MC-Proof 500 Flex AE

(Previously known as MC-Proof DS-Flex)

Two- component Flexible cementitious waterproofing

Product Properties

- Flexible and crack-bridging
- Withstands high positive and negative hydrostatic pressures
- Seamless waterproofing
- Alkali-resistant
- High elasticity
- Excellent bond to concrete and masonry
- Easy application by brush, trowel or spray

Areas of Application

- Internal waterproofing under tiles for wet areas such as toilets, bathrooms, etc.
- Exterior waterproofing of soil-touching structural element.
- Sealing of concrete.

Application Notes

Substrate Preparation

The substrate must be clean, frost-free, solid, stable, free of any loose particles like dust and free of grease, oil, paint, cement laitance, tar, bitumen or release agents which might affect the adhesion. Crack-lines need to be treated. Generally, the substrate has to be levelled and smoothened by plaster and screed prior to waterproofing.
The surface must not have standing water at the time of application for all absorbent substrates (cement renders, screed, concrete, brickwork, etc.).

Mixing

MC-Proof 500 Flex AE is supplied in two components (24 kg powder, 8 kg liquid) at the right mixing ratio. To maintain the correct ratio always mix the entire containers to avoid changes in material properties. Add the powder to the liquid while mixing to achieve a lump-free mix. Use a slow speed drill mixer (400 –500 rpm) and mix for a minimum of 3 minutes to produce a homogeneous consistency. After a maturity time of 5 minutes mix the material again for 1 minute to attain long workability. Material which is already setting must not be mixed again or diluted as this will affect the final properties.

Application

The application area should be shaded and protected from strong wind. The working time of the mixture is approx. 45 minutes. **MC-Proof 500 Flex AE** can be applied by trowel, brush or by spraying device.
Substrate surface must be Pre-dampen with water. Porose substrates might require more dampening. Any condensation should be removed using a sponge.
The application must be in two layers crosswise. The first layer must be applied as a scratch coat at a minimum wet film thickness of 1mm to achieve good adhesion onto the substrate.
The first coat should be allowed to cure for a minimum of 5 hours at 20°C or 3 hours at 35°C and longer at lower temperatures. The material should not be applied at temperatures below 5°C.
The second coat should also be applied at a minimum wet film thickness of 1 mm and finished in one direction.
Pre-dampening of the surface is not necessary when applying the second coat.
The applied area must be protected from rain for 3 hours. At corner areas and working joint apply the joint tape **BOTACT® SB 78** by embedding it into the first layer while still wet.

Further information

Protect **MC-Proof 500 Flex AE** against moisture until the material is completely dry. Avoid heavy mechanical stress that may damage the waterproofing. The datasheet of products used in conjunction with **MC-Proof 500 Flex AE** must be followed. All technical data stated in this data sheet are based on test under laboratory conditions. Actually, achieved data may vary due to ambient and site conditions. The Material Safety Data Sheet is available on request.

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Technical Data for MC-Proof 500 Flex AE				
Characteristic	**Unit**	**Value**	**Age test**	**Comments**
Density	g/cm³	~ 1.75		
Tensile Properties	N/mm²	1.30	28 days	BS EN ISO 527-3
Resistance to 5 Bar Negative water pressure		Passed		DIN1048
Resistance to 7 Bar Positive water pressure		Passed		DIN1048
Crack Bridging	mm	>2mm		ASTM C1305
Water Permeability	mm	Nil	7 days	DIN1048
Water Penetration under pressure	mm	Nil	7 days	BS EN 14891
Pull of strength	MPa	1.70	28 days	ASTM D4541
Pot Life at 30 °C			3 hours	

Product Characteristics for MC-Proof 500 Flex AE	
Storage	Can be stored in original unopened containers for 12 months
Form of Delivery	24 kg Bag 8 kg bucket
Disposal	In the interest of the environment, please empty all containers completely!

Safety Advice

Please take notice of the safety information and advice given on the packaging labels and Material Safety Data Sheets. Refer to chapter “Safety Measures for Handling Coating Materials and Reactive Resins”. GISCODE: P.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 11/21. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.

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