Technical Data Sheet

weber.tec Superflex 2K

2-comp. lightweight, flexible and radon-tight bitumen waterproofing thick coating

Polystyrene-filled, flexible and radon-tight 2-comp. bitumen waterproofing compound for earth-contacting building parts

Fields of application

For waterproofing earth-contacting basement walls (masonry and concrete), concrete floor slabs, lean concrete (i.e beneath floor concrete slab), foundations in the cases of ground damp, non-pressure and pressure water.
Convenient for waterproofing earth-contacting concrete ceilings of car parking (underground) in case of non-pressure water.
Also for protection of socket areas of facade against splash water (Underneath ETIC systems).
Also for the intermediate waterproofing of wet-duty rooms, not-inhabited balconies and terraces under floor screed.
In addition, for spot-bonding or full-surface bonding of extruded polystyrene rigid-foam boards used as protective, drainage or perimeter insulation boards (depending on the specific use) on the pre-said building parts.
For use outdoors and also indoors (under screeds).

Description

weber.tec Superflex 2K is a solvent-free and flexible 2-component waterproofing compound. With CE marking according to EN 15814 (classes W2A – CB2 – C2A) and official approval (Germany). Fulfills the standard DIN 18533 for PMBC (polymer-modified bitumen thick coatings; W1-E, W2.1-E, W3-E, W4-E).

Composition

Polymer resins, bitumen emulsion, fillers, special cements, polystyrene.

Main features

- CE marking: classes W2A – CB2 – C2A
- solvent-free
- flexible and crack-bridging

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com

- long pot life
- quickly resistant to rain after 3 - 4 hours
- suitable for any mineral substrates; no cement render is necessary on masonry
- resistant to ageing
- resistant to water attacking concrete up to the level ”highly corrosive” in accordance with DIN 4030 (up to 3.000 mg sulphate per liter of water) and also to seawater
- resistant to frost and thawing salts after full drying
- radon gas-tight (with official test report)
- sprayable with peristaltic pump and screw pump technology, e.g. Wagner PC 1030 with air support

Technical values

Consistency after mixing:	pasty, non-sag
Density after mixing:	approx. 0.70 kg/dm³
Mixing ratio:	component A (bitumen) : component B (powder) = 4 kg : 1 kg
Application temperature:	+1°C - +35°C (air and substrate)
Pot life:	1 - 2 hours
Waterproofing performance (EN 15814):	W2A
Crack-bridging performance (EN 15814):	CB2
Compressive strength (EN 15814):	C2A
Clean-up:	water (fresh product); thinner **weber.sys 992** (dry product)

Quality control

weber.tec Superflex 2K is subject to regular internal quality control.

General notes

- All characteristics mentioned in this data sheet are given for a temperature of +20 °C, without a draft and a relative rate of humidity of 70%.
- 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.

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com

- Do not bond protective boards or insulation boards and do not fill the excavation pit until the material has completely dried.
- Prior to backfilling of the excavation pit lay the fleece-lined drainage and protection foil **weber.sys 983** over the basement walls in order to protect the waterproofing system.
- Comply with the national standards and/or guidelines; if not issued, and if requested, refer to the norm DIN 18533 (“Waterproofing of Ground-contacting Building Structures”), the “Guideline for Planning and Execution of Waterproofing Works with Polymer-Modified Bitumen Coatings (PMBC)” (4th edition, Dec. 2018, issued by the German Construction Chemicals Association) and the WTA leaflet “Retrospective Waterproofing of Ground-contacting Structures” (WTA = International Association for Science and Technology of Building Maintenance and Monuments Preservation) and/or request technical advice.
- Follow the guideline relating to waterproofing works of water-impermeable concrete structures (working joints and butt joints between pre-cast concrete wall elements and connection area between water-impermeable concrete floor slab and wall elements); if not issued, request technical advice.

Special notes

- Do not mix with other substances during mixing and application.
- Observe 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 of 1.0 - 1.5 liter/m² for the scratch layer 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 dirty contaminants.
- Remove all water-repellent and adhesion-impairing particles.
- Break off edges and protruding parts.
- Round all vertical and horizontal angles in groove form.
- 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 the 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 on the fresh bondcoat, using the preformed rounded trowel “big size” (250 x 150 mm) **weber.sys Hohlkehlenschlitten**.

