Product technical sheet

Description of the product	Universal resin preparation for priming and impregnating 7-day-old concrete. Colourless, two-component low-viscosity epoxy resin.
Application	• Priming the surfaces of concrete deck slabs of bridge structures before laying waterproofing made of weldable asphalt felt on them. • **Possibility of priming 7-day-old concrete screeds.** • Priming concrete substrates, cement mortars, mortar and resin coatings, • As a primer for epoxy and polyurethane systems, • Binder for creating repair mortars, screeds and levelling putties, • Protection of concrete against dusting and penetration of moisture, • Impregnation and reinforcement of all types of mineral substrates, • Material for indoor and outdoor use.
Properties	• Very high adhesion to concrete substrate, • Increases the adhesion of successive layers to the substrate, • Good mechanical characteristics (hardness, tensile strength, bending strength), • Provides hydrophobic properties, • Good penetration of mineral substrates, • Low viscosity, • Ease of application, • Versatility. • Frost resistance, • Reduced tendency to crystallise.

Physical properties of Siconofloor Roadway 120		
Form	Component A modified epoxy liquid	
	Component B, amine hardener	
Density (according to EN ISO 2811-1: 2012)	Component A	1.06~1.19 g/cm^3
	Component B	0.99~1.10 g/cm^3
Pot life	30-40 minutes at 20^{o}C	
Theoretical mixture consumption	0.3~0.6 kg/m^2 when used as a priming resin	
Colour and odour	Component A colourless and odourless	
	Component B yellowish liquid with a characteristic odour	
Hygiene tests	Complies with requirements;	
Practical mixture consumption	Strongly depends on the intended use, the quality of the substrate (absorptivity), the application technique, application conditions, and the degree of roughness. Average consumption 0.3~ 0.5 kg/m^2. Two layers of resin are recommended for porous substrates.	
Curing time	Light loads after 8 hours at 25^{o}C	
	Full load capacity	7 days
Viscosity (according to PN EN ISO 2555:2011)	Component A	180~320 mPa*s
	Component B	160~320 mPa*s

Physical properties of Siconofloor ROADWAY 120		
Content of non-volatile substances (according to PN-EN ISO 3251:2008)	80^{o}C	97.91 ± 1 %
	105^{o}C	97.00 ± 1 %
ShA hardness (after 7 days)	100^o	
ShD hardness (ShD hardness after 7 days 82 ShD)	10^o	After 24h 55^o SHD
		After 48h 80^o SHD
	20^o	After 24h 70^o SHD
		After 48h 80^o SHD

Application	
Preparation of the substrate	The substrate must have sufficient compressive strength (minimum 25 N/mm²). The surface must be level, slightly rough, strong and dry, and free from non-bound particles. If in doubt, apply in a reference area. Fragments of understrength substrate, cement milk and fragments contaminated by oils or other separating agents must be removed mechanically, e.g. by blasting, grinding or milling. The substrate must have open pores before the material is applied. Before the material is applied, the substrate must be dusted and vacuumed.
Priming conditions	The substrate temperature should be +12~30^{o}C. Note that the lower the temperature, the longer it takes for SICONOFLOOR ROADWAY 120 to cure. The ambient temperature should be +12~30^{o}C. **Possibility of priming 7-day-old concrete screeds.** If the primed surface is left for the next coats, with a break exceeding 48 hours, the primed surfaces should be gently matted by sanding with fine sandpaper and then vacuuming the remaining dust. Newly laid SICONFLOOR ROADWAY 120 must be protected from humidity and direct action of water for at least 24 hours after the application has finished. The formation of milky discolouration on the surface indicates the contact of fresh material with moisture, resulting in a discrepancy in the properties of the final product from the properties declared by SICON. Z o.o Sp. K.. If artificial heating is required, gas, oil, paraffin or other fossil fuel

