

HydroFix Damp-Proofing Render

Silane-modified, two-component, water-repellent and breathable mineral render

10 kg SET · POWDER + ACTIVATOR

PRODUCT DESCRIPTION

DRYVATEC HydroFix is a cement-based, two-component renovation render developed to restore wall surfaces damaged by rising damp and to prevent capillary water from reaching the surface.

The distinguishing feature of the system is that the mixing water is activated. The HydroFix A liquid activator supplied with the set is added to the mixing water and distributes throughout the mortar matrix as it sets, rendering the pore walls water-repellent. The additive is not a coating applied afterwards — it becomes part of the internal structure of the render and cannot be worn away.

HydroFix P (powder component, 10 kg) and HydroFix A (liquid activator, 100 mL) are supplied as a single set; no separate additive or dosing calculation is required on site.

MODE OF ACTION

In an ordinary cement render an interconnected capillary network absorbs water and carries the moisture in the wall to the surface. HydroFix works not by sealing this network but by making it non-wettable:

- Silane molecules in the activator hydrolyse and bond to the cement hydration products and aggregate surfaces; their water-repellent ends turn into the pore void.
- The hardened render does not absorb liquid water — capillary transport is interrupted and no damp patches or salt efflorescence form at the surface.
- The pores remain open; water vapour passes freely and the moisture already present inside the wall can be released.

This selective permeability distinguishes HydroFix from conventional sealing renders. A sealing layer traps moisture within the wall; the damp then migrates above the rendered zone, salts accumulate behind it and the layer eventually blisters and detaches.

TECHNICAL DATA

AT +23 °C / 50 % RELATIVE HUMIDITY	
Product type	Cement based, silane modified, 2-component
Appearance / colour	Grey powder + clear liquid
Powder bulk density	approx. 1.7 kg/dm³
Mixing ratio	10 kg powder : 2.0 L water : 100 mL activator
Pot life (+20 °C)	30 minutes
Layer thickness	2 – 2.5 mm per coat
Total thickness	3 – 4 mm (3 mm recommended)
Waiting time between coats	6 – 8 hours
Compressive strength 28 d	≥ 32 N/mm²
Adhesion	≥ 1.0 N/mm²
Capillary water absorption	≤ 0.20 kg/m²·min
Vapour diffusion resistance μ	≤ 15
Touch dry	approx. 24 hours
Waiting time before painting	At least 3 days · until the render is visibly dry
Application temperature	+5 °C / +30 °C
Service temperature	-20 °C / +80 °C
Consumption	approx. 1.0 kg/m² · mm
Shelf life (powder)	12 months
Packaging	10 kg set

Values are typical figures obtained at +23 °C / 50 % relative humidity.

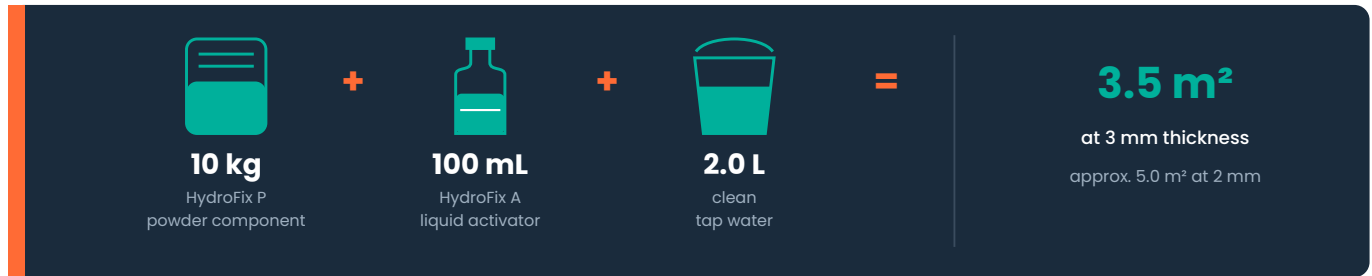
POSITION WITHIN THE SYSTEM

HydroFix does not stop the source of moisture on its own. Where rising damp is active, a DampStop injection barrier must be installed first; where the salt load is high, neutralisation with DampStop CS is required. HydroFix is the final link in this chain — the water-repellent, breathable surface layer.

SUBSTRATE SUITABILITY

SUBSTRATE / WALL TYPE	STATUS	NOTES
Brick, pumice, aerated concrete, stone	● Suitable	Absorbent mineral substrate; pre-wet before application
Fair-faced concrete, cement render	● Suitable	Provided it is sound and dust-free
Existing old cement render	● Conditional	Only if sound, load-bearing and unpainted; otherwise remove
Painted or limewashed surfaces	● Not suitable	No adhesion; must be fully removed
Gypsum plaster, plasterboard	● Not suitable	Alkaline mortar is incompatible with gypsum
Floors and slabs	● Not suitable	Product is for vertical surfaces only
Timber, metal, plastic	● Not suitable	Not applied to non-mineral substrates

PREPARING THE MIX



The diagram shows the contents of one batch. The mixing sequence is different and important: water first, then activator, powder last. Add the activator to the measured water and stir for about 30 seconds until homogeneous, then add the powder slowly. Mix for 3–4 minutes with a low-speed mixer (400 rpm), leave to mature for 5 minutes and stir again briefly. If the activator is added to the dry powder it does not disperse evenly through the matrix and water repellency remains patchy.

