

weber.tec Superflex D 2

2-comp. reactive waterproofing slurry

Highly flexible, reactive and quick-setting 2-comp. cement-based waterproofing slurry

Fields of application

As flexible external waterproofing for masonry and concrete basement walls (external and internal faces) below ground level, concrete floor slabs.

For retrospective interior waterproofing on masonry and concrete basement walls below ground level (negative water pressure).

For internal waterproofing of tanks with a water head up to 10 meters.

As preliminary waterproofing and bonding layer under PMBC (polymer-modified bitumen coatings), such as weber.tec 915, 922, Superflex 10, Superflex 100 S and Superflex 2 K.

Also as horizontal damp-proof course under ascending walls and as bonding layer on existing bitumen paints/coatings.

Furthermore, as solid-bonded waterproofing under ceramic coverings (e.g swimming pools/sanitary areas/wet-duty areas).

For use indoors and outdoors.

Description

weber.tec Superflex D 2 is a highly-flexible, quick-and reactive-setting 2-component waterproofing slurry. With official approvals (Germany). It fulfills the standards EN 14891 for waterproofing works under ceramic tiles, for mineral waterproofing products (MDS) according to DIN 18533, and for waterproofing of water containers and pools according to DIN 18535.

Composition

Cement, selected silica sands, highly reactive polymers, reactive fillers, additives

Main features

- **EMICODE EC 1^{PLUS}**: very low emission of volatile substances
- quick-setting
- waiting time between each application on walls: 90 minutes
- open to pedestrian traffic and covering with tiles: after 4 hours

- weather-independent full drying within 24 hours
- dry residue > 95%
- crack-bridging > 1 mm
- suitable on any mineral substrate; a render coat on masonry is not required
- can be covered with render or paint
- resistant to frost and thawing salts
- resistant to UV rays
- after 3 days permanently resistant in underwater areas
- sprayable with peristaltic pump and screw pumps, like Wagner PC 1030 with air support

Technical values

Application temperature (air and substrate):	3°C - 30°C
Density after mixing:	approx. 1.05 kg/dm ³
Consistency after mixing:	brush-, roller-, trowel- and spray grade
Pot life:	approx. 45 minutes*
Dry residue:	approx. 95% by volume
Drying time:	2.5 hours*; weather-independent within 24 hours
Delay between layers:	walls: approx. 1.5 hour*; floors: approx. 4 hours*
Delay for over-working (with next products):	approx. 4 hours*
Clean-up:	water (fresh product), mechanical means (dry product)

at 23°C and 50% relative humidity rate

Quality control

weber.tec Superflex D 2 is subject to a regular quality control.

General notes

- Limits of use: do not use for the internal waterproofing of drinking water tanks or sewage water tanks. For drinking water tanks use the 1-comp. mineral normal-setting waterproofing slurry weber.tec 930. For sewage tanks request technical advice.
- Comply with the national standards and/or guidelines; if not issued, and if requested, refer to the norm EN 14891 "Liquid-applied water impermeable products for use beneath ceramic tiling bonded with adhesives", the norm DIN 18533 "Waterproofing of Ground-contacting Building Structures", the norm DIN 18535. "Waterproofing of water tanks and pools", the "Guideline for Planning and Execution of Waterproofing of Ground-contacting Building Structures with Flexible Waterproofing Slurries (MDS), issued by the German Construction Chemicals Association and the WTA leaflet 4-6"Retrospective Waterproofing of Ground-contacting Structures" (WTA = International Association for Science and Technology of Building Maintenance and Monuments Preservation). In case of doubt request technical advice.
- All characteristics mentioned in this data sheet are given for a temperature of 23°C, without draft and a relative humidity rate of 50%.
- Higher temperatures and lower humidity rates accelerate, lower temperatures and higher humidity rates delay the setting time.
- In case of pressure water steel-reinforced concrete must satisfy the national standards (for ex. EN 206); if not issued and if necessary, request technical advice.
- In case of sunshine, carry out waterproofing works in shadow or in the morning or evening hours.
- Do not bond protective boards or insulation boards and do not fill the excavation pit until the material has not completely dried.
- Prior to backfilling the excavation pit use the drainage mat weber.sys 983 over the basement walls in order to protect the waterproofing system.
- After full drying of the last waterproofing layer weber.tec Superflex D 2 can be painted over with the silicone resin paint weber.ton 411 or the silicate egalizing paint weber.ton 414.
- If a render is planned on top of weber.tec Superflex D 2 on the external socket parts of the facade, apply the quick-setting stipple coat weber.san 951 S full-surface as bonding layer on the fully dry waterproofing layer.
- As alternative use the mineral bonding layer weber.dur 101 which is combed horizontally with a notched trowel (notch size ≥ 8 mm).
- In case of waterproofing under ceramic tiles or natural stones, all structural joints in the construction (movement, corner and connection joints) must be covered with the sealing tape system weber.tec 828 and incorporated in such a way, that they are congruent with the tile covering. When laying ceramic or stone materials, avoid damaging of the waterproofing layer.

