SPECIALIZED
COATING SYSTEMS

WATERPROOFING

Damp Proofing Systems

Rising damp, damp through walls, below-ground waterproofing and damp floors: from the damp-proof course to the finish.





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BEFORE YOU CHOOSE

Where Damp Comes From

Find where the water comes from before choosing a system. The wrong diagnosis means the wrong treatment.



SECTION 01 · RISING DAMP
Brick and mortar draw ground water up like a wick where a wall has no damp-proof course, or the old one has failed or been bridged by soil or paving. The water dries out on the wall and leaves a tide mark, salt bloom, flaking paint and crumbling plaster near the floor.



SECTION 02 · DAMP THROUGH WALLS
Wind drives rain into porous plaster, brick and hairline cracks, and water runs into the tops of parapets and boundary walls. Damp patches show at any height and grow after each storm.



SECTION 03 · BELOW GROUND
Soil holds rainwater and ground water, and presses it against foundations, basements and retaining walls. It finds the joints, cracks and porous concrete, seeps through and pools at the lowest level.



SECTION 04 · DAMP FLOORS
A slab laid without a damp-proof membrane draws moisture up from the ground, and a new screed still holds the water it was mixed with. Floor finishes laid on it lift, blister and smell musty.



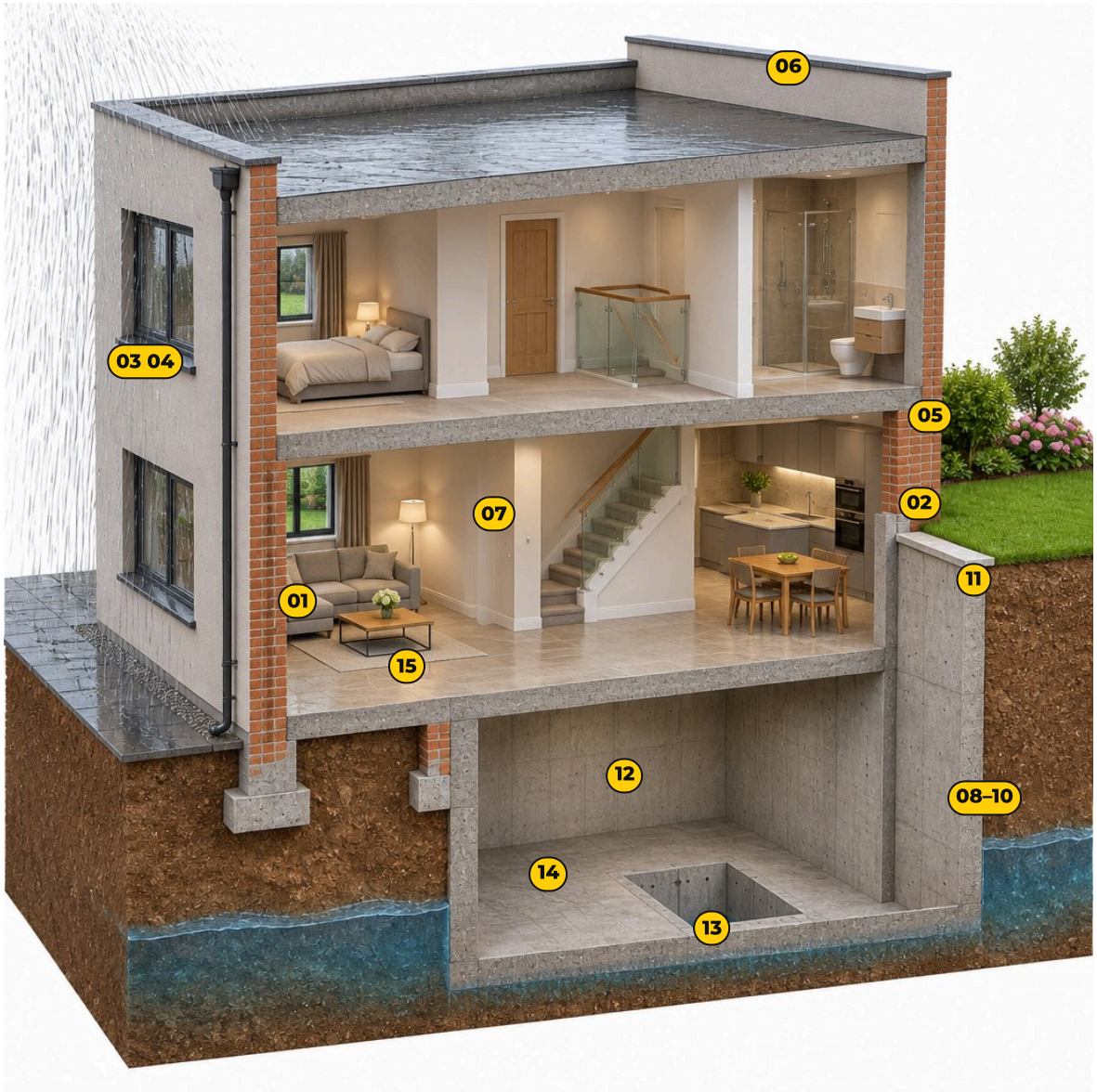
NOT RISING DAMP · CONDENSATION
Warm, moist air from cooking, showers and people meets a cold wall or steel roof and turns back into water: mould in corners, drips under roof sheeting. Ventilate first; DryCoat Anti-Condensation holds the condensation and lets it evaporate.



FIX FIRST · LEAKS
Burst pipes, broken gutters and downpipes and failed roof flashings pour water onto and into a wall. Fix the leak first, then let the wall dry before it is treated.

BEFORE YOU CHOOSE

Find the Damp, Find the System



SYSTEM BY PLACE

01 Injected Damp-Proof Course, Plastered Walls ---- 10
02 Injected Damp-Proof Course, Face Brick ---- 11
03 Elastic Wall Coating over a Water-Repellent Primer 13
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Damp-Proof Course, Repellents and Wall Coatings

Product	What it is	Pack	Systems
DAMP-PROOF COURSE AND WATER REPELLENTS			
HydroGuard® Pro Damp Block Crème (DBI-System)	Silane cream injected into drilled holes: a horizontal damp-proof barrier across the wall	1 and 5 L	**01, 02**
HydroGuard® Pro Damp Block Brush (DBB-System)	Silane cream brushed onto absorbent masonry: water repellent, no film	5 and 20 L	**08**
HydroGuard® Pro Solvent Max	Solvent-based silane-siloxane impregnation: deep penetrating, invisible	1, 5 and 20 L	**02, 05**
HydroGuard® Pro Roof & Brick	Silane-siloxane concentrate for clay brick and roof tiles, diluted with water	1 and 5 L	**02**
HydroGuard® Pro Facade Shield WB	Water-based silane-siloxane primer that consolidates and waterproofs mineral walls	5 and 20 L	**03, 04**
HydroGuard® Pro Admix Water Block	Crystalline admixture for plaster, render and mortar	20 kg	**01**
WALL PRIMERS AND COATINGS			
LEAKSEAL® WATERPROOF PLASTER PRIMER SB	Solvent-based polymer primer applied thick on damp masonry; takes paint or tile adhesive	5 and 20 L	**07**
SIMPLY® Plaster Primer WB or SB	Primer for new, dry plaster under SIMPLY® wall paints	5 and 20 L	**01**
SIMPLY® Damp Primer SB	Damp-tolerant acrylic primer for interior masonry; lets vapour through	5 and 20 L	**01**
LEAKSEAL® Crack-Seal Wall Undercoat	Fibre-reinforced acrylic that bridges hairline cracks	20 L	**03, 06**
LEAKSEAL® Elastic Wall Coating	Elastic, breathable pure acrylic for exterior walls	5 and 20 L	**03**
HydroGuard® Pro Wall Paint	Silicone resin wall paint: sheds rain, lets vapour out	5 and 20 L	**04**
SpecShield Anti-Seepage	Elastomeric pure acrylic for parapets and wall tops	5 and 20 L	**06**
Deep Penetrating Primer WB	Water-based primer that binds dusty and porous masonry	5, 20 and 200 L	**06, 09, 11**

