ECO SHIELD

Flexible, crack-bridging two-component waterproofing slurry

0.5 bar	2 mm	2 mm	3 days
WATERTIGHTNESS · 5 M WATER COLUMN	CRACK-BRIDGING	TOTAL THICKNESS · MAX. 3 MM IN RECESSES	WATER PRESSURE LOAD AT 20 °C

PROPERTIES AND BENEFITS

- Eco-Binder technology
- Environmentally friendly
- Free of VOC and APEO
- Tested according to DIN EN 14891
- Watertight up to 5 m water column (0.5 bar)
- Flexible and crack-bridging up to 2 mm
- Early load-bearing
- Easy to apply

DESCRIPTION

Eco Shield is a flexible, crack-bridging two-component waterproofing slurry for flexible waterproofing indoors and outdoors against non-pressing water.

RANGE OF USAGE

- Suitable for indoor and outdoor use
- Bonded waterproofing for interiors to DIN 18534-3, water exposure classes W0-I (low) to W3-I (very high)
- Bonded waterproofing in tanks and basins, including swimming pools, to DIN 18535-3, water exposure class W1-B, up to a water depth of 5 m
- Waterproofing of balconies, loggias and walkways to DIN 18531-5
- Waterproofing of building elements in contact with the ground to DIN 18533, water exposure classes W1-E, W2.1-E, W3-E and W4-E — e.g. external basement walls against non-pressing water, and wall bases against splash and capillary water in and below walls in contact with the ground

LOADABILITY

Rainproof	2 hours	Mechanical load	1 day
Walkable	5–6 hours	Water pressure load	3 days
Recoatable	12 hours		

Curing at 20 °C.

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Technical information

COMPOSITION AND PERFORMANCE

Mixing ratio	2 parts A (powder) : 1 part B (liquid)
Base, powder	Mineral
Base, liquid	Dispersion
Watertightness	Up to 0.5 bar (5 m water column)
Crack-bridging	Up to 2 mm
Tested to	DIN EN 14891

PACKAGING AND STORAGE

Packaging	20 kg A (powder) + 10 kg B (liquid)
Shelf life, powder	9 months
Shelf life, liquid	12 months
Storage temperature	10–25 °C, not below 0 °C

Store in the original packaging in a dry environment. Reseal opened containers immediately and use within a short time.

PROCESSING

Processing temperature	+5 °C to +30 °C
Processing time at 20 °C	approx. 45 min
Layers required	2
Thickness per layer	1 mm
Total thickness	2 mm
Total thickness with recesses	max. 3 mm
Consumption	3 kg/m² in 2 coats (for 2 mm total)

The information above is given based on our experience. Adjustment may be required in case of object-specific fluctuations.

PREPARATION OF SUBSTRATE

All wall and floor substrates must be load-bearing, tensile-resistant, dry to matt-damp and clean, i.e. free of all substances acting as release agents. All water residues should be removed. In the case of pressing water or active leaks, the substrate must be sealed before applying Eco Shield to ensure sufficient hardening of the slurry later on; to do so, rub the affected areas with water-stop mortar or plug them as required. For waterproofing against negative water pressure, the substrate must be able to absorb the resulting adhesive tensile forces.

SUITABLE SUBSTRATES

- Anhydrite and anhydrite flowing screeds
- Existing tile coverings
- Heated wall and floor constructions
- Cast stone coverings
- Concrete floor constructions, at least 28 days old
- Concrete wall constructions, at least 3 months old
- Gypsum plaster
- Plasterboard and gypsum fibreboard
- Lime-cement and cement plaster (CS II to CS IV to DIN EN 998-1, compressive strength ≥ 2.5 N/mm²)
- Lightweight concrete
- Natural stone or terrazzo
- Dry screeds
- Building boards
- Silicate Systems products named in this data sheet
- Levelling compounds
- Fully jointed masonry
- Fibre cement boards
- Cement and cement flowing screeds

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Mixing and application

Incompletely filled joints, holes and cracks should be closed and protruding edges removed. Smooth coarse-pored surfaces (coarse aggregates, lightweight concrete blocks) beforehand with a suitable repair or levelling mortar, depending on the application.

