

Sika® MonoTop®-612

Fibre Reinforced, Polymer Modified Repair Mortar

Product Description	Sika® MonoTop®-612 is a cementitious, silica fume containing, fibre reinforced, polymer modified, one-component repair mortar. This product is suitable for use in tropical and hot climatic conditions.
Uses	Sika® MonoTop®-612 is used for structural concrete repairs as well as general patching to concrete and mortars. Sika® MonoTop®-612 is especially suited for overhead and vertical applications and is suitable for application by the wet-spray method.
Advantages	Sika® MonoTop®-612 is easy to use requiring to be mixed with water only. <ul style="list-style-type: none">■ Excellent workability■ Adjustable consistency■ Especially suitable for overhead and vertical applications■ Good mechanical strengths■ Excellent frost resistance■ Applicable in layers up to 30 mm thickness■ Non corrosive, non toxic■ Suitable for wet spray application■ Sulphate resistant
Test Report	LPM; Laboratory for Preparation and Methodology (Beinwil am See, Switzerland) WRc, Water Byelaws Scheme (UK).
Product Data	
Type	Cementitious, polymer composition
Form	Grey Powder
Packaging	25 kg bag
Storage Condition	Store in a dry area between 5°C and 35°C. Protect from direct sunlight
Shelf life	12 months minimum from production date if stored properly in original unopened packaging
Technical Data	
Mixing ratio	Add 13-16% water to the dry mix (3.25 - 4.0 litre of water per 25 kg bag)
Pot life (30°C)	40 - 60 minutes
Density	Fresh mortar = 2.10 kg/lit approximately



Mechanical Strengths (28 days) (ASTM C109)	Compressive strength (25°C) Flexural strength Adhesion (Pull-off)	= 40 - 50 N/mm ² = 7 - 9 N/mm ² = 1.5 – 2.5 N/mm ² (concrete failure)
Modulus of elasticity	Approximately 25'000 N/mm ² (static)	
Coefficient of thermal expansion	Approximately 12.10 ⁻⁶ m/m per °C	
Index of Vapor Diffusion	μ H ₂ O = approximately 250	
Index of CO₂ diffusion	μ CO ₂ = approximately 1200	
Yield	Approximately 13 litre per 25 kg bag	
Layer Thickness	Minimum 5 mm Maximum 30 mm	
Application Details		
Substrate preparation	Substrate must be clean, sound, free from dust, loose particles, cement laitance, curing compounds, oil, grease or any other contamination. Metal surfaces (steel and iron) should be free from scale, rust, oil and grease. Pre-wet substrate to a saturated surface dry condition prior to application. Avoid puddles and standing water.	
Mixing	Pour clean, cold water in the given quantity into a clean mixing container. Add powder while mixing continuously. Use low speed electric mixers (max. 500 rpm) for 3 minutes avoiding entrapping of air. By adding the powder slowly in portions, the desired application consistency can be obtained.	
Application	A bonding agent, such as Sika MonoTop-610 or SikaTop Armatec 110 EpoCem is highly recommended. Apply Sika® MonoTop®-612 while the bonding agent is still wet. Sika® MonoTop®-612 can be applied by wet-spray equipment such as Putzmeister, Melomat, Vario-Jet etc. The mortar can also be applied by spatula or trowel. For thickness greater than 30 mm Sika® MonoTop®-612 must be applied in several layers. As soon as the mortar has started to set it can be smoothed by wooden or synthetic float, styrofoam block or sponge. For a very fine surface finish, Sika MonoTop-620 / 625 can be applied over the Sika® MonoTop®-612	
Curing	Where ambient conditions may lead to rapid surface drying, the use of light water fogging for 48 hours or a suitable water based curing compound (Sika Antisol E) is recommended. Do not commence fogging until final set has been reached.	
Cleaning	Application and mixing tools should be cleaned with water immediately after use while the material is still fresh. Hardened material can only be removed mechanically.	
Remarks	Sika® MonoTop®-612 should not be used at temperatures below 5°C. At ambient temperatures above 35°C, the material should be stored in the shade and chilled water should be used for mixing. Sika® MonoTop®-612 may be over coated with Sikagard ElastoColor W, Sikagard-680 S, Sikagard-550 W Elastic and all Sika Rep and MonoTop products.	
Notes	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.	

Safety

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related 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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