Flexible, polymer-modified thick-film coating for structural waterproofing



Characteristics

PROLASTIC® 55Z is a 2-component, hybrid waterproofing for the highest demands. Light, fast, flexible at low temperatures, extremely crack-bridging (> 2 mm) and universally applicable. It is perfect for flat sealing basements and bases when there is time pressure. PROLASTIC® 55Z unifies the advantages of mineral sealing slurries with the flexibility of bituminous seals in one, single product.

- Highest yield
- Can be used on all mineral surfaces, on old bitumen without intermediate coat
- Can be plastered over, frost/de-icing salt resistant.
 UV resistant
- Tested acc. the PG-MDS/FPD (mineral-based waterproofing slurries testing principles) rules and in conformity with DIN EN15814
- Low emission (EC1 Plus) and does not require special labelling suitable for indoors
- Flat, base and horizontal sealing and bonding bridge rolled into one
- Groutable, brush- and sprayable or applied with a roller
- · Radon proof

Use

PROLASTIC® 55Z for sealing in civil, underground and structural engineering on all stable substrates. Perfect for quickly sealing walls and floor slabs as well as basement sealing in conformity with DIN 18533. As damp-proofing for the wall/floor connection area as well as for renovating old bitumen coatings. For building sites operating to tight deadlines. Seal work in the interior, since low-dust and low-emission. Meets and exceeds the requirements of DIN 18533, Section 10, Table 5. (MDS)

Sealing level thresholds, doors and window elements in connection with **IMBERAL DB-PV 89ZH** acc. FPD guideline

Use

Application areas:

- Concrete, plaster, masonry
- · Damp rooms and washrooms
- Sealing concrete surfaces that are in contact with the soll
- Floor plate sealing
- Sealing in the composite wall insulation system
- · As a component sealant under tiles and slabs
- As a carbonation brake on concrete
- · Gluing insulation boards
- · Thresholds, doors, window elements
- Wood frame construction

Specifications

Packaging combo pack

Liquid component 2 x 6,5 kg kg PP sack
Powder 2 x 6,5 kg kg paper sack

Form as supplied 18 pack/pal.

Density, ready to use 0.98 kg/l

Colour hue grey

Processing temperature +5 °C to +25 °C Processing time +5 °C to +25 °C app. 30 minutes

Cold cracking (25 mm mandrel)< 0 °C

Elongation at break app. 80 %

Max. tensile strength app. 2.20 N/mm²

Leakproofness 3 bar / 28 days

Rain resistant¹) after app. 2 hours

Guard plate bonding¹⁾ after app. 3 - 4 hours Loadable, primed¹⁾ after app. 16 hours

Storage frost-free, dry, 12 months



Quantity required

Quantity as per 18533-3 (MDS)

DIN 18533 W1-E

Soil moisture with floor slabs 2,2 kg/m²

DIN 18533 W4-E
Spray water and soil
moisture on the wall plinth
as well as capillary water in and

under walls 2,2 kg/m²

Based on DIN 18533 (PMBC)

Scratch coat 1 - 2 kg/m²

DIN 18533 W1-E⁴⁾ Soil moisture and

non-pressing water 3,3 kg/m²

DIN 18533 W2-E2)4)

Moderate effect of 4,4 kg/m²

pressing water

DIN 18533 W3-E2)4)

Non-pressing water on 4,4 kg/m²

earth covered ceilings

DIN 18533-3 W4-E⁴⁾
Spray water and soil
moisture on the wall plinth
as well as capillary water in and kg/m²
under walls

Quantity as an insulating board adhesive

W1-E 2-3 kg/m²
Selective adhesion 3-4 kg/m²
Areal adhesion

W2-E / W3-E³⁾

Areal adhesion ca. 4 kg/m² (butt bonding)

- ¹⁾At +20 °C and 60% relative atmospheric humidity.
- ²⁾ A reinforcement layer is always embedded across the entire surface
- ³⁾ Please take the construction regulations of the panel manufacturer into consideration.
- 4) Does not meet the standard.

Preparation of the surface

The substrates must be firm, capable of bearing load, free of adhesion-inhibiting ingredients.

Apply IMBERAL® Aquarol 10D as a primer on absorbent mineral substrates. Once cleaned, old and adherent bitumen coatings can be covered without further priming.

For example, the following substrates are suitable for the application of sealant:

Masonry as per DIN 1053, for example, made of:

- Bricks
- Hollow blocks and solid bricks/blocks made of concrete, granulated slag bricks
- Lime-sand bricks, aerated concrete blocks
- Shuttering blocks made of concrete, mixed brickwork
- Concrete/reinforced concrete as per EN 206-1 in conjunction with DIN 1045-2
- Plaster (DIN V 18550)- Mortar group P III, CS III, CS IV as per DIN EN 998-1

Existing bituminous paints and coatings on a mineral substrate, as well as on existing, old mineral sealing compounds.

- Cement screed
- Old fixed tiled coverings, must be clean and degreased. Grinding the surfaces enormously increases the adherence.

