# BERAL® S100 90B

# **IMBERAL® S100** 90B



# Bitumen thick-film coating for structural waterproofing, polystyrene-filled

With general building inspection certificate



### Characteristics

IMBERAL® \$100 90B is a pasty, environmentallyfriendly, polystyrene-filled thick waterproofing sealant made of bitumen and rubber and containing a hydraulically setting powder. It is resistant to aggressive substances normally occurring in the ground and is not harmful if it enters the groundwater. In its hardened state it is resistant to frost and gritting salt.

- Easy to apply and work
- Becomes rainproof quickly
- Even consistency when applying
- Highly flexible
- Low shrinkage
- Complies with DIN EN 15814

### Use

IMBERAL® S100 90B for waterproofing structural components in contact with soil as per DIN 18533 on walls, foundations and floor slabs in contact with soil as well as earth-covered ceiling panels.

- · Soil moisture and non-pressing water W1-E
- · Against external pressure water, moderate effect W2-E
- · Against non-pressing water on earth covered ceilings W3-E
- · Against spray water on the wall plinth as well as capillary water in and under walls in contact with soil W4-E
- For waterproofing wall connections to WU concrete as well as construction joints and butt joints of components made of concrete with high water resistance
- · On non-plastered brickwork, concrete, plaster MG P II and P III as well as on old cleaned bitumen seals
- · As an adhesive for insulation, protective and drain hoards

# Applications:

- Cellars in residential and industrial buildings
- Floor slabs
- Underground garages
- Balconies, patios
- Wet rooms, showers
- Retaining walls
- As an adhesive for insulation, protective and drain boards

# **Specifications**

Packaging PE bucket/paper sack Mixer pack size Supplied 17 pack sizes/pal. Density, process ready approx. 0.75 kg/l Working temperature +5 °C to +35 °C Working time > 1 hour Softening point (ring and ball) > 100 °C approx. 130 % Elongation Max. tensile strength approx. 0.25 N/mm<sup>2</sup> Crack bridging

 without fabric insert > 2 mm at +4 °C Slot pressure test according to

**DIN EN 15814** 

Fully hardened and load

bearing<sup>1)</sup> after 2 days Storage frost-free and cool,

9 months

> 0.75 bar

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# Quantity required

acc. to DIN 18533

Scratch coat 1 - 2 l/m<sup>2</sup>

W1-E

Soil moisture and

non-pressing water 3.3 l/m<sup>2</sup>

W2-E2)

Against external pressure

water, moderate effect 4.4 l/m<sup>2</sup>

W3-E<sup>2)</sup>

Non-pressing water on

earth-covered ceilings 4.4 l/m<sup>2</sup>

W4-E

Spray water and ground moisture on the wall plinth as well as capillary water in and

under walls 3.3 l/m<sup>2</sup>

### Quantity as an insulating board adhesive

W1-F

Selective adhesion app. 2-3 l/m<sup>2</sup>

W2-E / W3-E<sup>3)</sup> Areal adhesion

(butt bonding) app. 3-4 l/m<sup>2</sup>

- Depending on the individual construction site, the material amounts indicated above can increase by about 1 - 1.5 l/m² (due to uneven substrate or uneven material application). Leveling and scratch coats must be considered separately.
- Waterproofing measures against pressing water do not comply with DIN 18533 and must be approved separately with the customer before waterproofing works start.
- 1) At +20°C and 60% relative humidity
- 2) As a rule a reinforcement fabric will be embedded in the whole area.
- <sup>3)</sup> Please take the construction regulations of the panel manufacturer into consideration

# Preparation of the surface

The substrates must be firm, capable of taking loads, free of dust, dirt and mortar residues. Clean the base projections thoroughly. Completely remove sinter layers and impurities. Outside edges have to be broken, all internal corners have to be designed as coving with INTRASIT® SM 54Z or the fast setting INTRASIT® RZ1 55HSP waterproof mortar. Paint or spray IMBERAL® Aquarol 10D as an undercoat on all absorbent mineral surfaces.

