

ombran R

Rapid setting mortar for repair of concrete structures

Product Properties

- Cement-bound, one-component
- Rapid strength development
- Does not contain any corrosion-promoting substances
- Volumetrically stable according to DIN 1164
- Able to water vapour diffusion
- High mechanical resistance
- Early resistance to water impact

Areas of Application

- Partial repair and reprofiling of damaged structures made of concrete or masonry
- Closing of manhole ring gaps
- Repair of voids and blowouts at concrete compounds and concrete pipes
- Forming of grooves
- REACh-assessed exposure scenarios: periodical inhalation, application, long-term water-contact

Application

Substrate Preparation

See the data sheet „General Application Advice for manhole and sewer repair mortars“.

Pre-wetting / Bond Coat

See data sheet „General Application Advice for manhole and sewer repair mortars“. Ombran HB must be used as bonding agent, the details of the technical data sheet of ombran HB must be observed.

Mixing

The mineral repair mortar is made of the factory-mixed dry mortar ombran R and water. Ombran R dry mortar is mixed homogeneously with water until the required consistency is achieved. For mixing use suitable forced action mixers or slowly rotating mixers. Mixing takes at least 3 minutes.

Mixing Ratio

See „Technical Data“ table for mixing ratio. For 1 kg ombran R approx. 0.15 litres of water are

required. Since ombran R is a cement-bound material the water demand may slightly vary.

Application

Ombran R is applied fresh-in-fresh onto the bonding agent using suitable tools (e.g. steel float, trowel) and is to be compacted. Higher layer thicknesses must be applied in several layers.

Curing

Ombran R must be protected for at least 72 h from drying out too rapidly by means of water-supplying and / or evaporation-reducing measurements. Hereby, relevant temperatures and wind influences must be observed. If further coatings or other products are to be applied, curing agents with a separating effect must not be used.

Safety Advice

Observe the hazard notices and safety advice on the labels and safety data sheets.
GISCODE: ZP1

Technical Data of ombran R

Characteristic	Unit	Value*	Comments
Mixing ratio	p. b. m.	100 : 15	ombran R : water
Application time	min	approx. 7	
Application conditions	°C	+ 5 to + 30	air-, substrate and material temperature
Coverage **	kg/m ² /mm	approx. 1.7	dry mortar
Layer thickness	mm	approx. 3 - 15 approx. 30	per work step max. total layer thickness
Resistant to water after	h	after approx. 1.5	at + 20 °C
Maximum grain size	mm	approx. 1	
Fresh mortar density	kg/l	approx. 2.0	
Compressive strength	MPa	approx. 15.0 approx. 24.0 approx. 33.0 approx. 37.0	1 h 1 d 7 d 28 d
Bending tensile strength	MPa	approx. 3.5 approx. 4.8 approx. 7.0 approx. 7.5	1 h 1 d 7 d 28 d

Product Characteristics of ombran R

Colour	grey
Delivery	15 kg bucket
Cleaning agent	water
Storage	If tightly sealed, the original packs can be stored for at least one year at temperatures between + 5 °C and + 25 °C in dry conditions. The same requirements apply to transport.
Pack Disposal	Make sure the pack is completely empty.

* Unless otherwise stated, all technical data were determined at + 23 °C und 50 % relative air humidity.

** Quantities used depend on the object and on the roughness of the substrate as well as on the storage and working temperatures and the temperature of the substrate. We recommend carrying out experiments beforehand to determine object-specific quantities.

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 be 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 07/15. 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.