Below-Ground Membranes, Joints and Floors

Product	What it is	Pack	Systems
BELOW-GROUND MEMBRANES			
LEAKSEAL® CemLastic	Two-component flexible cementitious membrane: positive and negative pressure	30 kg kit	**01, 08, 12, 13**
LEAKSEAL® BituLastic	Rubberised bitumen emulsion, reinforced with fleece	5 and 20 L	**09, 11**
LEAKSEAL® Insustick Pro SBS Self-Adhesive 2 mm	SBS bitumen sheet, laid cold	1 m × 15 m roll	**10**
Bitumen Primer SB	Solvent-based bitumen primer under sheet membranes	5 and 20 L	**10**
REINFORCEMENT, JOINTS AND DRAINAGE			
SurfaceReady® Glass Fibre Mesh 156 g/m²	Glass fibre mesh bedded in the cementitious membrane	1.5 m × 50 m roll	**01, 08, 12, 13**
LEAKSEAL® PES Reinforcing Fabric 120 GSM Needle-Punched	Polyester fleece rolled into the bitumen membrane	1 m × 50 m roll	**09, 11**
LEAKSEAL® TPE PES Flex Waterproofing Bandage	Elastic joint bandage for working joints	170 mm × 30 m roll	**12, 13**
LEAKSEAL® Waterstop Expansion Tape	Swelling water stop cast into construction joints	5 m × 20 mm	**13**
LEAKSEAL® Insuboard 4 mm	Bitumen protection board against the backfill	1 m × 2 m boards	**09, 10**
DIMPLEDRAIN®	Cuspated drainage sheet with a filter fabric	2 m × 20 m roll	**08**
FLO-DRAIN®	Drainage core in a geotextile jacket	30 m roll	**10, 11**
FLO-PIPE®	Slotted drainage pipe	6 m lengths	**11**
BIDIM A4	Polyester geotextile	150 m roll	**11**
REPAIR AND FLOOR PRIMERS			
SurfaceReady Cement Mortar Flexi Kit	Polymer cement repair mortar for holes, cracks and coves	25 kg powder, 10 kg modifier	**01, 07, 08, 12, 13**
PlasterStrong Cement Modifier	Acrylic cement modifier: keying coat and bonding agent for plaster	5, 10 and 200 kg	**01**
Epoxy SF Primer Fast Cure	Solvent-free epoxy primer for damp and green concrete	5 L kit	**14**
LeakSeal Vapour Barrier WB	Water-based vapour barrier for screeds	1, 5 and 20 L	**15**
CONDENSATION, NOT DAMP PROOFING			
DryCoat Anti-Condensation	Microporous acrylic that holds condensation and lets it evaporate: steel roof undersides, interior walls and ceilings. Not for rising moisture	5 and 20 L	**–**

Systems at a Glance

#	System	Code	Key products	Total	Page
01 RISING DAMP					
01	**Injected Damp-Proof Course, Plastered Walls**	WP-F-RD-01	HydroGuard® Pro Damp Block Crème (DBI-System) · SurfaceReady Cement Mortar Flexi Kit · LEAKSEAL® CemLastic	2.0 mm membrane	10
02	**Injected Damp-Proof Course, Face Brick**	WP-F-RD-02	HydroGuard® Pro Damp Block Crème (DBI-System) · HydroGuard® Pro Roof & Brick on clay brick; HydroGuard® Pro Solvent Max on cement brick, concrete and stone	No film	11
02 DAMP THROUGH WALLS					
03	**Elastic Wall Coating over a Water-Repellent Primer**	WP-F-EW-01	HydroGuard® Pro Facade Shield WB · LEAKSEAL® Crack-Seal Wall Undercoat · LEAKSEAL® Elastic Wall Coating	360 µm	13
04	**Breathable Water-Repellent Paint**	WP-F-EW-02	HydroGuard® Pro Facade Shield WB · HydroGuard® Pro Wall Paint	50–70 µm	14
05	**Clear Water Repellent**	WP-F-EW-03	HydroGuard® Pro Solvent Max	No film	15
06	**Parapets and Wall Tops**	WP-F-PW-01	Deep Penetrating Primer WB · LEAKSEAL® Crack-Seal Wall Undercoat	360 µm	16
07	**Damp Walls Inside**	WP-F-IW-01	SurfaceReady Cement Mortar Flexi Kit · LEAKSEAL® WATERPROOF PLASTER PRIMER SB · SIMPLY® wall paint	170–200 µm primer	17
03 BELOW GROUND					
08	**Foundations and Basement Walls, Cementitious**	WP-B-F-01	HydroGuard® Pro Damp Block Brush (DBB-System) · SurfaceReady Cement Mortar Flexi Kit · LEAKSEAL® CemLastic	2.0 mm	20
09	**Foundations and Basement Walls, Rubberised Bitumen**	WP-B-F-02	Deep Penetrating Primer WB · LEAKSEAL® BituLastic · LEAKSEAL® PES Reinforcing Fabric 120 GSM Needle-Punched	1.75 mm	21
10	**Foundations and Basement Walls, Self-Adhesive Sheet**	WP-B-F-03	Bitumen Primer SB · LEAKSEAL® Insustick Pro SBS Self-Adhesive 2 mm · LEAKSEAL® Insuboard 4 mm	2 mm sheet	22
11	**Retaining Walls**	WP-B-RW-01	Deep Penetrating Primer WB · LEAKSEAL® BituLastic · LEAKSEAL® PES Reinforcing Fabric 120 GSM Needle-Punched	1.75 mm	23
12	**Basements from Inside**	WP-B-BW-01	SurfaceReady Cement Mortar Flexi Kit · LEAKSEAL® TPE PES Flex Waterproofing Bandage · LEAKSEAL® CemLastic	2.0 mm	24
13	**Lift Pits and Sumps**	WP-B-LP-01	LEAKSEAL® Waterstop Expansion Tape · SurfaceReady Cement Mortar Flexi Kit · LEAKSEAL® TPE PES Flex Waterproofing Bandage	2.0 mm	25
04 DAMP FLOORS AND SLABS					
14	**Damp Slab under a Floor Coating**	WP-H-DF-01	Epoxy SF Primer Fast Cure	150 µm	27
15	**Screeds Before Wooden and Resin Floors**	WP-H-DF-02	LeakSeal Vapour Barrier WB	40–60 µm	28

Walls and Below Ground



Damp Walls

Salts in the old plaster keep drawing moisture: they come out with it.

1. **Find the source** Rising, penetrating, condensation or a leak (page 03).
2. **Fix leaks** Gutters, downpipes, pipes and flashings first.
3. **Strip** Spoilt plaster off to sound brick; old acrylic paint off.
4. **Brush off salts** Dry brushing; never wash salts back into the wall.
5. **Repair** Open joints, holes and cracks filled.
6. **Let it dry** As far as the system needs: each data sheet gives its limit.



Below Ground

Membranes fail at weak concrete, honeycombing and corners.

1. **Expose** Excavate to the footing, or strip the inside face.
2. **Clean** Laitance, shutter oil and loose material off.
3. **Repair** Honeycombing, tie holes and cracks filled.
4. **Cove** Every internal corner and the wall to floor junction.
5. **Joints** Water stops and bandages before the membrane.
6. **Damp or dry** Cementitious goes on damp; bitumen and sheets need a dry surface.





01

SECTION 01

Rising Damp

Damp drawn up from the ground into walls with no damp-proof course or a failed one. A chemical damp-proof course is injected at the base; the spoilt plaster is replaced, primed and painted.

IN THIS SECTION

PLASTERED WALLS

01 Injected Damp-Proof Course, Plastered Walls ---------- **10**

FACE BRICK WALLS

02 Injected Damp-Proof Course, Face Brick ---------- **11**

Plastered Walls

PLASTERED WALLS

01 Injected Damp-Proof Course, Plastered Walls

WP-F-RD-01

A new chemical damp-proof course injected into the wall, the damp plaster replaced over a cementitious tanking band, then primed and painted once the new plaster is dry.

