100 sandpaper and gradually refine—up to P180.

Final Note:

This material remains flexible for about two weeks, progressively hardening until it reaches maximum hardness in 60 days.

Notes on Substrates:

- **On New Concrete Screed:** Ensure new concrete surfaces are at least a month seasoned and completely dry. Cracks may appear in new concrete within the first three weeks after laying.
- **On Plywood Panels:** Application on plywood floors is possible provided the panels are solidly glued and the floor substrate is stable. Do not apply on panels that are screwed and not glued, as these may vibrate and cause cracks in the HYDROCEMENT finish.
- **In Showers:** This material is suitable for use in wet areas such as shower walls and steam-bath walls.
- **On Ceramic Tiles:** Apply one coat of GLP (Gap Levelling Plaster) within the tiles' gaps, then a second coat over the entire surface once dry. This method does not require abrasion of the tiles, although light abrasion helps level tiles and fills gaps with a single application, as GLP is a non-shrinking plaster.
- **Substrate with Cracks:** On a cement screed, assess if cracks are due to curing or settlement movements. For settlement cracks, apply a narrow fiberglass mesh (7-8 cm) along the crack, fixed with a fibrous plaster like ANTICRACK. Then, cover the entire floor with 100 cm-wide FIBERGLASS mesh, laid side by side without overlap. On new screeds, fix the mesh with the first coat of PASTELLONE. On tiled or marble floors, first fix the mesh with a layer of highly fibrous and adhesive plaster like GLP. Pay special attention to cracks when applying HYDROCEMENT over tiled floors, as cracks often follow the edges of tiles and hide in their gaps.

Tips:

- **Touch-Ups:** Keep some of the powder-coloured material (if used) in a well-sealed container to minimize air exposure, allowing it to be stored for many years. Alternatively, keep a record of the formulation for tinting the plaster if starting from an untinted material.
- **Working in Adjacent Rooms:** Create a natural break at doorways when working in adjacent rooms. Place a metal band (aluminium, steel, or brass) into the concrete substrate to act as a divider, rising 1.5-1.7 mm above the surface. Metal blades used should be 15 mm high and 3 mm thick, fixed after cutting the screed for at least one third of its thickness to direct any movements along this cut without causing cracks elsewhere.
- **Use Knee Pads:** Always use knee pads when applying products on floor surfaces.

- **Be Aware of Heavy Objects:** Dropping heavy objects can cause small dents in the surface, similar to wood flooring.

Finish Protection

After 2-3 days (the longer, the better) you should apply the final treatment following these steps:

1. Apply a waterproofing and stabilising treatment using our PRESEALER, applied in two coats. This treatment helps in facilitating the application of the varnish, as well as prevents the varnish from leaving any marks on the surface.
2. Once the surface is dry, apply two coats of PU2C, using a roller.
3. Following the PU varnish, you may apply two coats of PROTECTIVE WAX. While this third step is not essential, it does make the floor easier to clean.

Maintenance

Routine Cleaning

Clean surfaces regularly using a soft cloth and neutral pH, non-acidic detergents. For floors, you can occasionally add a small amount of PROTECTIVE WAX to the cleaning water to help maintain the surface protection.

Re-application of Protective Treatment

The longevity of the protective finish depends on the type of treatment and intensity of use. Here's how to maintain each system:

- PU1C / PU2C
When the varnish begins to show visible wear such as dullness or scratches (typically every 3 to 5 years depending on traffic) it is time to renew the protective treatment. Thoroughly clean and lightly sand the entire surface, then apply one new coat of PU1C or PU2C according to product instructions.
- Combination with PROTECTIVE WAX or any other wax
If a protective wax was used on top of PU, it must be fully removed before any re-application of the PU. This involves more intensive sanding to eliminate wax residue and ensure proper adhesion of the new protective layer.

Tools

SI TROWEL / BIANCO, SCRAPERS, CORNER TROWEL
Clean with water immediately after use

Decorative complements (optional)

TERRACOTTA FINE / MOTHER OF PEARL FINE / MICA / GLITTER

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