

MC-Proof 600 Xtra

Single-component crack-bridging waterproofing slurry and OS 5b surface protection coating



PRODUCT PROPERTIES

- Single-component waterproofing slurry according to DIN 18533 and OS 5b surface protection coating
- Crack-bridging of 2 mm as waterproofing according to DIN 18533
- High UV-stability
- Temperature-resistant up to -20 °C - crack bridging class B2 as OS 5b
- Open to water vapour diffusion, slows carbonation
- Carbonation-inhibiting and open to water vapour diffusion
- Resistant to frost-thaw and de-icing salts, chloride-proof
- Suitable for trowelling and spray application
- Tested and approved per German code PG-MDS/FPD
- Good media resistance in accordance with the approval principles for concrete in LAU-facilities
- Meets German requirements for OS 5b surface protection systems according to EN 1504-2 / DIN V 18026 and RiLi SIB 2001
- Normal flammable, fire behaviour D-s2, d0 according to EN 13501-1
- Compatible with systems from the MC-Color Flex range

AREAS OF APPLICATION

- Waterproofing sealant per DIN 18533 for water impact classes W1-E*, W2-E, W3-E and W4-E
- Waterproofing and protective sealant for concrete components per German Concrete and Construction Engineering Association (DBV) Code of Practice (Merkblatt) "Multi-storey and Underground Car Parks"
- Surface protection system for building construction and civil engineering works
- Coating for the protection of concrete structures at risk of cracking
- Certified according to DIN EN 1504 part 2 for principles 1, 2 and 8, procedures 1.3, 2.2 and 8.2
- REACH-rated exposure scenarios: inhalation periodic, processing

APPLICATION ADVICE

Substrate Preparation: MC-Proof 600 Xtra is suitable for application on mineral substrates. The substrate must be stable, clean and frost-free. Remove all impurities (e.g. dust, release agent, formwork oil, paint or cement residues). Depressions >5mm must be levelled using a suitable mortar. Floor/wall junction fillets should be made with a mineral mortar. As an alternative, we recommend the use of the MC-FastTape system for sealing the floor/wall junction. Mineral substrates may need to be prewetted to create a matt-damp surface.

Mixing: MC-Proof 600 Xtra should be sprinkled into the prefilled water with constant stirring. The material should then continue to be stirred for at least 3 minutes to form a homogeneous paste. A turbine paddle mixer (e.g. Collomix DLX) is recommended as the best device for achieving the desired mixing result.

Mixing ratio: See table "Technical values".

Approx. 4 to 4.2 litres of water are required for a 20 kg bag of MC-Proof 600 Xtra. As MC-Proof 600 Xtra is cement-bound, the water requirement may vary.

All information on substrate preparation for use as a surface protection system and waterproofing can be found in the general application advices "MC-Proof 600 Xtra as a waterproofing in accordance to DIN 18533." and "MC-Proof 600 Xtra as an OS 5b surface protection system."

Application

Waterproofing: First apply a pore-filling scratch coat to the substrate using a trowel or hard rubber float / rubbing board. Then apply the first waterproofing layer over the entire surface of the touch-dried scratch coat. As soon as the first layer has set, apply the second and final waterproofing layer. The required dry layer thickness will depend on the identified level of water exposure (water impact class).

*Waterproofing in accordance to W1-E (on non-concrete substrates), W2.1-E and W3-E deviates from the DIN 18533 and must be agreed in a special contract.

Further information on application as a waterproofing can be found in the general application advices

"MC-Proof 600 Xtra as a waterproofing in according to DIN 18533."

Surface protection system: First apply a primer / base filler to the prepared substrate using a hard rubber float / rubbing board. The surface protection compound should then be trowelled or sprayed onto the set base filler in a layer thickness of 2 mm. If required, the coating can then be rubbed and smoothed with a wet, medium-hard sponge to produce the required finish.

Further information on application as a waterproofing can be found in the general application advices "MC-Proof 600 Xtra as an OS 5b surface protection system."

*According to DIN 18533, a special agreement is required for water impact classes W2-E and W3-E. The consumption quantities do not include the layer thickness allowance specified in DIN 18533.

Overview of consumption:

Field of application	consumption (kg/m ²)	△ dry layer thickness (mm)
Waterproofing:		
scratch coat	0,5 - 1,2*	-
waterproofing as mineral-based sealing slurry for water impact classes W1-E and W4-E according to DIN 18533**	3,0	2,0
waterproofing as flexible polymer thick coating (FPMC) for water impact classes W1-E and W3-E according to Rili-FPD***	4,5	3,0
waterproofing as flexible polymer thick coating (FPMC) for water impact class W2.1-E according to Rili-FPD***	6,0	4,0
waterproofing as flexible polymer thick coating (FPMC) for water impact class W4-E according to Rili-FPD***	3,0	2,0
Surface protection system:		
base filler	0,7 - 0,9*	-
OS 5b	3,0	2,0

* depending on the roughness and evenness of the substrate

** Only on concrete substrates. The layer thickness allowance according to DIN 18533 must be observed.

*** German Construction Chemicals Guideline for the planning and execution of waterproofing with flexible polymer thick coatings (FPMC)

TECHNICAL VALUES & PRODUCT CHARACTERISTICS

Characteristic	Unit	Value	Comments
Mixing ratio	p.b.w.	100 : 20 - 21	powder component : water
Water addition	l	4 - 4.2	per 20 kg
Fresh mortar bulk density	kg/dm ³	1.44	
Working time	minutes	45	at 8° C
		30	at 20° C
		20	at 30° C
Application conditions	°C	5 - 30	air, substrate and material temperatures
	%	≤ 80	rel. humidity
	K	3	above dew point
Consumption ¹⁾			
Consumption (dry mortar)	kg/m ² /mm	1.5	
Drying time	days	1 - 2	
Overworkable after	hour	12	levelling / basic filling
		2	basic filler / 1st layer
Rain resistant after	hours	6	
Resistance to diffusion (against water vapour H ₂ O)	m	< 5	at 2000 µm dry layer thickness
Resistance to diffusion (against carbon dioxide CO ₂)	m	> 800	at 2000 µm dry layer thickness
Crack-bridging class (dynamic)		B2	at -20°C
Crack-bridging class (static)		A3	at -20°C

All technical values are laboratory results determined at 21°C ±2°C and 50% relative humidity.

1) see table on page 2

Storage	Can be stored in cool and dry conditions for at least 12 months in original unopened packs.
Delivery form	20 kg bag
Packaging disposal	Make sure single-use containers are completely empty.

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. [2300018568]