Technical sheet

Product description	Universal resin preparation for priming and impregnating concrete. Perfect for making resin mortars and screeds. Colourless, low-viscosity, two-component epoxy resin.
Application	• Priming the surface of concrete slabs of bridging sections of bridge structures, before laying on them waterproofing insulation made of weldable asphalt felts, • Priming concrete, cement, mortars and resin coatings, • As a primer for epoxy and polyurethane systems, • Binder for the creation of repair mortars, screeds and levelling putties, PC type, for repairing defects and levelling surfaces, in concrete structures, • Protection of concrete against dusting and penetration of moisture, • Impregnation and strengthening of all types of mineral substrates, • Material for use inside and outside buildings.
Properties	• Very high adhesion, • Increases the adhesion of subsequent layers to the substrate, • Good mechanical parameters (hardness, tensile and bending strength), • Provides hydrophobic properties, • Good penetration of mineral substrates, • Low viscosity, • Ease of application, • Short working breaks between successive layers (possibility of applying two layers in one day), • Versatility of applications, • Frost resistance, • Reduced tendency to crystallize.

Physical properties of Siconofloor Roadway 130		
Character	Component A modified epoxy liquid	
	Component B amine hardener	
Density (according to PN EN ISO 2811-1:2012)	Component A	1.05~1.2g/cm^3
	Component B	0.99~1.15g/cm^3
Working life	10 -15 minutes for a temperature of 20^{o}C	
Theoretical consumption of the mixture	0.3~0.6 kg/m^2 when used as primer resin	
Colour and smell	Component A is coloured and odourless	
	Component B is transparent and with a characteristic smell	
Hygiene tests	Meets requirements;	
Practical consumption of the mixture	Strongly depends on the intended use, substrate quality (absorptivity), application technique, application conditions, degree of roughness. Average consumption 0.3~0.5 kg/m^2. Two layers of resin are recommended for porous substrates.	
Curing time	24h light loads at 25^{o}C	
	Full load capacity	7 days
Viscosity (PN EN ISO 2555:2011)	Component A	240-400 mPa*s
	Component B	100-240 mPa*s

Mechanical properties of Siconofloor Roadway 130		
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 at 7 days 80 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 even, slightly rough, strong and dry, free from loose particles. The “pull off” test should not give a result below 1.5 N/mm². If in doubt, a reference field should be made. Fragments of the substrate of insufficient strength, cement laitance and fragments contaminated with oils or other separating substances must be removed mechanically, e.g. by shot peening, grinding or milling. The substrate must have open pores before the material is applied. Immediately before application of the material, dust and particulate matter should be removed from the substrate.
Application conditions	The temperature of the substrate should be +5~30^{o}C. It should be remembered that the lower the temperature, the longer the curing process of SICONOFLOOR ROADWAY 130 . Ambient temperature should be +5~30^{o}C. Substrate humidity should be max 5%. Relative air humidity should be a maximum of 80%. The temperature of the substrate and uncured flooring must always be 3°C above the dew point temperature.

	If the primed surface is left for the next coat with a break exceeding 48 hours, the primed surfaces should be gently matted by sanding with fine sandpaper and then removing the remaining dust. Freshly applied SICONOFLOOR ROADWAY 130 must be protected against moisture and direct exposure to water for at least 24 hours from the completion of application. The formation of laitance discolouration on the surface indicates contact of fresh material with moisture resulting in divergence in the properties of the final product from the properties declared by SICON Sp.K . Sp. z o.o. If artificial heating is required, do not use gas, oil, paraffin or other fossil fuel heaters. During the operation of such devices, large amounts of water and carbon dioxide in the form of water vapour are released, which significantly disturb the hardening process of the resin. Use only electric heaters for heating.
Application methods	Pre-mix component A, then add component B, mix the components until a homogeneous consistency is obtained, but not less than 3 minutes. Quartz sand can be added to the mixed components A and B of the resin, if required, mix for another 2 minutes until a homogeneous mixture is obtained. The mixing ratio of Component A and Component B is shown on the packaging and must not be changed. Changing the proportions will result in a product with properties different from those declared by the Manufacturer. Mixing for too long may cause air entrainment and should therefore be avoided. To mix the resin, use a low speed electric stirrer (300 ~ 400 rpm) or other equipment designed for this.
Priming layer	Apply SICONOFLOOR ROADWAY 130 with a brush or roller in accordance using a painting technique, ensuring that a uniform, continuous coating is obtained, if necessary, apply a second layer.
Levelling mortar	Spread the SICONOFLOOR ROADWAY 130 mortar to the desired thickness with a trowel or a chemically resistant rubber squeegee.
Resin screed	SICONOFLOOR ROADWAY 130 along with the appropriate aggregate should be spread using steel battens, preferably on guides. After a short time, compact the mortar and level it with a trowel or a power trowel (20÷90 revolutions per minute) with blades covered with chemically resistant material. The proportions of the SICONOFLOOR ROADWAY 130 resin to the aggregate depend on the aggregate grain size, but the most common is 10% of the resin weight for the aggregate. After finishing work, the tools should be washed with acetone or xylene immediately after use. Hardened or bound material can only be removed mechanically.
Storage conditions for kit components	The SICONOFLOOR ROADWAY 130 resin is a material with a reduced tendency to undergo the crystallization process. It should be stored in a dry place at a temperature of 5~30°C. Component A and B in liquid state are water polluting agents and should not get into the sewage system, ground or water courses. After hardening, the resin is neutral for the environment.
Comments and recommendations	
Health and safety conditions	During all work with resins, use protective clothing, gloves and glasses. Adequate ventilation must be provided when working in confined or closed rooms, and during drying. When working, do not weld and do not come close to open fire sources. Use lighting lamps with appropriate safety measures. Detailed information on health, safety, as well as data on ecological, toxicological properties of the material, etc. are available in the Material Safety Data Sheet for SICONOFLOOR ROADWAY 130. Avoid contact with skin. Avoid breathing vapours from heated material. Do not allow individual components to come into contact with acids, strong oxidants, bases. All employees should be thoroughly trained in the handling of epoxy resins and hardeners with regard to the existing hazards. Allergy sufferers must not be commissioned to work with resins. If there is a risk of splashing the resin, use protective gloves and goggles. After each contact of the resin with the skin, wash with water with the addition of mild cleaning agents, do not use benzene, toluene or carbon tetrachloride! For hygiene reasons, you should not eat or drink in the workplace, and also not smoke there.
Concluding remarks	The technical data provided is based on laboratory trials and tests. Practical measurement results may differ from the attached ones, due to circumstances over which Sicon Sp. z o.o. Sp.K. has no control. All information is given in good faith and takes into account the current state of knowledge and experience. The manufacturer informs that the colour of the finished floor may vary. This phenomenon does not indicate a defect of the floor or reduced technical parameters. Possible discolouration may appear because of the way in which work and drying take place. It is recommended to cover specific surfaces with batches of materials from one production batch. The product documentation provides general information that is appropriate under certain conditions. Prior to large-scale use of the product, it is recommended that the purchaser perform an application test under the specific environmental conditions of the construction site. The supplier has no influence on the types of applications, methods of application and conditions of implementation occurring on a construction site, therefore, these instructions cannot result in his responsibility for the final result of the application. Recommendations of Sicon's associates that deviate from the information contained in the technical sheet, are binding only if confirmed in writing. Date of issue: 01/2018 All sheets for the Siconofloor ROADWAY 130 system issued so far shall expire on the day of the issuing of this sheet.