

# MC-Proof 501 flex AE

Two-component flexible cementitious waterproofing



BE SURE. BUILD SURE.

## PRODUCT DESCRIPTION

Two-component flexible cementitious waterproofing for external walls before receiving any cladding system (i.e., Stone, EIFS / ETICS, ACP, Metal, etc.). It complies with **ASTM E-84** (Surface burning & Smoke development test) **Class-A** rating.

## PRODUCT PROPERTIES

- Flexible and crack-bridging
- Withstands high positive
- Hydrostatic pressures
- Alkali-resistant
- High elasticity
- Excellent adhesion Bonds to porous and non-porous surfaces
- To provide protection to concrete surfaces from carbonation and chloride attack
- UV Resistance
- Fire Rating and Performance as per ASTM E84-18, BS EN 13501-1:2018

## AREAS OF APPLICATION

- For waterproofing and creating moisture barrier on the external facade before receiving cladding on top
- For full surface repairs on the concrete and exposed concrete
- For fine filing and repairs on precast concrete components

## APPLICATION ADVICE

### 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 501 Flex AE** is supplied in pre-weighted sets composed of 24 kg powder and 8 kg liquid. 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. 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 501 Flex AE** can be applied by trowel, brush or by spraying device. Substrate surface must be Pre-dampen with water. Porous 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. A 100% closed film must be achieved to ensure the stated properties. The applied area must be protected from rain for 3 hours. At corner areas and working joint apply the joint tape **BOTACT® SB 78** Sealing Tape or 50-180 gsm glass fiber reinforcing mesh by embedding it into the first layer while still wet. For Spray application Contact MC-Bauchemie Local branch for equipment recommendation.

### Further Information:

Protect **MC-Proof 501 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 501 Flex AE** must be followed. All technical data stated in this datasheet are based on test under laboratory conditions. Achieved data may vary due to ambient and site conditions. The Material Safety Data Sheet is available request.

## TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Density	g/cm <sup>3</sup>	~1.80	
Resistance to water pressure (at 5bar positive pressure)		Pass	BS EN 12390-8
Elongation at fracture	%	~38	ASTM D638-14
Tensile strength	N/mm <sup>2</sup>	~1.03	ASTM D638-14
Crack-bridging ability	mm	3.2	ASTM C1305-08
Carbon Dioxide permeability	g/m <sup>2</sup> d	2.10426	DIN EN 1062-6
UV Resistance		Pass	No change in color as per ASTM G154-16
Fire rating and performance		Class A	ASTM E84-18 / BS EN 13501-1:2018
Colour		Grey	
In-company production control		EN ISO-9001	
Storage		Can be stored in cool and dry conditions for at least 12 months in original unopened packs	
Consumption	kg/m <sup>2</sup>	1.7 to 1.9	per coat for 1mm dry film thickness

### Safety instructions

Please note the safety information and advice given on the packaging labels and safety data sheets.



**Note:** The information contained in this data sheet is based on our experience and is correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual structure, to the specific application and to non-standard local conditions. Application-specific conditions must be checked in advance by the planning engineer/specifier and, where different from the standard conditions indicated, will require individual approval. Technical advice provided by MC's specialist consultants does not replace the need for a planning review by the client or its agents in respect of the history of the building or structure. Subject to this prerequisite, we are liable for the correctness of this information within the framework of our terms and conditions of sale and delivery. Recommendations of our employees deviating from the information given in our data sheets are only binding for us if they are confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be observed. The information given in this technical data sheet is valid for the product supplied by the country company listed in the footer. It should be noted that data in other countries may differ. The product data sheets valid for the relevant foreign country must be observed. The latest technical data sheet shall apply to the exclusion of previous, duly superseded versions; the date of issue in the footer must be observed. The latest version is available from us on request or may be downloaded from our website. [2400023624]