Working instructions

Primer

- Concrete and masonry: apply the bitumen primer **weber.tec 901** diluted 1 : 10 with water, using a block brush, a roofer's brush, a deck brush, a roller or a spraying device.
- Aerated concrete and sandy substrates: apply the all-purpose primer **weber.prim 900**, using a brush, a paintbrush, a roller or a spraying device.
- After drying the works for scratch layer and waterproofing layers can begin.

Mixing

- The amounts of both components (bitumen and powder) are delivered pre-mixed and adjusted to each other. Mix the components A (bitumen) and B (powder) in a ratio of 4 : 1 parts by weight.
- Mix the whole quantity of both components with an electric drill and stirrer **weber.sys Rührpaddel** no. 4 until lump-free.

Scratch layer

- If unsealed recesses ≤ 5 mm are still prevailing, such as mortar pockets, open butt joints and cavities, apply a scratch layer of the bitumen coating, 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.

Waterproofing of vertical surfaces

- The product is applied in at least 2 layers, using the notched trowel **weber.sys Schichtdickenkelle** (best practice) which always provides a regular layer thickness of 3 mm, whatever the hand angle is. Use a flat trowel for the next layer(s).
- The next layers should be applied as soon as possible, when the 1st layer can be no longer damaged.
- In cases of ground damp and non-pressure water (W1-E) both layers can be applied "wet-on-wet".
- In cases of non-pressure water on earth-contacting concrete ceilings (W3-E) and pressure water (W2.1-E) lay the woven fiberglass mesh **weber.sys 981** onto the fresh 1st layer.

Waterproofing of horizontal surfaces

- In cases of waterproofing concrete slabs against ground damp and non-pressure water (W1-E) apply the bitumen directly onto the concrete slab in 2 layers.
- After full drying of the waterproofing layers lay 2 PE-foils as a protection layer/gliding layer, and afterwards the floating screed on the PE foil.
- In case of pressure water (W2.1-E) the waterproofing system is applied onto the lean concrete (i.e beneath the floor concrete slab). Lay the woven fiberglass mesh **weber.sys 981** onto the fresh 1st layer.

Bonding of insulation boards

- In cases of ground damp and non-pressure water distribute 6 palm-sized dots of the mixed **weber.tec Superflex 2K** uniformly as glue across the back of each board.
- In case of pressure water apply the mixed bitumen full-surface as glue on the backside of each board.
- Clean mixing equipment and tools with water (fresh product). Hardened material can only be removed with the thinner **weber.sys 992**.

Practical information

Application thickness:
depends on category of water load; see figures herebelow under “Consumption”

Drying time:
approx. 2 - 3 days

Tools:
Electric drill + stirrer weber.sys Rührpaddel no. 4, peristaltic pump or screw pump, notched trowel (3 mm) weber.sys Schichtdickenkelle, flat trowel; for grooves: preformed round trowel “big size” (250 x 150 mm) weber.sys Hohlkehlenschlitten; for priming works: block brush, deck brush, paint-brush, roofer’s brush, roller, spraying device.

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

Consumption / yield

W1-E: ground damp and non-pressure water	min. 3.6 l/m^2	dry layer thickness ≥ 3 mm
W2.1-E: pressure water< 3 m immersion depth	min. 4.8 l/m^2	dry layer thickness ≥ 4 mm
W3-E: non-pressure water (earth-contacting concrete ceilings)	min. 4.8 l/m^2	dry layer thickness ≥ 4 mm
W4-E: splash water areas (socket areas of facade)	min. 3.6 l/m^2	dry layer thickness ≥ 3 mm
As spot glue for insulation boards in case of **W1-E**	approx. 2.0 l/m^2	
As full-surface glue for insulation boards in case of **W2.1-E**	approx. 4.0 l/m^2	

Packagings

Type	Sales unit	Number / euro-pallet
Plastic bucket (kit with bitumen and powder)	30 liters	18 buckets

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.

Saint-Gobain Weber GmbH
Schanzenstr. 84, D-40549 Düsseldorf
Contact: export.de.weber@saint-gobain.com