

PRODUCT DATA SHEET

Sika MonoTop®-615 HB

HIGH BUILD POLYMER MODIFIED REPAIR MORTAR

DESCRIPTION

Sika MonoTop®-615 HB is a one component, thixotropic, high build, polymer modified, cementitious mortar containing silica fume.

USES

- Fast repair to overhead, horizontal or vertical concrete or mortar surfaces above and below ground level
- Filling/ repair mortar for voids, holes, honeycomb areas, etc.
- Repair spalled concrete caused by reinforcement corrosion
- Repair and improve resistance to oils, sewage, chemicals, etc.

CHARACTERISTICS / ADVANTAGES

- Fast and easy to apply to clean, sound substrate in layers up to 60 mm thick
- Excellent thixotropic behaviour, especially suitable for overhead and vertical application
- One component system requiring only the addition of clean water
- Compatible with the thermal expansion properties of concrete
- Chloride free
- Non-corrosive to reinforcing steel
- Non-toxic, suitable for potable water
- Minimized shrinkage tendency
- Good sulphate resistance

PRODUCT INFORMATION

Chemical base	Cementitious materials, aggregate, additives and fibres		
Packaging	25kg bag		
Shelf life	Min. 6 months if stored properly in original, unopened packaging		
Storage conditions	Dry, cool, shaded place		
Appearance / Colour	Grey powder		
Bulk Density	~1.15 kg/l		

TECHNICAL INFORMATION

Compressive Strength	1 day	28 days	ASTM C349/C109
	≥ 6 N/mm ²	≥ 30 N/mm ²	
Tensile Strength in Flexure	≥ 6 N/mm ² (28 days)		ASTM C348
Tensile Adhesion Strength	≥ 1.5 N/mm ² (on concrete surface with proper primer)		ASTM D4541

SYSTEM INFORMATION

System Structure	Sika MonoTop®-615 HB is a part of Sika MonoTop® system comprising of::	
	Bonding Primer / Reinforcement	Sika® MonoTop® 610
	Corrosion Protection	
	High performance polymer modified repair mortar	Sika MonoTop® R or Sika MonoTop®-618 VN
	or High build polymer modified repair mortar (recommended for overhead application)	Sika MonoTop®-615 HB

APPLICATION INFORMATION

Mixing ratio	15.20 – 15.60% About 3.8 to 3.9 ltr of clean water per 25 kg bag
Fresh mortar density	~1.75 kg/l
Yield	1 bag yields approx. 16.5 ltr of mortar. Approx. 60 bags required for one m ³ of mortar.
Layer Thickness	Min. 5 mm / Max. 60 mm (20 mm for overhead applications)
Ambient Air Temperature	Min. 6°C / Max. 40°C
Substrate Temperature	Min. 6°C / Max. 40°C

BASIS OF PRODUCT DATA

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.

IMPORTANT CONSIDERATION

- Mix to a uniform consistency (no lumps). A small reduction in the water gives a stiffer mix.
- Repairs with Sika Monotop® system cannot bridge live cracks or moving joints, etc.
- Repairs in excess of 60 mm deep must be layered as indicated above.
- Sika Monotop® mortars that are wetted during the initial cure period may produce a white “bloom” on the surface which does not affect the long term properties of the mortar.

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

All concrete and mortar substrate must be sound, clean and free from oil, grease and surface contaminants. All loose materials and surface laitance must be removed. For large areas, grit or grit-water blasting or

scabbling is recommended. For small areas and for “spot” repairs, needle gunning or jack-hammering is effective.

The prepared substrate should be thoroughly soaked with clean water until uniformly saturated but with no surface water. This condition is referred to as saturated surface dry. Care should be taken to remove any cement slurry or dust produced during surface preparation. Steel reinforcements should have all traces of rust removed and be primed with two coats of Sika MonoTop®-610.

MIXING

Sika MonoTop®-615 HB should be mechanically mixed in a clean container using a low-speed electric mixer (max. 500 rpm). Place required quantity of clean water as recommended above into a clean container and then add Sika MonoTop®-615 HB slowly while mixing. A minimum mixing time of 3 minutes is recommended.

APPLICATION

Brush apply a bonding coat onto the saturated surface dry substrate. Then, work wet-on-wet the mixed mortar well onto the substrate using a rendering rather than a placing technique to fill all pores and voids. Compact well. Force material against the edge of the repair, working towards the centre. For repairs in excess of 60 mm deep, apply in layers ensuring previous layers are well keyed and hardened. Finish lower layers with a heavy brush stipple to form a key for subsequent layers. If previous layers are over 48 hours old, needle gun the surface and dampen. Steel trowel the final coat if required.

CURING TREATMENT

To achieve the full potential of any cement based material, curing is essential. The use of standard curing methods (polythene sheets or damp hessian) is essential to prevent premature drying out of mortar.

CLEANING OF TOOLS

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

LOCAL RESTRICTIONS

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

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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