Special notes

- Do not add any foreign substances during mixing and application.
- Do not use the material on frozen substrates, at freezing or high temperatures (substrate temperature above 30°C).
- If there is danger of reverse damp penetration through the basement wall take the appropriate measures (see herebelow under “Substrate preparation”).
- Slight color changes cannot be avoided in direct sunlight.
- Refer to the **Weber** application tip “General guidelines for basement waterproofing works with thick-layer bitumen coatings and reactive coatings” for full information related to important issues like assessment of water load, thickness control, and all execution details.
- The consumption figures given in this document will increase if the applicator lacks experience. In addition, the figure for the scratch layer of 0.5 - 1.5 kg/m² depending on the substrate roughness must be taken into account.

Substrate preparation

- The substrate must be frost-free, solid, clean, sufficiently dry, free of tar, oil, grease, honeycombs, protruding parts, cracks and all other dirty substances.
- Remove all water-repellent and adhesion-impairing particles.
- Break off edges and protruding parts.
- Close joints and recesses > 5 mm with the watertight patching mortar weber.tec 933 up to max. 10 mm thickness, using a flat trowel
- Round the external angles between concrete slab and basement walls in groove form beforehand. Apply first a bonding layer of weber.tec 933 mixed in brush consistency along the angles. Afterwards apply the mortar as groove mortar mixed in trowel consistency in a radius of approx. 5 cm with the preformed rounded trowel “big size” (250 x 150 mm) weber.sys Hohlkehlenschlitten on the fresh bondcoatBreak off edges and protruding parts.
- Use the all-purpose primer weber.prim 900 for absorbent substrates, using a deck brush, a paintbrush, a roller or a spraying device
- In case of use in combination with ceramic tiles, mineral substrates must be levelled (if necessary) with the mortar weber.plan 818 or weber.plan 819. On old tiles use the bonding primer weber.prim 803. Verify adequate bonding via a test on a trial area; it may be necessary to roughen the substrate mechanically.
- PVC connections: roughen with sand paper; use the epoxy resin primer weber.prim 807 and scatter silica sand weber.sys Harzquarzmaterial (0.1 - 0.5 mm), so that a solid contact layer is achieved.

- Metal surfaces (aluminium, copper and zinc): degrease with the thinner weber.sys 992 and cover with the flexible waterproofing epoxy resin weber.tec 827 S. Scatter silica sand weber.sys Harzquarzmaterial (0.7 - 1.2 mm) over the fresh epoxy resin layer up to saturation. After curing (next day) vacuum off any loose sand. and apply weber.tec Superflex D 2.
- All other metals: degrease with the thinner weber.sys 992 and directly apply weber.tec Superflex D 2.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Mixing

- The amounts of liquid and powder are delivered pre-mixed and adjusted to each other. Mix the components A and B in a ratio of 1 : 1 part by weight.
- Mix with an electric drill and the stirrer weber.sys Rührpaddel no. 3 during 2 - 3 minutes until a homogenous, lump-free and slurry-like mortar is achieved.