SURFACE PREPARATION

- Remove blistered paint, loose render and salt crust to at least 50 cm beyond the damaged area.
- Brush off and dry any mouldy areas.
- The surface must be sound, load-bearing and free from dust, form oil and laitance.
- Pre-wet absorbent surfaces; no standing water may remain.
- Where rising damp is active, install the DampStop injection barrier first; HydroFix alone does not stop the source.

APPLICATION

- 01 Apply the mortar with a steel trowel, working from the bottom upwards.
- 02 Do not exceed 2 – 2.5 mm in a single coat.
- 03 Apply the second coat once the first has set, after 6 – 8 hours.
- 04 Draw the second coat perpendicular to the first (horizontal vertical).
- 05 Build up to a total thickness of 3 – 4 mm.
- 06 Protect from impact, water, direct sun and frost for 48 hours.

CONSUMPTION

LAYER THICKNESS	CONSUMPTION	COVERAGE PER 10 KG SET	USE
2 mm (thin coat)	2.0 kg/m²	approx. 5.0 m²	Single coat on even surfaces
3 mm (standard)	3.0 kg/m²	approx. 3.5 m²	Recommended system thickness
4 mm (thick coat)	4.0 kg/m²	approx. 2.5 m²	Uneven or absorbent surfaces

Values refer to a smooth surface of medium absorbency. Surface irregularity and absorbency increase consumption; an allowance of 10 % is recommended when estimating.

PAINT AND COATING COMPATIBILITY

HydroFix relies on vapour transmission. If a vapour-tight layer is applied over it, moisture accumulates behind the render, salts crystallise and the layer separates from the surface. The choice of paint is as decisive as the render itself.

SUBSTRATE / WALL TYPE	STATUS	NOTES
Silicate (mineral) paint	● Suitable	Highest vapour permeability; recommended
Silicone emulsion paint	● Suitable	Water-repellent and breathable; suitable outdoors
Limewash, mineral decorative render	● Suitable	Historic and traditional buildings
Mineral-based tile adhesive	● Conditional	Strengthen ventilation in wet rooms
Acrylic / plastic interior paint	● Not suitable	Blocks vapour transmission
Epoxy, PU coating, membrane	● Not suitable	Forms a full barrier; causes blistering
Vinyl wallpaper	● Not suitable	Moisture accumulates behind the render

COMMON MISTAKES

- Mixing with too much water**
The matrix is diluted, the surface dusts and cracks and water repellency falls. The ratio is 10 kg : 2.0 L.
- Adding the activator to the dry powder**
It does not disperse evenly; part of the render gains no water repellency.
- Exceeding 2.5 mm in a single coat**
Shrinkage cracking and loss of adhesion occur; thickness must be divided into coats.
- Applying before the moisture source is stopped**
Salts accumulate behind the render and the layer blisters within months.
- Painting before curing is complete**
The paint blisters. Touch dry is 24 hours; waiting time before painting is at least 3 days.

POST-APPLICATION CHECKS

- Surface soundness: no dust or material should come away when the surface is rubbed by hand.
- Crack check: no shrinkage cracking; if present, the layer thickness or water ratio was incorrect.
- Water bead test: after curing, water dropped on the surface must bead rather than soak in.
- Before painting: wait at least 3 days and confirm the render is visibly dry, measure surface moisture and use only a vapour-permeable paint.
- System monitoring: in buildings treated together with DampStop the wall dries within 6 – 12 months; the surface must not be sealed during this period.

STORAGE

Powder component 12 months in unopened packaging, stored dry and cool. Liquid activator between +5 °C and +30 °C; a frozen activator loses its function.

SAFETY

Wear gloves, eye protection and a dust mask. Wet mortar is alkaline; rinse thoroughly with water on skin or eye contact. Refer to the Safety Data Sheet.

LIMITATIONS

For vertical mineral surfaces only. Not sufficient on its own where positive hydrostatic pressure is present; the source of moisture must be stopped first.

POSITION WITHIN THE THREE-STAGE SYSTEM

HydroFix is the second link of the system — the water-repellent, breathable surface layer that completes the barrier.

01 DampStop

Horizontal chemical barrier inside the wall

02 HydroFix

Water-repellent surface renovation layer

03 Nem Kutusu

Electromagnetic drying in reinforced concrete

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