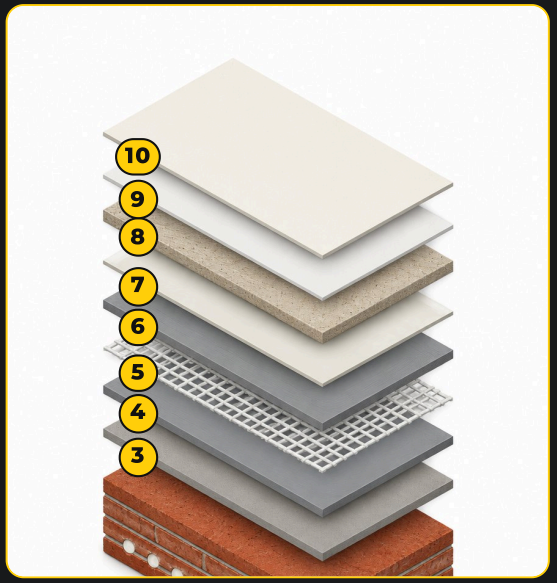
DESCRIPTION

For brick and block walls where damp rises from the ground and the plaster is spoilt by damp and salts. The injected cream forms a water-repellent barrier across the wall at the base; the band of LEAKSEAL® CemLastic holds back the moisture and salts already in the brickwork while the wall dries; the new plaster, a plaster primer and wall paint finish it.

WHERE IT IS USED

- Plastered brick and block walls, inside and out
- Houses and buildings with no damp-proof course or a failed one
- Walls with tide marks, flaking paint and salt bloom near the floor

#	Layer	Product	Dry film	Coverage	How
1	Strip	Remove plaster and skirtings	–	–	Chop out the damp plaster to sound brick, height above the tide mark
2	Damp-proof course	HydroGuard® Pro Damp Block Crème (DBI-System)	–	Holes 8 to 12.5 cm apart	Drill a line of holes in a mortar joint at the base and fill them with the cream, without pressure
3	Repair	SurfaceReady Cement Mortar Flexi Kit	To the repair depth	–	Fill the drill holes, open joints and defects; cove the wall to floor junction
4	Tanking coat 1	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	Brushed onto the damp, sound brick
5	Reinforcement	SurfaceReady® Glass Fibre Mesh 156 g/m²	–	Stressed areas	At cracks and junctions only, in the wet first coat
6	Tanking coat 2	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	Once coat 1 has hardened
7	Key	PlasterStrong Cement Modifier	–	10 m²/L	Keying coat on the cured membrane, so the plaster bonds Technical to confirm
8	Replaster	Cement plaster with HydroGuard® Pro Admix Water Block	–	Admix 1 kg per 50 kg cement	The admixture goes into the plaster mix; the plaster is cured moist
9	Primer	SIMPLY® Plaster Primer WB or SB	–	–	Once the new plaster is dry. If it must be painted while still damp, SIMPLY® Damp Primer SB
10	Topcoat	SIMPLY® wall paint	–	–	Two coats: inside or outside, see the finishes



FINISHES: SIMPLY® WALL PAINTS

INSIDE

HANDY-Matt · LUX-Velvet · Kitchens & Bathrooms · LUX-Matt · LUX-Sheen · Super Acrylic Walls & Ceilings · WALL-Matt · WALL-Sheen

OUTSIDE

LUX-Matt · LUX-Sheen · Super Acrylic Walls & Ceilings · WALL-Matt · WALL-Sheen · WeatherTex Fine · WeatherTex Coarse · WeatherTex Granular

TOTAL --- 2.0 mm membrane

Face Brick Walls

FACE BRICK WALLS

02 Injected Damp-Proof Course, Face Brick

WP-F-RD-02

A chemical damp-proof course injected into an unplastered wall, with a clear water repellent on the face so the brick stays as it looks.

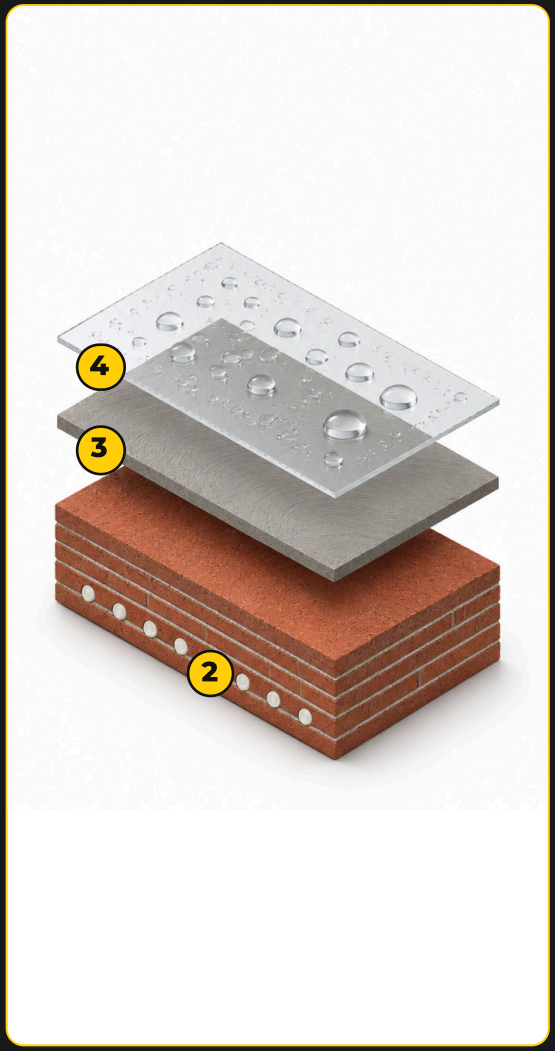
DESCRIPTION

For face brick and stone walls with rising damp, where there is no plaster to replace. The holes go into a mortar joint and are re-pointed to match, so the face keeps its look. The injected cream stops the damp rising; a clear silane-siloxane impregnation above it cuts the water the brick takes up and holds back salt bloom, with no film and no change to the look.

WHERE IT IS USED

- Face brick walls, boundary walls and garden walls
- Clay and cement brick with salt bloom and damp at the base
- Walls that must keep their natural finish

#	Layer	Product	Dry film	Coverage	How
1	Clean	**Brush off salts and loose material**	–	–	**Dry brushing; no washing into the wall**
2	Damp-proof course	**HydroGuard® Pro Damp Block Crème (DBI-System)**	–	Holes 8 to 12.5 cm apart	**Drill a line of holes in a mortar joint at the base and fill them with the cream, without pressure**
3	Re-point	**Pointing mortar matched to the joints**	–	–	**Fill the holes flush and match the existing joints**
4	Repellent	**HydroGuard® Pro Roof & Brick on clay brick; HydroGuard® Pro Solvent Max on cement brick, concrete and stone**	–	Brick 0.5–2.5 m²/L	**Flood coats until the surface stops absorbing** Technical to confirm



TOTAL ---------- **No film**



02

SECTION 02

Damp Through Walls

Rain driven into exterior walls, water getting in at parapets and wall tops, and walls that stay damp inside. Each is sealed where the water gets in, and the wall is left to breathe.

IN THIS SECTION

ELASTIC MEMBRANE

03 Elastic Wall Coating over a Water-Repellent Primer ---- **13**

BREATHABLE PAINT

04 Breathable Water-Repellent Paint ---- **14**

CLEAR REPELLENT

05 Clear Water Repellent ---- **15**

PARAPETS AND WALL TOPS

06 Parapets and Wall Tops ---- **16**

INSIDE FACES

07 Damp Walls Inside ---- **17**

Elastic Membrane

03 ELASTIC MEMBRANE
Elastic Wall Coating over a Water-Repellent Primer

WP-F-EW-01

A water-repellent primer, cracks bridged, and two coats of an elastic, breathable pure acrylic.

DESCRIPTION

Keeps driving rain out of exterior walls while letting the wall breathe, and bridges hairline cracks.