	heaters should not be used. During operation of such equipment, large amounts of water and carbon dioxide are released as steam, which significantly interfere with the curing process of the resin. Only use electric heaters for heating.
Application methods	Mix component A initially, then add component B, stir the ingredients until a homogeneous consistency is achieved, but not less than 3 minutes. Quartz sand may be added to the mixed components A and B of the resin if required, mix for a further 2 minutes until a homogeneous mixture is obtained. The mixing ratios of component A and component B are indicated on the packaging and must not be changed. A change in the ratio will result in the product having characteristics different from those declared by the Manufacturer. Too long stirring may cause aeration of the resin and should therefore be avoided. Use a slow speed electric stirrer (300 to 400 rpm) or other suitable equipment to mix the resin.
Priming layer	Apply SICONOFLOOR ROADWAY 120 using a brush or roller according to the art of painting, making sure that a uniform, continuous coating is obtained, if necessary apply a second layer.
Levelling mortar	Spread the SICONOFLOOR ROADWAY 120 mortar to the desired thickness with a trowel or a chemical resistant rubber squeegee.
Resin screed	SICONOFLOOR ROADWAY 120 should be spread, along with the appropriate aggregate, with the help of steel laths, preferably on guides. After a short time, compact the mortar and level it with trowels or a mechanical float (20 ÷ 90 revolutions per minute) with blades covered with chemically resistant material. The proportions of the SICONOFLOOR ROADWAY 120 resin to the aggregate depend on the grain size of the aggregate, but the most common is 10% of the resin mass to aggregate. After finishing work, tools should be cleaned with acetone or xylene immediately after use. Hardened or bound material can only be removed mechanically.
Storage conditions for kit components	SICONOFLOOR ROADWAY 120 resin is a material with a reduced tendency to crystallise. Store in a dry place at 5~30°C. Components A and B in the liquid state are water-polluting agents and should not enter sewage systems, land or water courses. The resin after curing is neutral for the environment.
Comments and recommendations	
Health and safety conditions	Wear protective clothing, gloves and goggles whenever handling resin. When working in confined or enclosed spaces, and during drying, adequate ventilation must be provided. Do not weld or expose open flames during the work. Use lighting lamps with the appropriate protection. Detailed information on health, safety, ecology, toxicological properties of the material, etc. is available in the Material Safety Data Sheet for SICONOFLOOR ROADWAY 120. Do not allow contact with the skin. Avoid breathing vapours from heated material. Do not allow individual components to come into contact with acids, strong oxidisers, alkalis. All employees should be thoroughly trained in the handling of epoxy resins and hardeners for existing hazards. Allergy sufferers must not be commissioned to work with resins. Protective gloves and goggles must be worn if there is a risk of resins splashing. Always wash your hands with water and mild cleaning agents after contact with the skin. Do not use benzene, toluene or carbon tetrachloride! For hygiene reasons, do not consume food or drinks in the workplace and do not smoke.
Final remarks	These specifications are based on trials and laboratory tests. Practical results of measurements may differ from those provided, due to circumstances beyond the control of Sicon z o.o. Sp. K Sp. K. All information is given in good faith and takes into account current knowledge and experience. The manufacturer indicates that the colour of the finished floor may vary. This phenomenon does not indicate a defect in the floor or reduced technical specifications. Possible discolouration may occur due to the way the work and drying are performed. It is recommended that particular areas be covered from batches of material from one production run. The product documentation constitutes general information, appropriate under certain conditions. It is recommended that the purchaser carry out an application test under specific construction environmental conditions prior to large-scale application of the product. The supplier has no influence on the types of use, application methods or execution conditions on the site, therefore these instructions may not be held responsible for the end result of the application. Recommendations of Sicon's associates that deviate from the information in the technical sheet are mandatory only if they are confirmed in writing. Issue date: 05/2022 All previously issued sheets of the Siconofloor ROADWAY 120 system shall expire on the date of issue of this sheet.