

**PCC I type cement-based repair mortar, designed for making coatings  
with the maximum coating thickness of 40 mm.**

Product description	Ready to use, dry, cement-based, polymer modified, mineral mortar		
Scope of application	<ul style="list-style-type: none"><li>• For system repair and re-profiling of concrete surfaces of all types,</li><li>• To execute and repair industrial floors and screeds,</li><li>• For the surfaces loaded with vehicle traffic,</li><li>• For leveling and protection of concrete surfaces,</li><li>• Possible for both internal and external use,</li><li>• For laying stone and concrete curbs.</li></ul>		
Properties	<ul style="list-style-type: none"><li>• one component,</li><li>• very good adhesion to concrete,</li><li>• chloride resistant,</li><li>• frost-resistant,</li><li>• low shrinkage,</li><li>• high resistance to abrasion,</li><li>• high resistance to carbonation,</li><li>• possibility of applying by spraying or manually,</li><li>• possibility of use as PCC I, II, III and SPCC mortar,</li><li>• grain size up to 2 mm; coating thickness up to 40 mm.</li></ul>		
Characteristics of the product			
Appearance	Gray powder		
Packaging	25 kg paper bag, reinforced with polyethylene foil; single pallet: 42 x 25 kg = 1050 kg per euro pallet.		
Shelf life	9 months from date of manufacture, assuming storage in undamaged original packaging.		
Storage conditions	Store the product in a dry, cool place, avoid direct sunlight.		
Technical data			
Adhesion to the substrate according to PN-EN 1542	≥ 1.5 MPa		
Bending and compression strength according to PN-EN 13892-2:2004		Compression strength [MPa]	Bending strength [MPa]
	1 day	≥20	≥ 4.0
	7 days	≥ 50	≥ 8.0
	28 days	≥ 60	≥ 9.0
Application			
Consumption	Estimated consumption of the preparation: <ul style="list-style-type: none"><li>• 13 l of fresh mortar can be obtained from 25 kg SICON REPAIR 0/40 dry blend</li><li>• approx. 1850-1950 kg of dry blend, per 1 m³ of the mortar.</li><li>• approx. 19 kg/m² with the coating thickness of 10 mm.</li></ul>		
Substrate preparation	The concrete substrate, on which the laying of SICON REPAIR 0/40 mortar is allowed, should meet the following requirements: <ul style="list-style-type: none"><li>• in terms of strength – the average strength of the substrate tested using “pull-off” method should be at least 1.5 MPa, and the value of a single measurement should not be less than 1.0 MPa,</li><li>• in terms of purity – the concrete surface should be free of cement paste, loose faction, dust, oil stains, grease and other contaminants that can reduce its adhesion,</li><li>• in terms of roughness – the substrate should be roughened,</li><li>• in terms of humidity – the concrete surface should be matt and damp (uniformly dark, matt, devoid of bright and dark spots, and standing water).</li><li>• prior to the material application, the elements of reinforcing steel should be cleaned of rust to Sa 2 1/2 degree of purity, according to PN-EN ISO 8501-1. It is recommended to clean it using abrasive blasting, e.g., sandblasting. The cleaned reinforcing steel must be double protected with SICON CONTACT MC 100 anticorrosive coating.</li></ul>		
Mixing ratio	Approx. 3.2 – 3.4 l of water per 25 kg of dry blend.		
Mixing method	Pour approx. 2/3 of water into a container, and then pour the bag contents. After a short mixing refill the remainder water, then mix until the desired consistency is obtained. SICON REPAIR 0/40 must be mixed in a concrete countertop mixer, or a counter-stirrer. stirring time: approx. 5 minutes.		
Application	Apply twice SICON CONTACT MC 100 anticorrosive coating on the uncovered reinforcing steel. Apply bonding coating of SICON CONTACT MC 100 material on cured and dry anticorrosive layer, and on the entire surface of the damaged area. If the reinforcing steel elements are not uncovered, lay one coating of SICON CONTACT MC 100, as a bonding bridge, on the previously wetted		

	substrate using a brush. Then apply SICON REPAIR 0/40 repair mortar on the still wet bonding bridge.
<b>Stirring device</b>	<ul style="list-style-type: none"> <li>commercially available concrete mixers with counter-stirrers,</li> <li>manual low speed mixers for mortar and pumps for applying and pumping, depending on the required capacity and distance of filling</li> </ul> Compacting and mechanical profiling on horizontal surfaces using vibration batten. Application and hand molding using steel trowel, trowel and aluminum batten.
<b>Curing</b>	Freshly treated surfaces should be protected from drying out too quickly. It is recommended to use a preparation for surface protection of SICON CONTACT MC 100.
<b>Application conditions</b>	
<b>Ambient temperature</b>	<ul style="list-style-type: none"> <li>minimum +5°C, maximum +30°C,</li> <li>recommended application conditions: temperature approx. +20°C, relative humidity of air approx. 50 %.</li> </ul>
<b>Material processing time</b>	Material processing time depends on: <ul style="list-style-type: none"> <li>temperature - and respectively equals to:               <ul style="list-style-type: none"> <li>- approx. 25 minutes at +30°C,</li> <li>- approx. 60 minutes at +23°C,</li> <li>- approx. 90 minutes at +10°C,</li> </ul> </li> <li>with the relative humidity of air – higher humidity increases the processing time.</li> </ul>
<b>Comments and recommendations</b>	
<b>Health and safety conditions</b>	The main component of the preparation is cement; therefore use personal protective equipment, the same as when working with cement, i.e., gloves and goggles, when handled. Detailed guidance on safety, health and hazardous properties of the material are included in the Material Safety Data Sheet - supplied by the manufacturer upon request. Disposal of empty packaging lies with the end user and should be carried out in accordance with applicable regulations.
<b>Legal notices</b>	These instructions has been drawn up according to the current state of the art and experience in the application of the product, they refer to the products stored in accordance with the specified instructions. The product documentation provides for general information applicable under certain conditions. It is recommended that before using the product on a large scale, the purchaser tests it under specific construction environment conditions. The supplier has no control over the use, methods of application and execution conditions occurring at the construction site and therefore no responsibility of the supplier for the final effect of the application may arise from these instructions. Recommendations of Sicon partners that differ from the information included in the Safety Data Sheet shall apply only in the case of their written confirmation. Date of issue: 01/2016 All previously issued Sicon Repair 0/40 safety data sheets shall expire on the date of issue of this sheet.