ROUNDING OF CORNERS

To round wall-floor and wall-wall junctions, form a cove with Eco All In One (refer to its technical data sheet). The cove must be fully hardened before it is coated with Eco Shield. For complete waterproofing and comprehensive protection against harmful chemicals, cove areas must subsequently be coated over their full surface with Eco Shield.

MIXING

Eco Shield is supplied in matched proportions (20 kg component A and 10 kg component B give 30 kg of mortar). The ready-to-use material is prepared by intensive mechanical mixing. Place component B (liquid) in the mixing container first and add component A (powder) while stirring. Use a hand-held mixer with a suitable stirrer; for part quantities in smaller containers, a drill-mounted mortar stirrer is recommended. Mix for at least 2 minutes until a uniform, lump-free mortar is obtained. The mix must not contain any residues of dry powder.

WATERPROOFING OF BUILDINGS

Eco Shield is applied in 2 layers. Each layer is 1 mm thick. The total thickness is max. 2 mm. Where the substrate has recesses, the total thickness may be increased to a maximum of 3 mm.

The substrate should be at most matt-damp and free of puddles. For optimal adhesion and complete filling of the surface, apply the first layer of Eco Shield with a brush, working the material into the substrate. Apply the second layer with a brush or smoothing trowel, 2–3 hours after the first (at 20 °C). Do not dampen the substrate between layers. The waiting time may vary with temperature and relative humidity. When Eco Shield is used as an intermediate layer, apply the waterproofing with a brush. To ensure even drying, do not significantly exceed the stated consumption.

Aftercare and protection of the coating

During the first 24 hours, protect the coating against drying out too quickly (sun, draught) and against frost and rain. The finished surface must not be covered with foil or other materials.

TOOLS AND CLEANING

Hand-held mixer, stirrer, brush, smoothing trowel, scrubbing brush, long-pile paint roller. Clean all tools with water at every interruption of work. Dry tools before further use.

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Notes and relevant standards

NOTES

Do not apply Eco Shield on frozen substrates, in frost or in rain. Waterproofing of buildings is normally carried out on the side facing the water (positive load). Where internal waterproofing (negative load) is required, in particular for existing buildings under renovation, the construction must be able to absorb the water pressure. The choice of suitable waterproofing depends on the water load, the soil conditions and the building construction. These factors should be checked as early as possible before waterproofing work begins.

RELEVANT STANDARDS AND GUIDELINES

When applying Eco Shield and subsequently covering it with other finishes, observe the following standards and guidelines, unless otherwise specified in this data sheet.

DIN EN 14891:2017-05	Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives
DIN 18195:2025-12	Waterproofing of buildings – Terms
DIN 18531-5:2025-08	Waterproofing of roofs, balconies, loggias and walkways – Part 5: Balconies, loggias and walkways
DIN 18533-3:2026-06	Waterproofing of elements in contact with soil – Part 3: Waterproofing with liquid-applied materials
DIN 18534-3:2025-10	Waterproofing of interiors – Part 3: Liquid-applied waterproofing in combination with tiles and slabs (AIV-F)
DIN 18535-3:2017-07	Waterproofing of tanks and pools – Part 3: Waterproofing with liquid-applied materials
DIN 18336:2019-09	German construction contract procedures (VOB) – Part C: Waterproofing works
DGfM	Guideline on the waterproofing of masonry

AVAILABLE ON REQUEST

Material Safety Data Sheet (MSDS).

The content of this technical data sheet corresponds to the latest development and our applications experience. All information is based on ideal conditions and therefore does not apply for every application purpose. Due to different materials, substrates and different actual site conditions no warranty is given for the customer's application. In particular, we assume no liability based on this information or any verbal statements. The only exception is when we can be blamed for the case of intent or gross negligence. In that case the customer has to prove that he has transmitted all required information completely and in a timely manner for a proper and promising evaluation by ETS Europe. Any further details regarding the application of our products have to be confirmed in writing by ETS Europe. The customer must test the product's suitability for the intended application and purpose. We reserve the right to change the product specifications due to the ongoing development. Apart from that our general terms and conditions are valid. This data sheet supersedes all earlier technical data on this product.