BE SURE. BUILD SURE.

MC-Montan Shotseal

MADE IN GERMANY

Highly elastic, self-crosslinking, sprayed waterproofing membrane with IMB technology

- High elasticity and pull off strength
- Permanently waterproof
- Vapour diffusible
- High alkali resistance
- High UV resistance
- All weathering resistance
- Curing-free
- Applied by spray technique
- Excellent bonding to concrete and steel components

Area of application

- On sprayed or casted concrete of single-shell tunnel structures
- Between 2 layers of concrete in 'sandwich structures'
- As substitution of conventional waterproofing sheet membranes
- Bonding on steel and sheet membranes at interface areas to form a durable transition between different waterproofing systems (e.g. at cross cuts)

MC-Bauchemie Singapore

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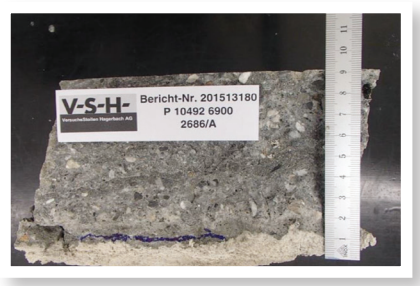
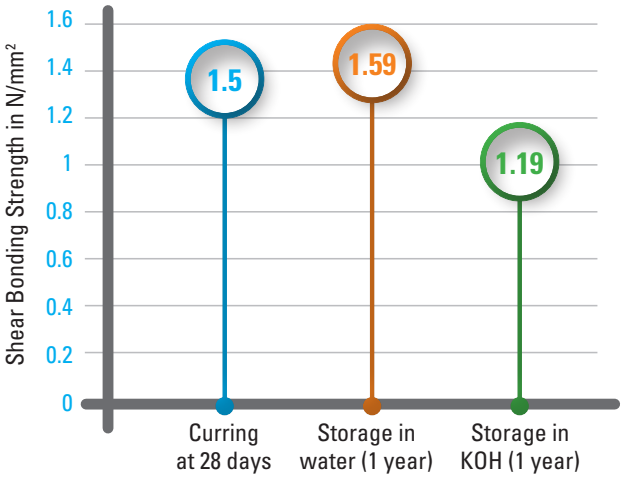
Water permeability

Direction of water ingress is contrary to the spraying direction. The surface of the sprayable membrane will be tested with water pressure from below. The depth of ingress has been measured from the surface of the concrete (excluding the sprayable membrane). The mean value reached 4mm. Picture 1 shows an example of a specimen after water loading.



Picture 1

Determination of Shear bond as well as resistance to water storage and 3% KOH (caustic potash solution) after 365 days



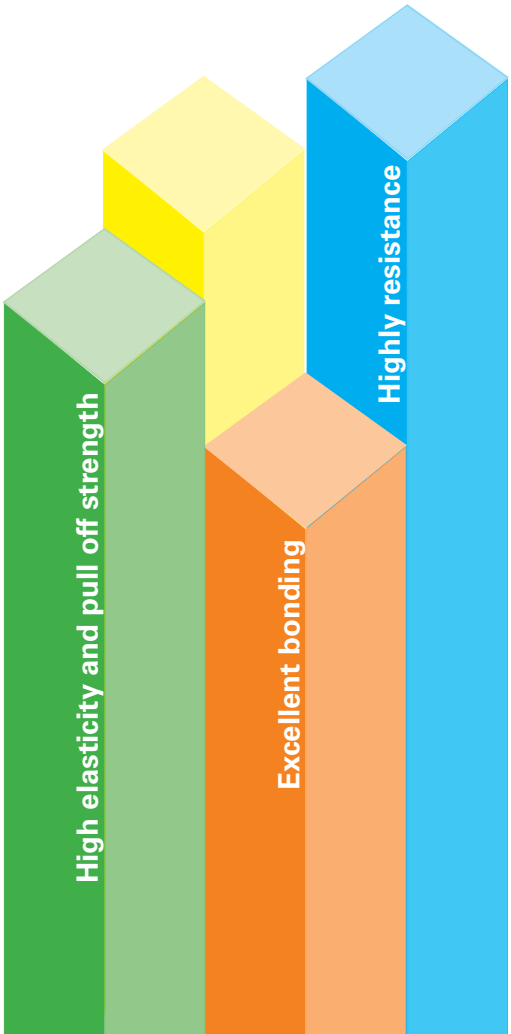
Specimen with 8mm Nafufill Shotseal Concrete as tunnel lining membrance

Picture 2

Picture 3

Technical properties for MC-Montan Shotseal

Form	Powder
Colour	Light brown
Water pressure resistance	6 bar
Bulk density (+20 °C)	1440 g/l
Application thickness, mm	2 - 10 per pass
Consumption	Depends on substrate condition
Application temperature	5 to 35 °C
Failure stress (at +20ºC, at 28 days)	> 1.5
Failure strain (at +20ºC, at 28 days)	> 100 % Depends on substrate
Pull off strength, 28 d, 23 °C/ 65 % RH concrete	1.8 MPa
Pull off strength, 365 d, 3 % KOH	1.2 MPa
Pull off strength, freeze & thaw	1.6 after MPa
Pull off strength, 28 d, 23 °C/ 65 % RH steel	2.5 MPa
shear bond 28 d, 23 °C/ 65 % RH concrete	1.5
Shore hardness	85 at 7 days
Flammability (DIN 4102-B2)	B2 on material basis
Elasticity	Depends on substrate and temperature
Full cure	7 day
Water dosage to powder weight	20 %



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