



SikaTop[®] 121

Thin Layer Waterproofing Render and Levelling Mortar

Technical Data Sheet

DESCRIPTION

SikaTop 121 is a two component polymer modified cementitious waterproof mortar comprising of a liquid polymer and a special cement based mix incorporating admixtures.

USES

- * For internal waterproof tanking of concrete basements, pits and tanks against ground water ingress.
- * For internal waterproof lining of concrete water tanks, pools etc against leakage.
- * Fine crack and blow hole filler.
- * Levelling mortar.
- * Bonding bridge for **SikaTop** repair mortars.

ADVANTAGES

- * Pre batched for quality.
- * No water required.
- * Fast and easy to apply.
- * Excellent bond strength and adhesive properties.
- * High early and final strengths.
- * Waterproof.
- * High abrasion resistance.
- * Free of chloride ions.
- * Non-corrosive to steel.
- * Suitable for drinking water contact.
- * BBA approved.

Technical Data (typical)

Mixed colour: Cement grey
(Component A: white liquid)
(Component B: grey powder)

Mixed wet density: 2.0 kg/litre

Application temperature: +7°C min, +25°C max
(Substrate and ambient)

Application thickness per layer: 1.0 mm minimum
5.0 mm maximum

MECHANICAL PROPERTIES

28 days @ 20°C RH 65%

Compressive strength: 45.0 N/mm²

Flexural strength: 12.0 N/mm²

Bond strength: (tensile) 3.0 N/mm²
(Failure in substrate)

E-Modulus (static): 25.0 kN/mm²

Water vapour resistance: 19 MNsg⁻¹

'Working time': (@20°C) 30 minutes

Approved for potable water contact.
Details and return to service information available on request.

All above values are approximate.

WATERPROOF TANKING

Applied in 2 layers to give a total thickness of between 5.0 and 8.0 mm.

Refer to Installation Guide and BBA Detail Sheet 4.

CONCRETE SUBSTRATE PREPARATION

Bonding Bridge:

Breakout and remove all concrete designated as being defective, loose and unsound, using suitable mechanical equipment.

Ensure sufficient concrete is removed from around reinforcement to allow priming and compaction of the repair material.

At the repair locations, feather edging should be avoided. The edges should be square cut to at least the recommended minimum application thickness of the repair material. Where a saw cut is employed, the substrate should be roughened mechanically to provide a 'key' between the repair mortar and substrate.

Levelling Mortar:

Prepare and clean all surfaces by suitable mechanical means such as abrasive blast cleaning or equivalent to ensure cement laitance, surface contamination and all existing coatings are removed and all blowholes and honeycombed areas are exposed. The resultant surface finish should be profiled for maximum bond.

MIXING

SikaTop 121 should be mechanically mixed using a forced action mixer or in a clean drum using a drill and paddle. A normal concrete mixer is NOT suitable.

Shake component A before using. Pour approximately ½ component A into mixing container and add component B slowly while mixing. When homogeneous, add the remainder of the component A and remix. Normal mixing time depends on the type of mixer used, 2 - 3 minutes is average. Mix so as to entrain as little air as possible and use without delay.

APPLICATION

The surface should be pre-wetted to a saturated surface dry condition before application.

Apply **SikaTop 121** by brush, spatula or trowel to the required finish.

Where **SikaTop** is to be overcoated, finishing with a damp sponge after initial set has taken place is recommended.

Do not overwork **SikaTop 121** during or after applying. Should **SikaTop** mortar be wetted during the initial cure period a white 'bloom' may be produced on the surface. This however, does not affect the long term properties of the mortar.

Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

Important Note

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

Please consult our Technical Sales Department for further information

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IMPORTANT CONSIDERATIONS

CURING

It is essential to cure **SikaTop 121** immediately after application for a minimum of 3 - 7 days to ensure full cement hydration and to minimise cracking. Use polythene sheeting or other approved method.

- * **SikaTop 121** can be overpainted. A solvent based **SikaGard**® primer should be used before applying waterbased coatings. Alternatively use a solvent based **SikaGard** coating.
- * Mix to a uniform lump free consistency. Do not overmix.
- * Special attention is required to avoid puncturing the waterproof tanking with fixings. These should be accommodated either by surface bonding with **SikaDur**® 31 or **Sikaflex**® 11FC.
- * Ensure associated Sika products and construction materials also have DWI approval when used in structures where DWI compliance is required.
- * Hardened **SikaTop 121** requires needle-gunning and wetting down should subsequent layers of **SikaTop** need to be applied.
- * **SikaTop 121** is not a traffickable finish.
- * Apply only to prepared, sound substrates.
- * Allow repair mortar to harden between applications.
- * Protect freshly applied material from freezing.

CLEANING

Remove **SikaTop 121** from tools and equipment with water. Hardened material can only be removed mechanically.

PACKAGING

Refer to latest price list.

CONSUMPTION

2.0 kg/m²/mm (2.0 kg/litre)

Excluding allowances for loss wastage, surface profile and porosity.

STORAGE AND SHELF LIFE

Minimum 6 months in unopened original sealed containers stored in dry warehouse conditions (+5°C - +25°C).