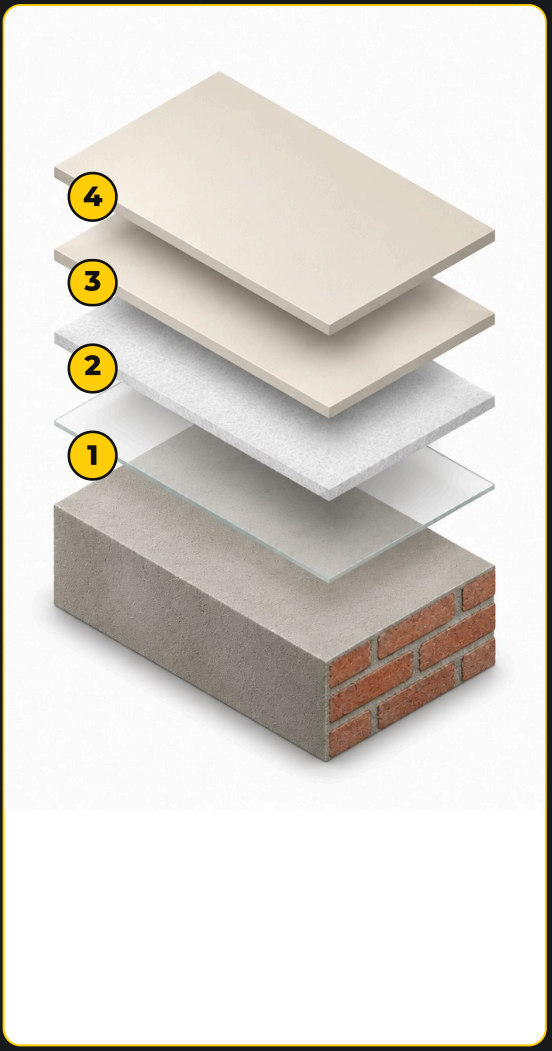
WHERE IT IS USED

- Exterior plastered walls hit by driving rain
- Walls with hairline cracks
- Coastal and exposed buildings

#	Layer	Product	Dry film	Coverage	How
1	Primer	**HydroGuard® Pro Facade Shield WB**	–	Plaster 0.5–1 L/m²	**Brush, roller or spray on the dry wall**
2	Cracks	**LEAKSEAL® Crack-Seal Wall Undercoat**	**200 µm**	2.35 m²/L	**On the cracks**
3	Coat 1	**LEAKSEAL® Elastic Wall Coating**	**180 µm**	0.40 L/m²	**Brush or roller**
4	Coat 2	**LEAKSEAL® Elastic Wall Coating**	**180 µm**	0.40 L/m²	**Brush or roller**

NOTE

Bare plaster, brick or concrete only. The water-repellent primer has to soak into the wall: over paint it cannot, and the system does not give its protection. Strip old paint first.



TOTAL ---------- 360 µm

Breathable Paint

BREATHABLE PAINT

04 Breathable Water-Repellent Paint

WP-F-EW-02

A silane-siloxane primer under a silicone resin wall paint: rain beads and runs off, vapour passes so the wall dries out.

DESCRIPTION

Porous plaster and brick soak up driving rain like a sponge. The water works through to the inside face and shows as damp patches that come and go with the weather. The primer soaks into the wall and stops it drawing in water, without sealing it; the silicone resin paint sheds the rain and lets the moisture already in the wall dry out.

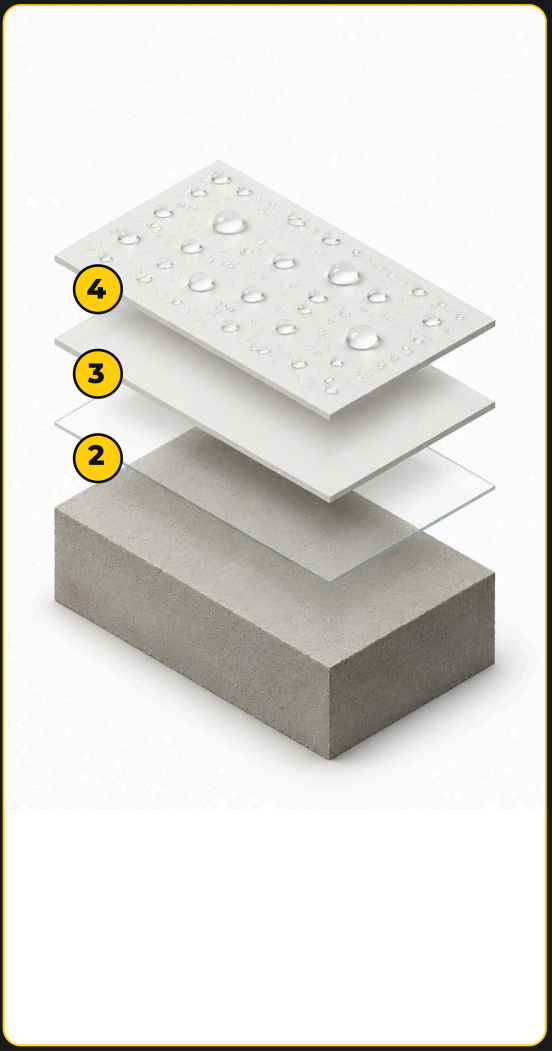
WHERE IT IS USED

- Exterior walls that soak up driving rain
- Damp patches inside that come and go with the weather
- Coastal and humid sites

#	Layer	Product	Dry film	Coverage	How
1	Strip	**Remove all paint, dirt and salts**	–	–	**Back to bare plaster; high-pressure water; let the wall dry**
2	Primer	**HydroGuard® Pro Facade Shield WB**	–	Plaster 0.5–1 L/m²	**One or two coats**
3	Coat 1	**HydroGuard® Pro Wall Paint**	**25–35 µm**	10.8 m²/L at 35 µm	**Once the wall is dry**
4	Coat 2	**HydroGuard® Pro Wall Paint**	**25–35 µm**	10.8 m²/L at 35 µm	

NOTE

Bare plaster, brick or concrete only. The water-repellent primer has to soak into the wall: over paint it cannot, and the system does not give its protection. Strip old paint first.



TOTAL ---------- 50–70 µm

Clear Repellent

05 CLEAR REPELLENT
Clear Water Repellent

WP-F-EW-03

A deep-penetrating silane-siloxane impregnation: no film, no change to the look, far less water taken in.

DESCRIPTION

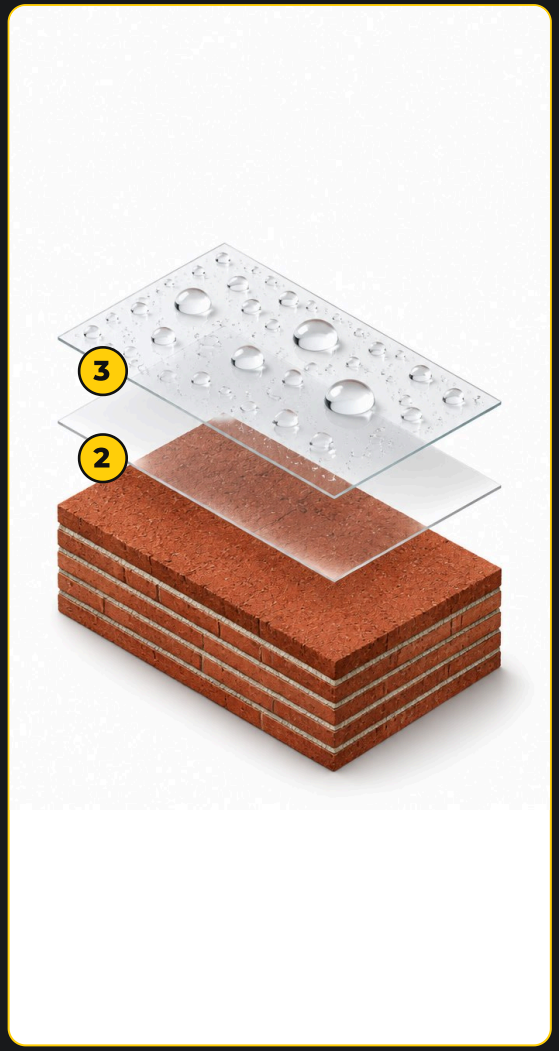
For face brick, fair-faced concrete and plaster that take in rain. The impregnation lines the pores rather than coating them, so the wall still breathes and keeps its look.

WHERE IT IS USED

- Face brick and fair-faced concrete
- Plaster to be left unpainted
- Walls with salt bloom from rain

#	Layer	Product	Dry film	Coverage	How
1	Clean	**Remove dirt, moss and salts**	–	–	**Let the wall dry**
2	Coat 1	**HydroGuard® Pro Solvent Max**	–	Brick 0.5–2.5; concrete 2–4 m²/L	**Flood coat**
3	Coat 2	**HydroGuard® Pro Solvent Max**	–	Brick 0.5–2.5; concrete 2–4 m²/L	**Until the surface stops absorbing**

NOTE
Bare, unpainted brick, concrete or plaster only: the impregnation has to soak in. On clay face brick, HydroGuard® Pro Roof & Brick in place of HydroGuard® Pro Solvent Max.