The substrate can be slightly moist. When there is the danger of penetration by moisture from the back, carry out an intermediate sealing with INTRASIT® DS1 54Z, INTRASIT® Poly-C1 54Z or IMBERAL® RSB 55Z. Old bitumen sealing that has stuck fast can be reworked with PMBC after cleaning. Close open joints, pores and voids up to 5 mm with IMBERAL® S100 90B as the scratch coat. Close joints wider than 5 mm, mortar pockets and holes with INTRASIT® SM 54Z or INTRASIT® RZ1 55HSP. Scratch coats and channels must have hardened before the waterproofing work begins.

# **Application**

DIN 18533 – Waterproofing of buildings DIN 1053 – Masonry

Follow the directive for the design and planning of structural parts in contact with the ground with plastic-modified bitumen thick coating.

### Mixing:

Shortly stir the liquid component with a slowly rotating stirring tool with paddle (400 to 600 rpm) and intensively mix-in the entire powder component. The mixing process takes approx. 1 minute and is finished when the mass is homogeneous and free of lumps.

# Surface sealing:

PMBC is processed in at least two passes. In case of soil moisture and non-pressing water as well as in the plinth area, the sealing layers can be applied whilst still wet. Against external pressure water, moderate effect, and with non-pressing water on earth-covered ceilings, the reinforcement IMBERAL® VE 89V is integrated in the first layer. The second layer is sealed when the first bonding layer is no longer damaged.

### Plinth and areas exposed to spray water:

When plastering subsequently or in the area of the clinker contact area we recommend waterproofing these areas with IMBERAL® RSB 55Z.

### Movable joints:

Carry out and integrate in the surface sealing expansion and structural joints with joint sealing tape IMBERAL® FAB 89ZH.

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### **Precautions**

The waterproofing should be protected against damage. After the waterproofing has completely dried, the protective and drain layer IMBERAL® Multidrain 89V is applied. If suitable perimeter insulation boards are installed for protection, adhesion is made in relation to the load conditions applying the point-bulge procedure or over the complete area with PMBC or IMBERAL® BEP-F 20B.

Water seepage inside the waterproofing layer from the base of the basement or through accumulated water from the ceilings of the floors and rainfall pipes not yet connected should be prevented. No cohesive soil (containing clay or loam) should reach the waterproofing.

# hahne system products

IMBERAL® Aquarol 10D IMBERAL® BEP-F 20B INTRASIT® DS1 54Z INTRASIT® Poly-C1 54Z INTRASIT® RZ1 55HSP INTRASIT® SM 54Z IMBERAL® FAB 89V IMBERAL® VE 89V IMBERAL® Multidrain 89V

# Important notes

IMBERAL® RSB 55Z

- Maintain a working temperature of +5 °C to +35 °C.
- Bubble formation due to deep pores or hollows in concrete should be prevented or reduced by means of scratch plastering.
- Do not apply the product in direct sunlight.
- If possible, arrange waterproofing penetrations in the area of soil moisture, non-standing seepage water. Here, the bitumen thick-coating can be processed to the penetration like channels.
- Use adhesive flanges or loose/fixed flanges for passages where there is water not under pressure.
  Openings in accumulating seepage water or ground moisture areas must always be made with loose/fixed flange screw connections.
- Gullies must be reinforced with plate edging or sheeting, integrating a woven tape.
- Apply protective layers and protective measures according to DIN 18533.
- Any devitations from DIN 18533 must, as a rule, be contractually agreed separately.
- When laying perimeter insulation boards, also see the information sheet on the thermal insulation of components in contact with soil by the professional association Polystyrol-Extruderschaum (FPX).
- Clean tools and equipment with water immediately after use.

# Ingredients

Bitumen, polymers, emulsifiers, functional fillers, fibers, hydraulic binders

# Safety provisions/recommendations

Powder component contains cement and causes alkaline reaction when coming into contact with moisture or water. For further information on safety when transporting, storing and handling, please refer to the current safety data sheets.

# **Disposal**

The local waste removal regulations must be observed.

### Manufacturer

Sievert Baustoffe GmbH & Co. KG

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