BUILDING TRUST

PRODUCT DATA SHEET

Sika MonoTop®-130 Seal

Pourable Non-shrink waterproofing/watertight mortar

PRODUCT DESCRIPTION

Sika MonoTop®-130 Seal is a one part flowable shrinkage compensated general purpose cementitious mortar for waterproofing applications.

USES

- General purpose use in watertight concrete installations
- Filling cavities, voids, gaps and recesses
- Sealing around penetrations
- Machine and base plates
- Post fixings
- For exterior and interior use

CHARACTERISTICS / ADVANTAGES

- Easy to use (ready to mix powder)
- Prebatched for quality
- Just add water
- High compressive strength gain
- Easy to mix and apply
- Contains no chloride admixtures
- Shrinkage compensated
- Fire rating and protection properties comparable to concrete
- Can be pumped or poured
- Good mechanical properties

APPROVALS / STANDARDS

Conforms to the requirements of BS EN 1504-3 2005 1 - component Class R4 mortar for the repair of concrete structures

PRODUCT INFORMATION

Chemical Base	Cement, selected fillers and aggregates, special additives	
Packaging	25 kg bags	
Shelf Life	6 months from date of production	
Storage Conditions	Store properly in dry conditions in undamaged and unopened original sealed packing.	
Appearance / Colour	Grey powder	
Maximum Grain Size	Dmax: 1.0 mm	
Density	~ 2310 kgm³ (wet density)	
Soluble Chloride Ion Content	~0.01%	(EN 1015-17)

TECHNICAL INFORMATION

Compressive Strength	1 day	7 days	28 days	Test
	~ 20 N/mm²	~ 45 N/mm²	~ 60 N/mm²	EN 12190
Modulus of Elasticity in Compression	~ 36 N/mm²			(EN 13412)
Flexural Strength	~ 10 N/mm² (28 days)			(EN 196)
Tensile adhesion strength	~ 2.5 N/mm² (28 days)			(EN 1542)
Restrained Shrinkage / Expansion	~3.3Mpa			(EN 12617-4:2002)
Capillary Absorption	0.27 kg m² $h^{-0.5}$			
Water Penetration under Pressure	Pass			(BS EN 12390-8:2019)
Reaction to Fire	Class A1			(EN 13501-1)

APPLICATION INFORMATION

Mixing Ratio	Water : mortar powder = 1 : 6.25 parts by weight (4-4.5 litres of water per 25kg bag)
Consumption	Depends on the substrate roughness and thickness of layer applied. As a guide, 1 bag yields approximately 13.0 litres of mortar
Layer Thickness	10mm min / 200mm max (of the smallest dimension)
Flowability	~610 mm (0 mins) 560 mm (30 mins) (EN 13395-2)
Initial set time	~315 mins (EN 13294)
Final set time	~405 mins (EN 13294)

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

There is no limit on the depth of the void that needs filling as long as maximum cross-sectional dimension is not exceeded.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Watertight Concrete:
Surfaces must be sound, thoroughly clean, free from ice, oils, grease, standing water and any loose or friable particles and any other surface contaminants.

Sealing around Pipes:
2 x bands (for single Watertight Concrete system) or 1 x band (for dual sytem Watertight Concrete & SikaProof) of Sikaswell S-2 around the outside of pipe prior to grouting. (Minimum cover of reinforced concrete to Sikaswell S-2 is 75mm).

Shutter/Formwork:
Where formwork is to be used, all formwork should be of adequate strength, treated with release agent and sealed to prevent leakage. Sealing can be achieved by using Sikaflex® -11FC+ sealant beneath or around formwork and between joints. Ensure formwork includes outlets for extraction of the pre-soaking water. A header box/hopper should be constructed on one side of the formwork so that a material head of 150-200 mm can be maintained during the application.

SUBSTRATE PREPARATION

The substrate should be prepared by suitable mechanical preparation techniques such as high pressure water jetting, breakers, blastcleaning, scabblers, etc. The concrete substrates should be pre-soaked with clean water continuously for 2-6 hours to ensure a saturated surface dry condition throughout the operation.

Immediately before placing mortar, remove *all* excess or standing water from within any formwork, cavities or pockets.

MIXING

Place the water into a forced action mixer or in a clean drum. Slowly add complete bag of Sika MonoTop®-130 Seal into the water and continuously mix for 3 minutes in mixer to achieve a uniform and lump free consistency. Alternatively use a slow speed drill (200-500 rpm) and spiral paddle mixer.

APPLICATION

Pour the mixed mortar into the header box/hopper ensuring continuous material flow during the complete operation to avoid trapping air. Use steel banding or chains to assist flow where necessary. For large volume placement, pumps are recommended. For cold weather working consider using warm water to assist with achieving strength gain & other physical properties.

CURING TREATMENT

After the mortar has initially hardened, remove formwork and trim edges while concrete is 'green'. Protect the fresh material from premature drying using appropriate curing method e.g. curing compound such as Sikafloor® ProSeal ,moist geo-textile membrane, hessian, polythene sheet etc. In cold weather apply heat blankets to maintain a constant temperature.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened/cured material can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

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 accordance with Sika's recommendations. 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 user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always

refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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