TOTAL ---------- **No film**

Parapets and Wall Tops

PARAPETS AND WALL TOPS

06 Parapets and Wall Tops

WP-F-PW-01

An elastic pure acrylic over the tops and inner faces of parapets and boundary walls, where water gets into the wall from above.

DESCRIPTION

Water that gets in at the top of a parapet or boundary wall runs down inside it and shows as damp below. The elastic acrylic seals the top and the faces that take the water.

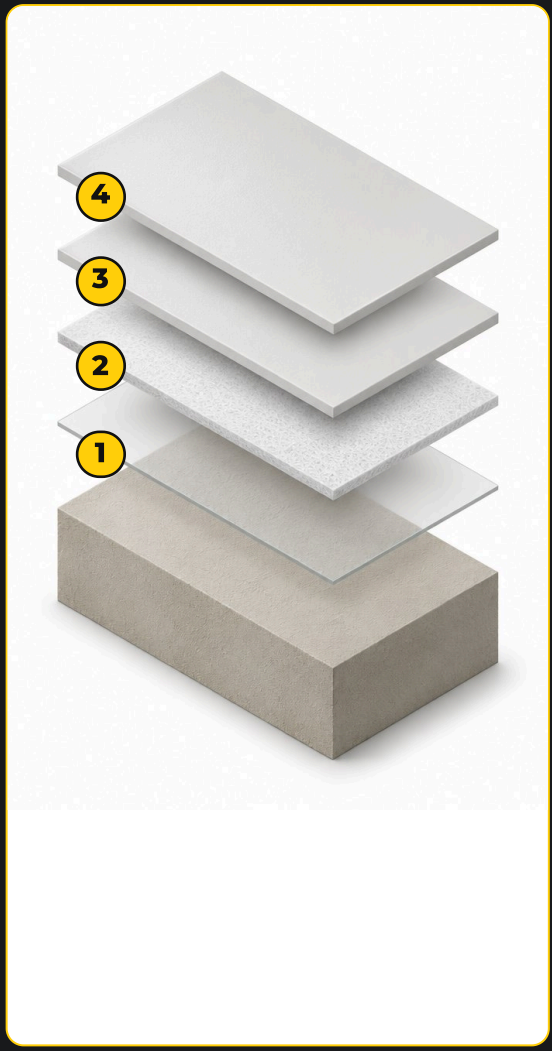
WHERE IT IS USED

- Parapet tops and inner faces
- Boundary and garden wall copings
- Plaster bands and sills

#	Layer	Product	Dry film	Coverage	How
1	Primer	Deep Penetrating Primer WB	18–20 µm	4.6 m²/L	On the clean, dry plaster
2	Cracks	LEAKSEAL® Crack-Seal Wall Undercoat	200 µm	2.35 m²/L	On the cracks
3	Coat 1	SpecShield Anti-Seepage	180 µm	0.36 L/m²	Brush or roller
4	Coat 2	SpecShield Anti-Seepage	180 µm	0.36 L/m²	Brush or roller

NOTE

SpecShield Anti-Seepage is the finish: it is made in any colour, so no wall paint goes over it. Lighter colours stand up to the sun best.



TOTAL ---------- 360 µm

Inside Faces

07 INSIDE FACES
Damp Walls Inside

WP-F-IW-01

A thick-film, alkali-resistant primer that seals damp masonry inside, under paint or tile adhesive.

DESCRIPTION

For the inside face of walls that hold moisture: old houses, cellars, walls against a bank. The primer is applied at its thicker damp-proofing film and takes an acrylic paint. It treats the surface; where damp rises or water presses from behind, the wall needs system 01 or 12 as well.

WHERE IT IS USED

- Interior plaster that stays damp
- Walls behind kitchens, bathrooms and against a bank
- Under tile adhesive on damp masonry

#	Layer	Product	Dry film	Coverage	How
1	Strip	Remove paint, salts and loose plaster	–	–	Old acrylic paint off completely
2	Repair	SurfaceReady Cement Mortar Flexi Kit	To the repair depth	–	Fill and level
3	Primer coat 1	LEAKSEAL® WATERPROOF PLASTER PRIMER SB	85–100 µm	4.9 m²/L at 100 µm	At the rising damp film
4	Primer coat 2	LEAKSEAL® WATERPROOF PLASTER PRIMER SB	85–100 µm	4.9 m²/L at 100 µm	At the rising damp film
5	Topcoat	SIMPLY® wall paint	–	–	Two coats, see the finishes



FINISHES: SIMPLY® WALL PAINTS

INSIDE

HANDY-Matt · LUX-Velvet · Kitchens & Bathrooms · LUX-Matt · LUX-Sheen · Super Acrylic Walls & Ceilings · WALL-Matt · WALL-Sheen

TOTAL --- 170–200 µm primer



03

SECTION 03

Below Ground

Foundations, basements, retaining walls and lift pits, where soil water presses on the structure. Waterproofed from the outside while it can be reached, from the inside once it is backfilled.

IN THIS SECTION

OUTSIDE FACE

08 Foundations and Basement Walls, Cementitious ---- **20**

09 Foundations and Basement Walls, Rubberised Bitumen ---- **21**

10 Foundations and Basement Walls, Self-Adhesive Sheet ---- **22**

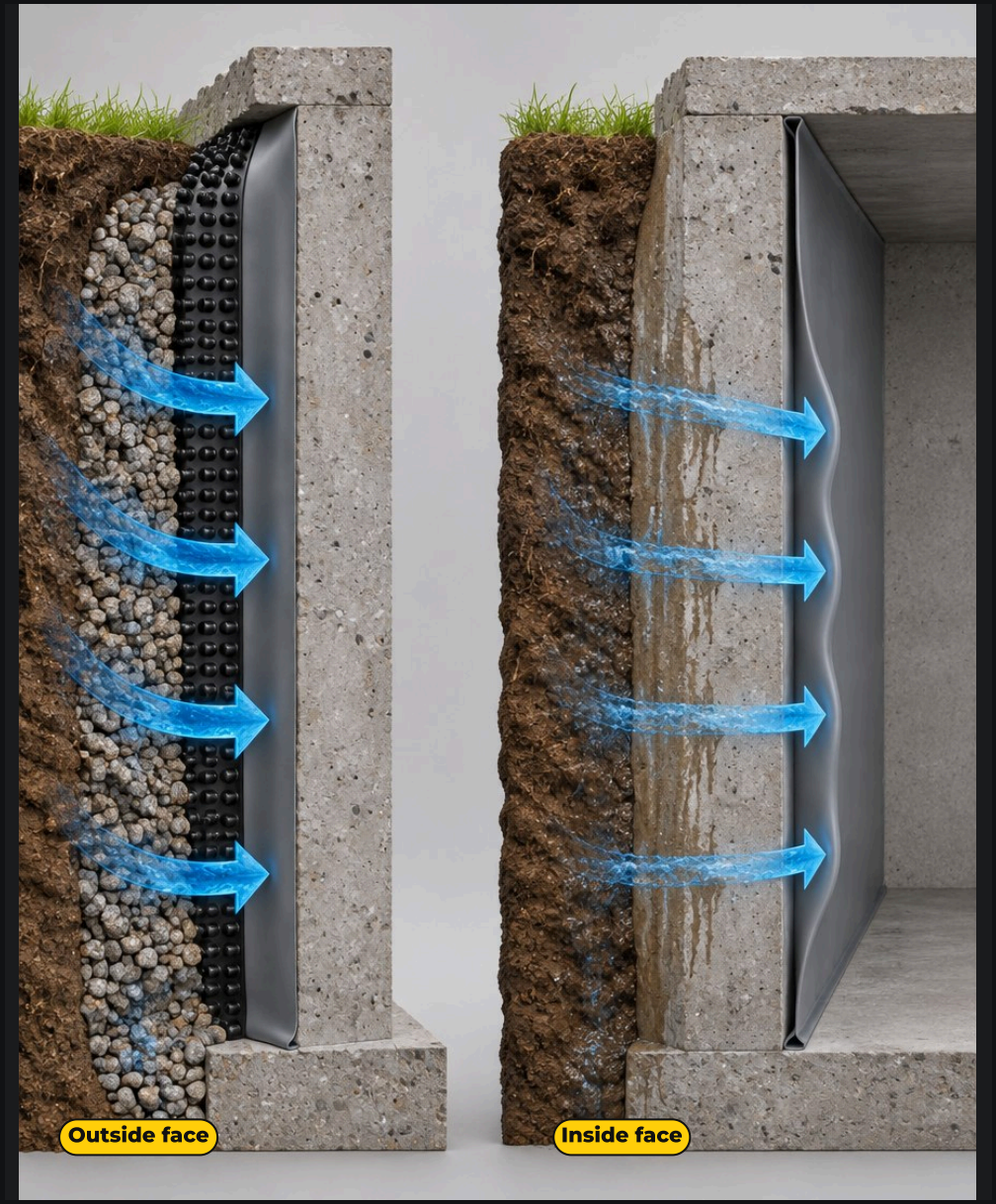
11 Retaining Walls ---- **23**

INSIDE FACE

12 Basements from Inside ---- **24**

13 Lift Pits and Sumps ---- **25**

Outside or Inside?