Other substrates not listed above must be checked to ensure their suitability for each area of application. In the case of masonry, DIN 1053 stipulates that butt joints exceeding 5 mm in width, e.g. for bricks not laid with the butt ends facing each other must be sealed on the outside with mortar when the bricks are laid. Open recesses greater than 5 mm, such as mortar pockets or holes, must be filled in advance with INTRASIT® SM 54Z/ INTRASIT® RZ1 55HSP. Coves are likewise formed using INTRASIT® SM 54Z/ INTRASIT® RZ1 55HSP.

If you have rising seepage water, the reinforced concrete must comply with DIN EN 206 and DIN 1045. Furthermore, the water resistant concrete guidelines must be followed.

PROLASTIC® 55Z is ideal for waterproofing transitions and base areas. You can find planning details and drawings, etc. in the Internet at the product.

PROLASTIC® 55Z is one of a new class of product of flexible, polymer-modified thick film coatings (FPD). Since the standardisation of these substances won't be written until later, FPD's are not yet included in the current version of the waterproofing standard. For that reason, the implementation of the waterproofing work in accordance with VOB Part C must be separately agreed with the builder. You can find a pre-printed form on our website



Preparation of the surface

For masonry consisting of porous aggregate lightweight or concrete bricks, special measures are required to seal the pores (e.g. scratch coating with PROLASTIC® **55Z**). The scratch coat must be allowed to dry/harden for approximately 2 hours before the next work phase commences. Check the concrete also. Imperfections and ridges that may have been caused by the form work when the concrete was poured must be eliminated in the same way as for masonry. Separating substances such as mould oil or curing agents must be removed. When exposed to solar radiation, e.g. pores that are open or covered can lead to the formation of blisters in the freshly applied coating. To minimise the risk of blister formation, a scratch coat should be applied. The scratch coat must be allowed to dry/harden before the next work phase commences. Layers of cement paste or firmly adhering dirt must be removed mechanically (e.g. rotating discs/milling machines). The edge of the concrete floor slab must be bevelled. Before applying the sealant, the prepared concrete floor slab (floor slab protrusion) must be thoroughly cleaned. Hollow plastering around the cavities must be removed and replaced accordingly. Sanded plasters must be strengthened or removed and, if applicable, replaced. Existing waterproofing is only suitable as a substrate for PROLASTIC® 55Z if the material compatibility with the existing waterproofing can be ensured. In case of doubt, material compatibility must be verified by applying a test coat/bond. Furthermore, the existing waterproofing must be checked to ensure adequate adhesion to the substrate. Loose parts must be removed. Following the application of a scratch coat, the product can be applied directly to the old substrate. Priming is not required. Tar coatings and tar sheets are not suitable substrates for sealants.

For pressure loaded surfaces and for brick contact areas we recommend our product IMBERAL® RSB 55Z.

Application

Mixing:

PROLASTIC® 55Z is delivered in an innovative and resource-saving packaging. During processing, the powder sack (paper sack) is taken out first. Then the liquid component in the bucket is cut open with a cutter knife and emptied into the mixing vessel. Then the powder component is added while stirring with a powerful stirrer (at least 600 rpm). In case of partial removal, the quantities must be weighed. The mixing ratio is 1:1 in parts per weight.

Surface sealing:

FPD 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.

Movable joints:

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

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 PROLASTIC® 55Z or IMBERAL® BEP-F 20B.

Precautions

Protect against mechanical stress until the product has hardened sufficiently.

Protective layers compliant with DIN 18533.

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IMBERAL® Aquarol 10D IMBERAL® VE 89V INTRASIT® SM 54Z INTRASIT® RZ1 55HSP IMBERAL® RSB 55Z IMBERAL® DAB 30P IMBERAL® DB-PV 89ZH



Important notes

- Maintain the processing temperature of +5 ° to +25 °C
- The maximum coat thickness per work phase is 6 mm.
- If the product is applied in direct sunlight, at elevated temperatures and windy weather, early skin formation must be expected. Precautions for shade are recommended.
- Usable only on dry or mat moist substrates.
- Rough trowel marks in the surface are to be avoided.
- The instructions in DIN 18533 apply in this case.
- Wash all processing equipment with clean water immediately after use.
- For level sleepers, doors and window elements with increased crack width changes> RÜ3-E, we recommend the use of IMBERAL® DAB 30P.
- If there is a risk of moisture on the back, carry out back moisture protection from INTRASIT® RZ1 55HSP or INTRASIT® DS1 54Z
- When used on insulation boards over GOK as a base seal, substrates made of EPS and XPS must be provided with a suitable reinforcement mortar and fabric insert in advance.

Ingredients

Liquid components: Polymer dispersion, additives. Powder: Special cements, mineral aggregates, auxiliary materials, pigments.

Safety provisions/recommendations

Powder component causes alkaline reaction when coming into contact with 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

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This information is based on extensive tests and practical experience. However, it cannot be applied to every type of application. If in doubt, we recommend that you test the product before using it. Due to continuous product improvement, this information is subject to change without notice. Our General Terms and Conditions apply. Version as of 7.2021