



MICROTOP® TW 02

SYNTHETIC RESIN, MICRO-SILICA-MODIFIED, PIGMENTED MORTAR SYSTEM FOR THE PROTECTION OF WATER STORAGE CONCRETE STRUCTURES

DESCRIPTION

MICROTOP® TW 02 is a one component, micro-silica-modified, hydraulic binding mortar designed for the use on concrete structures for storing drinking water. When mixing the indicated quantity of water a mortar forms which can be shotcreted, grouted or smoothed. MICROTOP® TW 02 complies with the DVGW work sheets W 270 and W 347. Granulometric composition 0 – 0,2 mm.

APPLICATION

MICROTOP TW 02 is used as shotcrete mortar in dense wet shotcreting method for the coating of surfaces in drinking water storage facilities. Processing acc. to DIN 18551. MICROTOP® TW 02 has an extremely low volume of pores.

PROPERTIES

- micro-silica-modified
- synthetic resin modified
- low modulus of elasticity
- water impermeability
- low volume of pores
- open to steam diffusion
- mechanical shotcreting
- can be smoothed and grouted

PROCESSING

Sub-Base/Preparation:

For load-bearing concrete and firmly bonded existing screeds. The sub-base always has to be cleaned by water jet, preferably with high pressure water ≥ 1.000 bar. A bond strength of at least $1,5 \text{ N/mm}^2$ has to be achieved. Clean sub-base of loose particles such as dust and cement slurry. Cement mortars, pot holes etc. have to be levelled with MICROTOP® TW 02 rough cast. The day prior to the application, the sub-base must be dampened until capillary saturation is achieved. The sub-base must be mat-damp when the application takes place.

MICROTOP® TW 02 should be mixed in complete packaging unit with approx. 5 ltr of water for at least 3 minutes using a slow running stirrer. The application is carried out in a layer of between 2 – 5 mm thickness, acc. to DIN 18551 whether in thick coat or grouting method. The temperature of the sub-base must be min. $5 \text{ }^\circ\text{C}$ and must not fall below $5 \text{ }^\circ\text{C}$.

After-treatment:

The air conditioning of the water chambers must be guaranteed until the applied material (due to its contents of polymer) has achieved a sufficient mechanical strength so as to avoid the formation of condensed water on the surface. By the use of air humidifiers the relative air humidity after the application must be kept at 95 % for at least 10 days. The heat input must not exceed $20 \text{ }^\circ\text{C}$.

Air draught and stronger air movements have to be avoided.

PRODUCTION/CONTROL

KORODUR Westphal Hartbeton GmbH & Co., works Wattenscheid Control: internal and external control

Certification: DIN EN ISO 9001:2000

PACKAGING/SUPPLY

25 kg special paper bags

STORAGE

dry, like cement, shelf-life approx. 6 months

NOTES

This product contains cement and has an alkaline reaction with moisture/water. Therefore protect skin and eyes. In case of contact with eyes consult a doctor. Our recommendations for application techniques are based on our experiences. It is recommended to adapt processing and material quantities to the given local conditions and we refer in this context to our AGB. Further literature, processing hints, tender texts and test certificates on the different KORODUR industrial flooring systems, KORODUR floor hardeners, KORODUR dry mortars and special products are available on request.



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NOTES ON TESTING AND TECHNICAL DATA

Test certificates: Hygiene Institute, Gelsenkirchen		
	DVGW working sheet W 270	DVGW working sheet W 347
natural	W 1263/2002/G,	C253/02/st
white	W 1264/2002/G,	C250/02/st
blue	W 1265/2002/G,	C252/02/st
Test certificates: LGA, Nürnberg		
	Compressive strength	BP0114105/1
	Tensile strength	BP0114105/1
	Static modulus of elasticity	BP0114105/1
	Depth of water penetration	BP0114105/1
	Porosity	BP0114105/1
	Bond strength	BP0114105/1
	TOC value	PAZ 6112548.2
Technical Data		
	Density	1,9 kg/ltr
	Granulometric composition	0 – 0,2 mm
	Strength class	B 35
	Water / solid substance value (WF)	approx. 0,20
	Installation thickness	approx. 2 – 5 mm
	Processing temperature	≥ 5 °C

HINTS

The aforementioned data, in particular the suggestions for the processing and use of our products are based on our knowledge and experience in normal case. Taking into consideration of the differences and deviations in materials, sub-bases and working conditions, a guarantee for working results cannot be given nor any reliability, regardless of the legal relationship, be referred to these hints nor to given verbal advice, unless we are charged of having acted on purpose or gross negligence. In such case the applicator has to furnish evidence that he had forwarded to us in good time, completely and in written form any information required for proper and promising judgement. Protective rights of third parties have to be observed. In any case the latest technical data sheet refers which is available on request.

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