START FROM WHAT YOU CAN REACH

- New building, wall still open: waterproof the outside face, where water pressure pushes the membrane onto the wall. Systems 08, 09, 10.
- Retaining wall: membrane on the soil face and drainage behind it, system 11.
- Building finished and backfilled: waterproof from inside with the membrane that holds negative pressure, system 12.
- Lift pits and sumps: water stops at the pour, the membrane inside, system 13.
- Water pouring through a crack or a joint must be stopped before any membrane goes on.

Outside Face

08 OUTSIDE FACE
Foundations and Basement Walls, Cementitious

WP-B-F-01

A damp-proofing cream, a reinforced flexible cementitious membrane, and a drainage sheet against the backfill.

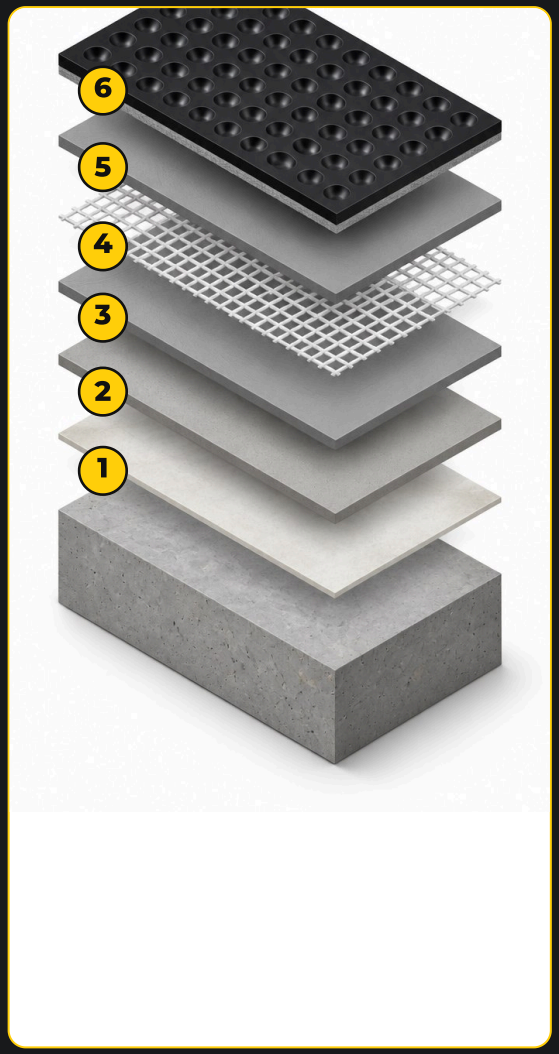
DESCRIPTION

The cementitious membrane holds water under positive and negative pressure; the drainage sheet takes the water pressure off the wall.

WHERE IT IS USED

- Foundations and basement walls before backfilling
- Damp or green concrete and masonry
- Where water pressure can come from either side

#	Layer	Product	Dry film	Coverage	How
1	Damp-proofing	**HydroGuard® Pro Damp Block Brush (DBB-System)**	–	1 coat, 2 at most	**Brushed on**
2	Repair and cove	**SurfaceReady Cement Mortar Flexi Kit**	**To the repair depth**	–	
3	Coat 1	**LEAKSEAL® CemLastic**	**1.0 mm**	2.1 kg/m²	
4	Reinforcement	**SurfaceReady® Glass Fibre Mesh 156 g/m²**	–	Stressed areas	**At stressed areas**
5	Coat 2	**LEAKSEAL® CemLastic**	**1.0 mm**	2.1 kg/m²	
6	Drainage	**DIMPLEDRAIN®**	–	–	**Cusps to the wall, filter to the backfill**



TOTAL ---------- 2.0 mm

Outside Face

09 OUTSIDE FACE
Foundations and Basement Walls, Rubberised Bitumen

WP-B-F-02

A fleece-reinforced rubberised bitumen emulsion on the outside face, protected by a bitumen board before backfilling.

DESCRIPTION

A seamless, water-based bitumen membrane for buried walls and foundations, reinforced with polyester fleece and protected from the backfill.

WHERE IT IS USED

- Foundations, footings and buried walls
- Basement walls from outside
- Planters and ponds below ground

#	Layer	Product	Dry film	Coverage	How
1	Primer	**Deep Penetrating Primer WB**	**18–20 µm**	4.6 m²/L	**On the dry, sound wall**
2	Coat 1	**LEAKSEAL® BituLastic**	**250 µm**	0.50 L/m²	**Roller**
3	Coat 2	**LEAKSEAL® BituLastic**	**500 µm**	1.00 L/m²	**Wet in wet with the fleece**
4	Reinforcement	**LEAKSEAL® PES Reinforcing Fabric 120 GSM Needle-Punched**	–	Whole area	**Rolled into the wet second coat**
5	Coats 3 and 4	**LEAKSEAL® BituLastic**	**1,000 µm**	2.00 L/m²	**About 24 h apart at 25 °C**
6	Protection	**LEAKSEAL® Insuboard 4 mm**	**4 mm**	1 m × 2 m boards	**Before backfilling**



TOTAL ---------- 1.75 mm

Outside Face

10 OUTSIDE FACE
Foundations and Basement Walls, Self-Adhesive Sheet

WP-B-F-03

A cold-laid SBS bitumen sheet on the outside face, lapped and protected, with a drainage core behind the backfill.

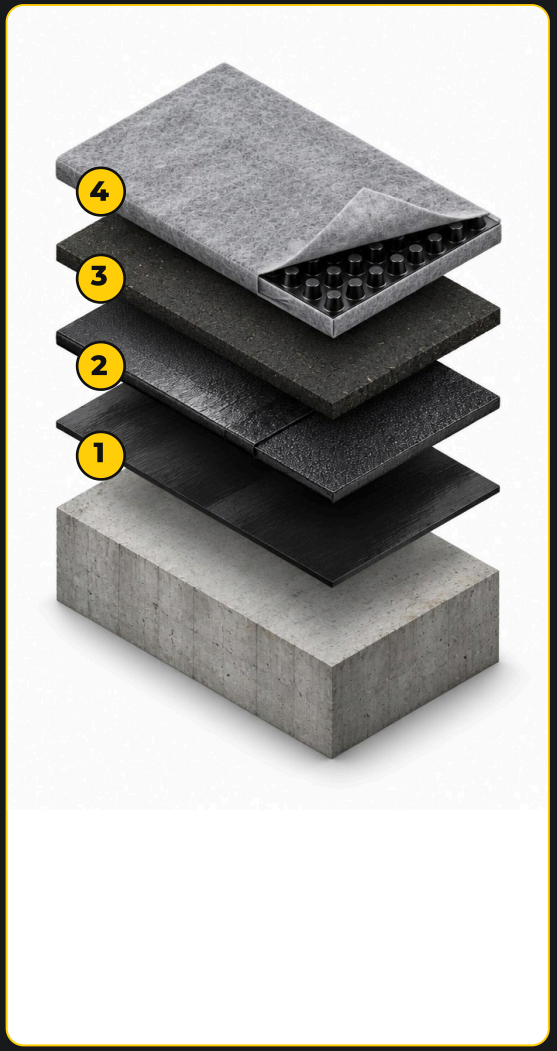
DESCRIPTION

A factory-made membrane of even thickness, laid cold with no flame, for new basements and foundations. It sticks to the primed wall as it is unrolled.