Scratch layer

- If there are unsealed recesses > 5 mm after substrate preparation, such as mortar pockets, open butt joints and cavities, apply a full-surface scratch layer consisting of weber.tec Superflex D 2 and silica sand weber.sys Hartquartzmaterial (0.1 - 0.3 mm) in a ratio of 3 : 1 parts by volume, using a flat trowel; this layer levels the substrate and also avoids blistering, i.e. formation of air bubbles in the bitumen coating, especially in case of warm weather conditions.
- The scratch layer must have dried sufficiently, so that the application of the 1st layer cannot damage it.

Application

- On horizontal and vertical surfaces apply weber.tec Superflex D 2 in 2 - 3 layers with block brush, flat trowel, notched trowel or a spraying device, uniformly, full-surface and without leaving open pores at a rate of approx. 1.1 kg/m² per mm dry layer thickness.
- The 2nd and 3rd layer should take place as soon as there is no danger of damaging the previous one.
- The required final dry layer thickness of all waterproofing layers must comply with the existing or expected water load.
- In case of waterproofing under ceramic tiles or natural stones, the specific areas, like movement, corner and connection joints, and also pipe ducts must be first waterproofed. Bond the parts of the elastic sealing tape system weber.tec 828 (tapes, inner and outer angles, lip-seals) with weber.tec Superflex D 2 onto the substrate.

- Mortar residues must be removed in fresh condition with a wet sponge.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed with the thinner weber.sys 992.

Protection

- In case of waterproofing on external side of basement walls weber.tec Superflex D 2 must always be covered with the drainage mat weber.sys 983. On the socket parts of facade it can be covered by a specific socket render; request technical advice.
- In case of waterproofing of wet-duty rooms, shower rooms, swimming pools etc. it must always be covered with a hard protection, like screed, ceramic tiles or natural stones.

Practical information

Colours:
grey

Drying time:
within max. 24 hours

Application thickness:
depends on the water load; see figures herebelow under "Consumption"

Tools:

Electric drill stirrer weber.sys Rührpaddel no. 3, peristaltic pump or screw pump, block brush, flat trowel, notched trowel; for priming works: block brush, paintbrush, roller, spraying device; for angles (grooves): brush, preformed round trowel "big size" (250 x 150 mm) weber.sys Hohlkehlen-schlitten

Storage:

The product can be stored at least 12 months in its original unopened packaging, if kept dry and frost-free. Frost destroys the liquid component. After thawing it is not allowed to use it.

Technical Data Sheet

Consumption

W1-E: ground damp and non-pressure water:	min. 2.5 kg/m ²	dry layer thickness ≥ 2 mm
W2.1-E: pressure water (≤ 3m immersion depth):	min. 3.1 kg/m ²	dry layer thickness ≥ 2.5 mm
W4-E: splash water areas (socket areas of facade) and capillary water in and under walls	min. 2.5 kg/m ²	dry layer thickness ≥ 2 mm
Bondcoat / contact layer on old bitumen layers	approx. 0.7 kg/m ²	
Internal waterproofing of water tanks in the cases W1-B till W2-B (positive pressure)	min. 3.1 kg/m ²	dry layer thickness ≥ 2.5 mm
Internal waterproofing in case of ground damp and non-pressure water	min. 2.5 kg/m ²	dry layer thickness ≥ 2 mm
Internal waterproofing in case of pressure water (negative pressure)	min. 3.5 kg/m ²	dry layer thickness ≥ 3 mm
Bonded waterproofing under tiles (water load cases W0-I till W2-I according to EN 14891	min. 3.1 kg/m ²	dry layer thickness ≥ 2.5 mm

Packagings

Type	Sales unit	Number / euro-pallet
Plastic bucket\ (kit with liquid and powder)	24 kg	18 buckets
Plastic bucket\ (kit with liquid and powder)	6 kg	60 buckets
Plastic bucket (liquid)	15 kg	24 buckets
Paper bag (powder)	15 kg	24 bags

The information in this technical data sheet is based on our current knowledge and experience at the time of printing. However, they do not guarantee in the legal sense.