Technical Data Sheet

weber.tec Superflex 10

2- comp. lightweight bitumen waterproofing thick coating

Highly flexible and solvent-free 2-component bitumen waterproofing compound

Fields of application

For the external waterproofing of masonry and concrete below ground level for basement walls, concrete floor slabs, lean concrete (i.e. beneath floor concrete slab), foundations, ceiling slabs of car parking decks in cases of ground damp, non-pressure and pressure water. Also convenient 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 outdoors.

Description

weber.tec Superflex 10 is a solvent-free and highly flexible 2-component waterproofing compound. With CE marking according to EN 15814 (classes W2A – CB2 – C2A). Fulfills the standard DIN 18533 for PMBC (polymer-modified bitumen thick coatings). With official test report relating to tightness to radon gas and with EPD (Environmental Product Declaration) acc. to ISO 14025 and EN 15804.

Composition

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

Main features

- solvent-free, hence environment-friendly
- highly flexible and crack-bridging
- high dry residue ≥ 90%
- a 1.1 mm thick wet layer provides approx. a 1.0 mm thick dry layer
- quickly resistant to rain after 2.5 - 3 hours at 4 mm layer thickness
- suitable for any mineral substrates; no cement render is necessary on masonry
- resistant to ageing, 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 thawing salts and freeze after full drying
- radon gas-tight

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- 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) = 4.45 kg : 1 kg
Application temperature (air and substrate):	+1°C - +35°C
Pot life:	1 - 2 hours
Dry residue:	≥ 90% by volume
Waterproofing performance (EN 15814):	W2A
Crack-bridging performance (EN 15814):	CB2
Compressive strength (EN 15814):	C2A
Class of reaction to fire:	E
Clean-up:	water (fresh product); thinner weber.sys 992 (dry product)

Quality control

weber.tec Superflex 10 is subject to a regular internal quality control.

General notes

- All characteristics mentioned in this data sheet are given for a temperature of +20°C, without draft and a relative rate of humidity of 50%.
- In case of pressure water steel-reinforced concrete must satisfy the national standards (EN 206) and, if requested DIN 1045.
- 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 completely dried.
- Prior to backfilling the excavation pit use the fleece-lined drainage and protection foil weber.sys 983 over the basement walls in order to protect the waterproofing system.
- Follow 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”.
- In case of waterproofing water-impermeable concrete structures in the areas of working joints and butt joints of pre-cast concrete elements, comply with the national guideline (if existing) relating to water-impermeable concrete structures.

Special notes

- Do not add any foreign substances during mixing and application.
- Refer to our comprehensive document “General Guidelines for Waterproofing Works with Bitumen Thick 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 – 1.0 - 1.5 liter/m² depending on the substrate roughness – must be added on top.

Substrate preparation

- The substrate must be frost-free, solid, clean, sufficiently dry, free of tar, oil, grease, honeycombs, protruding parts, cracks and all dirty substances.
- Remove all water-repellent and adhesion-impairing particles.
- Break off edges and protruding parts.
- Round the angles between concrete slab and basement walls in groove form.
- Close joints and recesses > 5 mm with the watertight patching mortar weber.tec 933, using a flat trowel.
- Angles between concrete slab and basement walls must be waterproofed with weber.tec 933 as groove mortar in a radius of 5 cm, using the preformed rounded trowel weber.sys Hohlkehlenschlitten groß.
- The substrate preparation must be adapted to the specific job site conditions.

Working instructions

Primer

- Concrete and masonry: apply the bitumen primer weber.tec 901 diluted 1 : 10 with water, using a masonry’s swab, a brush, a broom or an airless sprayer.
- Cellular concrete and sandy substrates: apply the water-born synthetic primer weber.prim 801, using the pre-said tools.
- 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 4.45 : 1 parts by weight.
- Mix the whole quantity of both components with electric drill and the 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, cavities or masonry bricks with coarse profile, apply a scratch layer of the bitumen coating, using a flat trowel; this layer levels the substrate and avoid 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 next layers cannot damage it.

Waterproofing of vertical surfaces

- The product is applied in at least 2 layers.
- For the first layer use the notched trowel weber.sys Schichtdickenkelle (best practice) which always provides a regular layer thickness of 3 mm
- Use a flat trowel for the next layer(s); they should be applied as soon as possible, when the previous one can be no longer damaged.
- In case of ground damp and non-pressure water (W1-E) both layers can be applied “wet-on-wet”.
- In case 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 case of waterproofing of concrete slab against ground damp and non-pressure water (W1-E) apply the bitumen coating directly onto the concrete slab in 2 layers.
- After full drying of the waterproofing layers lay a 2-ply polyethylene foil as a protection layer/gliding layer, and apply the floating screed on the polyethylene 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 case of non-pressure water distribute 6 palm-sized dots of mixed bitumen evenly 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

Tools:
Electric drill + stirrer weber.sys Rührpaddel no. 4 or peristaltic pump or screw pump, notched trowel (3 mm) weber.sys Schichtdickenkelle, flat trowel, preformed round trowel weber.sys Hohlkehlen-schlitten groß (for angles); for priming works: masonry’s swab, brush, broom or airless sprayer

Drying time:
approx. 2 - 3 days
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 use it.

Consumption / yield

W1-E: ground damp and non-pressure water	min. 3.5 l/m^2	dry layer thickness ≥ 3 m
W2.1-E: pressure water < 3 m immersion depth	min. 4.5 l/m^2	dry layer thickness ≥ 4 m
W3-E: non-pressure water (ground-contacting concrete ceilings)	min. 4.5 l/m^2	dry layer thickness ≥ 4 m
W4-E: splash water areas (facade socket areas)	min. 3.5 l/m^2	dry layer thickness ≥ 3 m
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.