WHERE IT IS USED

- New basement walls and foundations
- Slab on grade, protected
- Sites where open flame is not allowed

#	Layer	Product	Dry film	Coverage	How
1	Primer	Bitumen Primer SB	30–50 µm	8.6–14.3 m²/L	On the dry concrete
2	Membrane	LEAKSEAL® Insustick Pro SBS Self-Adhesive 2 mm	2 mm	1 m × 15 m roll	Laid cold, side and end laps sealed
3	Protection	LEAKSEAL® Insuboard 4 mm	4 mm	1 m × 2 m boards	Before backfilling
4	Drainage	FLO-DRAIN®	4.0 mm	30 m roll	Against the board, to the footing drain



TOTAL ---------- 2 mm sheet

Outside Face

11 OUTSIDE FACE
Retaining Walls

WP-B-RW-01

A reinforced bitumen membrane on the soil face, a drainage core against it, and a slotted pipe at the footing to take the water away.

DESCRIPTION

A retaining wall holds back wet soil; water that cannot drain builds pressure and comes through. The membrane keeps it out of the wall and the drainage takes it away.

WHERE IT IS USED

- Retaining walls on terraced sites
- Walls behind driveways and gardens
- Earth-sheltered walls

#	Layer	Product	Dry film	Coverage	How
1	Primer	**Deep Penetrating Primer WB**	**18–20 µm**	4.6 m²/L	**On the dry, sound wall**
2	Coat 1	**LEAKSEAL® BituLastic**	**250 µm**	0.50 L/m²	**Roller**
3	Coat 2	**LEAKSEAL® BituLastic**	**500 µm**	1.00 L/m²	**Wet in wet with the fleece**
4	Reinforcement	**LEAKSEAL® PES Reinforcing Fabric 120 GSM Needle-Punched**	–	Whole area	**Rolled into the wet second coat**
5	Coats 3 and 4	**LEAKSEAL® BituLastic**	**1,000 µm**	2.00 L/m²	**About 24 h apart at 25 °C**
6	Drainage	**FLO-DRAIN®**	**4.0 mm**	30 m roll	**Against the membrane**
7	Footing drain	**FLO-PIPE® in BIDIM A4**	–	6 m lengths, slots up	**Along the footing, to an outlet**



TOTAL ---------- 1.75 mm

Inside Face

12 INSIDE FACE
Basements from Inside

WP-B-BW-01

The reinforced flexible cementitious membrane on the inside face of a basement that is built and backfilled: it holds water under negative pressure.

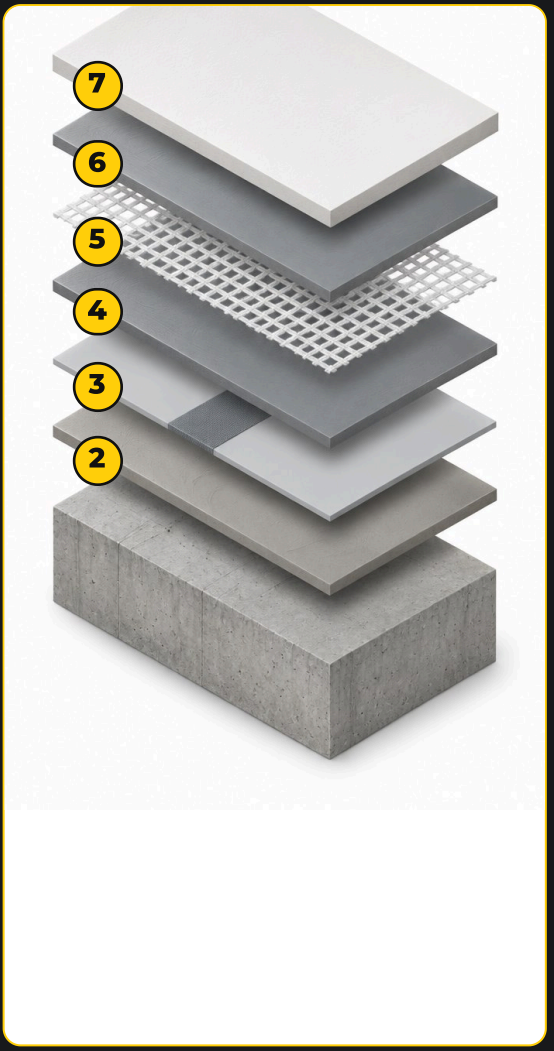
DESCRIPTION

When the outside of a basement cannot be reached, the waterproofing goes on the inside. The flexible cementitious membrane holds water that pushes through the wall from behind; joints are bridged with the bandage first.

WHERE IT IS USED

- Existing basements, cellars and parking levels
- Walls and floors with water coming through
- Plant rooms and service tunnels

#	Layer	Product	Dry film	Coverage	How
1	Strip	Remove plaster, paint and laitance	–	–	Back to sound concrete or brick
2	Repair and cove	SurfaceReady Cement Mortar Flexi Kit	To the repair depth	–	Cracks, holes and every internal corner
3	Joints	LEAKSEAL® TPE PES Flex Waterproofing Bandage	1.5 mm	170 mm wide	Over working joints. On the inside face a metal plate is fixed over the bandage, so water pressing from behind cannot push it off
4	Coat 1	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	On the damp surface
5	Reinforcement	SurfaceReady® Glass Fibre Mesh 156 g/m²	–	Stressed areas	At stressed areas
6	Coat 2	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	
7	Finish	Plaster, paint or tile	–	–	After the membrane has cured



TOTAL ---------- 2.0 mm

Inside Face

13 INSIDE FACE
Lift Pits and Sumps

WP-B-LP-01

Water stops cast into the joints, then the reinforced cementitious membrane inside the pit.

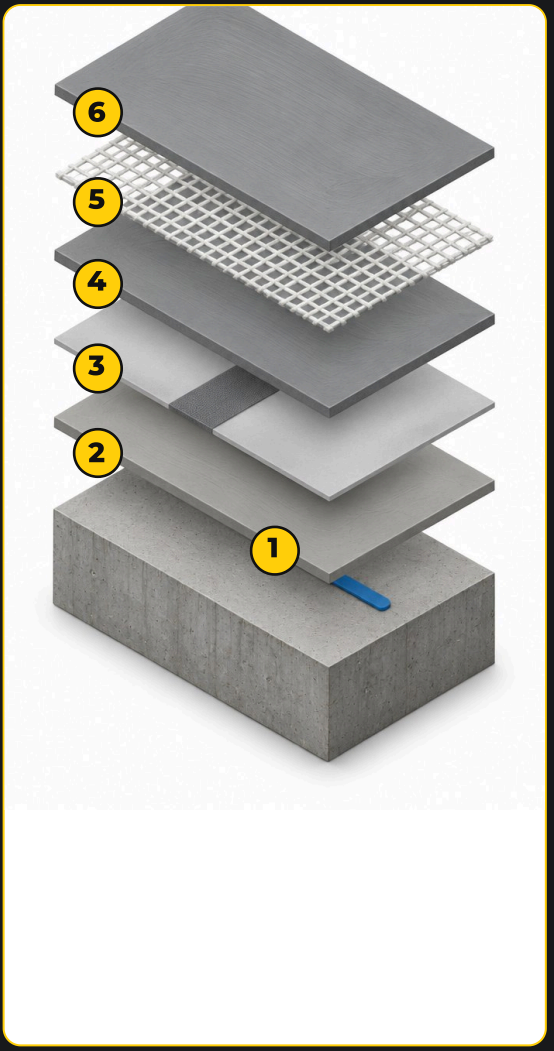
DESCRIPTION

Lift pits and sumps sit lowest on the site and take water from every side. Joints are sealed when the concrete is poured; the membrane goes on the inside of the pit.

