

General Application Advice

Flexible coating for manhole tapers

Application advice

Substrate Preparation

After preparing the substrate by suitable methods, the substrate must be free and clean from loose matter, dust oil, grease cement slurries or other materials that would prevent a good bond. Oil or grease contaminated surfaces have to be de-oiled by using MC-Duroprop U. The tensile strength of the surface has to correspond with the officially known technical rules. Before starting application the surface can be dry or damp.

Reprofiling / Local repair

In advance leakages and infiltration must be sealed with suitable products (mineral based fast-setting mortar or reaction resin). Highly structured surfaces in the area of the taper must be levelled before application of ombran flex. Dependent on the failure mode products of ombran MHP-Family or ombran R can be used therefor. A coating of the products mentioned before, with ombran flex may only be carried out after clear superficial hardening (depends on air- and substrate temperature). The usage of the primer MC-DUR 1177 WV-A is possible and necessary under special conditions.

Mixing

It is recommended to preheat ombran flex up to approx. + 20 °C, to ensure easy handling. Mixing can be done in the can of the base component. Shake ombran flex component B (hardener component) before usage, pour one half of it into the can of the base component and stir slightly. Subsequently the residual amount of component B (hardener component) is added. Both components must be carefully mixed to a uniform consistency by using a slow running mechanical mixer. Single-shaft mortar mixers or appropriate mixing equipment / power drill (min. 400 W) with spiral fixture are suitable for mixing. Power drills with basket fixture are not suitable for mixing. Immerse the mixers completely into the material to minimize air bubbles caused by mixing. Mixing time takes approx. 5 min. Mixing by hand or mixing of partial quantities is not allowed.

Application conditions

ombran flex is to be used at material-, air- and substrate temperatures of + 5 °C to + 30 °C. In case of working without primer a dew point distance of at least + 3 K must be observed. The relative air humidity must not exceed 80 %.

Application - wide area

ombran flex can be applied by trowels or floats. The first work step has to be a thin scratch coat. The scratch coat is to be over coated immediately "fresh-to-fresh" and formed in one process free of holes and bubbles up to a layer thickness of 4 mm. After applying the required layer thickness the surface can be smoothed. Slightly setting material can be smoothed by manual rubbing with soapsuds. Application time is - depending on ambient conditions - between 25 and 40 minutes.

Application - joint sealant

In case of using ombran flex as joint sealant special jointers have to be used. Optionally an application by piping bags is possible. The application has to be free of holes and bubbles. The closed-cell Polyethylene round profile Mycoflex Fugenfüller PE has to be installed as backfill material. The joint depth is to be limited to approx. 50 % of the width but at least 10 mm (observe DIN 18540). Prevent three-sided adhesion by using a Polyethylene strip if no backfill material can be installed. Joints can be over worked up to a maximum width of approx. 30 mm. Please observe the data sheet „Structural joint formation“.

Connection to existing coating areas / side closing

In case of connecting ombran flex to an existing coating (adhesion required) a claw-joint of approx. 4 x 4 mm is to be milled into the coating and has to be filled and over coated with ombran flex. If the coating flows out at the flange of the construction, the flange has to be covered with ombran flex. The upper completion at the frame of the manhole cover has to be done with reasonable care. The manhole cover must not be abandoned into fresh ombran flex.

Application Advice

Usage of a primer

In case of application to moist or non-mineral substrates, application as joint sealant as well as in case of chemical, thermal exposure or / and exposure to UV-light the primer MC-DUR 1177 WV-A must be used first. All relevant information for application of the primer can be observed in the technical data sheet. In case of mixing partial quantities of the primer a scale must be used. Therefore both components of the primer have to be separately mixed up in the original barrel. After approx. 5 minutes time of mixing MC-DUR 1177 WV-A is applied thin (avoid greasy films and puddles) onto a prepared surface by using a lambskin roller or a foam rubber roller in a cross coat. It can also be brushed onto the joint flank. After an appropriate drying time of approx. 2 h (dependent on ambient temperature and relative air humidity) a change of primer colour from milky to colourless takes place. The surface will be sticky. From this point on and at the latest within the following 12 hours the primer has to be over coated with ombran flex. Waiting time can be shortened by injecting air or heating.

Curing / Release

ombran flex can be lightly over rained after approx. 2 h and can be completely flooded after 24 h. A leakage test must not be held before 24 h after application of ombran flex.

Safety Advice

The safety advices for reaction resin based materials and substances must be observed. Protective clothing, protective gloves and safety glasses / face protection must be worn when using this product. Observe the safety advices and hazard notices on the labels and safety data sheets. The relevant safety data sheets can be downloaded from www.mc-bauchemie.de.

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.

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