WHERE IT IS USED

- Lift pits
- Sumps and pump chambers
- Inspection and service pits

#	Layer	Product	Dry film	Coverage	How
1	Water stop	LEAKSEAL® Waterstop Expansion Tape	5 × 20 mm	Laps 50 mm	In construction joints, when the concrete is poured
2	Repair and cove	SurfaceReady Cement Mortar Flexi Kit	To the repair depth	–	
3	Joints	LEAKSEAL® TPE PES Flex Waterproofing Bandage	1.5 mm	170 mm wide	Over joints in the pit
4	Coat 1	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	
5	Reinforcement	SurfaceReady® Glass Fibre Mesh 156 g/m²	–	Stressed areas	At stressed areas
6	Coat 2	LEAKSEAL® CemLastic	1.0 mm	2.1 kg/m²	



TOTAL ---------- 2.0 mm



04

SECTION 04

Damp Floors and Slabs

Slabs and screeds that are damp or still drying, before a resin floor or a floor finish goes on.

IN THIS SECTION

UNDER FLOOR COATINGS

14 Damp Slab under a Floor Coating ---------- **27**

UNDER WOODEN AND RESIN FLOORS

15 Screeds Before Wooden and Resin Floors ---------- **28**

Under Floor Coatings

UNDER FLOOR COATINGS

14 Damp Slab under a Floor Coating

WP-H-DF-01

A solvent-free epoxy primer that bonds to damp concrete, in two coats, before a resin floor goes on.

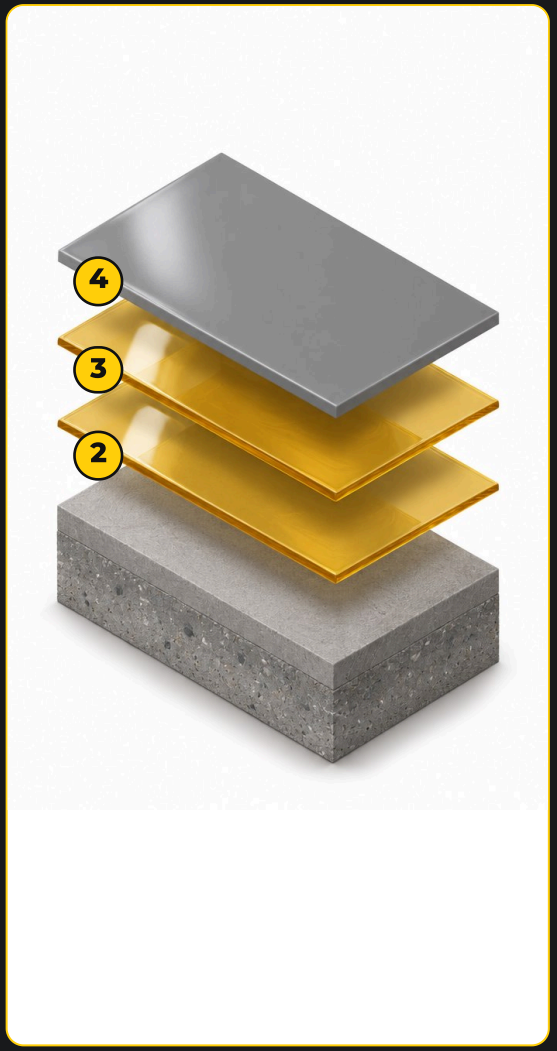
DESCRIPTION

A resin floor laid on damp concrete blisters and lifts. This primer seals damp or green concrete where a solvent-borne primer would fail, so the floor coating can follow.

WHERE IT IS USED

- Damp or green concrete slabs
- Ground floor slabs before an epoxy or polyurethane floor
- Basement floors

#	Layer	Product	Dry film	Coverage	How
1	Prepare	**Grind the slab**	–	–	**No standing water on the surface**
2	Primer coat 1	**Epoxy SF Primer Fast Cure**	**75 µm**	13.3 m²/L at 75 µm	
3	Primer coat 2	**Epoxy SF Primer Fast Cure**	**75 µm**	13.3 m²/L at 75 µm	
4	Floor	**The floor coating system**	–	–	**From the Floor Coatings range**



TOTAL ---------- 150 µm

Under Wooden and Resin Floors

15

UNDER WOODEN AND RESIN FLOORS

Screeds Before Wooden and Resin Floors

WP-H-DF-02

A water-based vapour barrier on a screed that still holds moisture, before wooden, parquet, laminate or resin flooring goes down.

DESCRIPTION

New screeds hold water long after they are laid, and that moisture swells and lifts wooden floors. The vapour barrier blocks the residual moisture and gives the adhesive a solid surface. It is for residual moisture, not a replacement for structural waterproofing under heavy, constant rising damp.

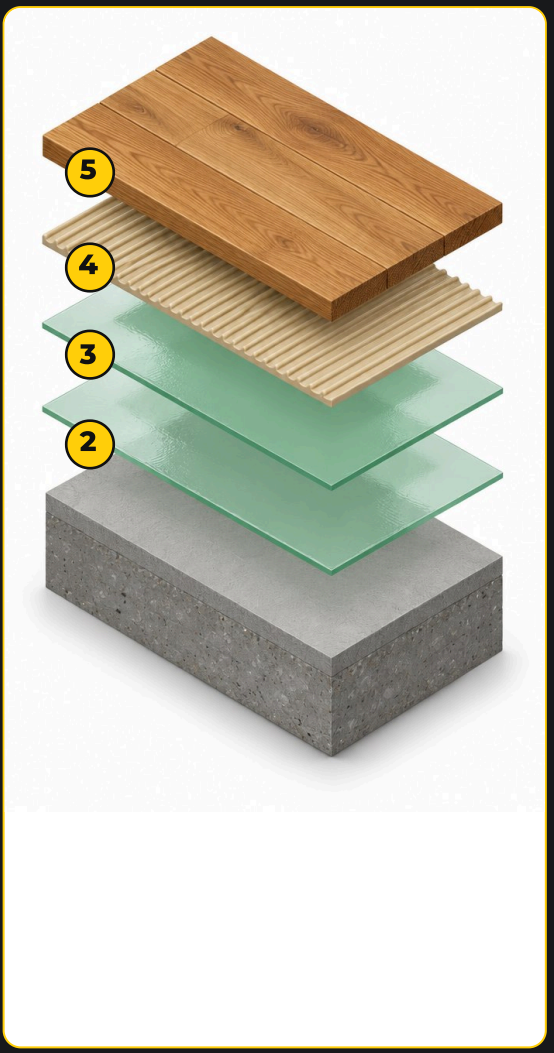
WHERE IT IS USED

- Solid wood, parquet and laminate floors
- Resin floor systems
- Houses built where the water table is high

#	Layer	Product	Dry film	Coverage	How
1	Prepare	Clean, sound screed, at least 28 days old	–	–	No visible water on the surface
2	Coat 1	LeakSeal Vapour Barrier WB	20–30 µm	10–16 m²/L	Brush or roller
3	Coat 2	LeakSeal Vapour Barrier WB	20–30 µm	10–16 m²/L	Across the first coat
4	Adhesive	Flooring adhesive	–	–	As the flooring maker states
5	Floor	Wooden, parquet or laminate flooring	–	–	By others

NOTE

Not under PVC, CV, rubber or linoleum floors.



TOTAL ---------- 40–60 µm

Joints, Penetrations and Corners

Water finds the joint, the pipe and the corner before it finds the open wall. These go in before the membrane.



Construction Joint
LEAKSEAL® Waterstop Expansion Tape cast into the joint at the pour



Working Joint
LEAKSEAL® TPE PES Flex Waterproofing Bandage over the joint, bedded in the membrane



Wall to Floor
Cove of SurfaceReady Cement Mortar Flexi Kit before the membrane



Pipe Through a Wall
Sealed with JointSeal® Polyurethane Hybrid 525
detail to confirm

FOR OWNERS AND FACILITY MANAGERS

Looking After a Damp-Proofed Building

A damp-proofed wall stays dry when water is kept away from it and the wall can breathe.

01 · LET IT DRY
An injected wall takes time to dry out. Salts can still bloom: brush them off dry.

02 · KEEP GROUND LOW
Soil, paving and planters stay below the damp-proof course.

03 · GUTTERS AND DRAINS
Clear gutters, downpipes and footing drains; water away from walls.

04 · VENTILATE
Air bricks clear and rooms aired: condensation is not rising damp.



NOTES



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