

Product technical sheet

Description of the product	Flexible, chemically cured, solvent-free, two-component polyurethane designed for insulation-surface in Siconofloor Roadway systems. The basic application is a flexible structural resin that creates an insulation-surface layer for pavements, roads and bicycle paths on steel or concrete bridges, folding bridges, drawbridges and modular bridges.	
Application	<ul style="list-style-type: none">• Component of systems designed for communication engineering,• For waterproofing and sealing concrete and steel surfaces exposed to atmospheric conditions and mechanical loads, e.g. pavements, footbridges, bicycle paths, ramps, multi-level car parks and industrial floors.• It can be used as a flexible layer (interlayer) without mineral filler• Binder for creating repair mortars, screeds and levelling fillers on steel systems.	
Properties	<ul style="list-style-type: none">• Very high adhesion to primed steel and concrete substrate,• Highly elastic material• Good chemical and mechanical resistance,• High density and viscosity,• Ease of application,• Frost resistance,• Reduced tendency to crystallise.• Possibility of additional saturation with quartz sand	
Physical properties of Siconofloor Roadway BC-PU		
Density (according to EN ISO 2811- 1: 2012)	Component A	1.40~1.58 g/cm ³
	Component B	1.12~1.31 g/cm ³
Pot life	30-40 minutes at 20°C	
Theoretical mixture consumption	0.3–0.6 kg/m ² when used as a priming resin	
Colour and odour	Component A coloured and odourless	
	Component B transparent 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.	
Curing time	Light loads after 8 hours at 25°C	
	Full load capacity	7 days
Viscosity (according to PN EN ISO 2555:2011)	Component A	3400~8500 mPa*s
	Component B	650~900 mPa*s
Application		
Preparation of the substrate	The material is spread on a pre-primed surface. Any loose substrate fragments, organic and inorganic impurities, cement milks that may have a negative impact on the connection of the Siconofloor Roadway BC-PU with the substrate should be removed. Any unevenness should be levelled by PCC material or a putty made of Siconofloor Roadway 130 material and quartz sand. The steel substrate should be cleaned to Sa 2½ grade, free from flaking. Before starting the laying process, the surface should be dusted off and the steel, galvanized and cornice elements should be protected against contamination.	
Application conditions	The substrate temperature should be +12~30°C. Note that the lower the temperature the longer it takes for SICONOFLOOR ROADWAY BC-PU to cure. The ambient temperature should be +12~30°C. The substrate should be dry, dust-free and degreased. 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. The newly laid SICONFLOOR ROADWAY BC-PU 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. Sp. z o.o Sp. K..	
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. After initial mixing, transfer the material into a separate container and continue mixing. 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.	
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 and environmental data, toxicological properties of the material, etc. is available in the Material Safety Data Sheet for SCONOFLOOR ROADWAY BC-PU. 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	<p>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.</p> <p>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.</p> <p>Issue date: 05/2022</p> <p>All previously issued sheets of the Siconofloor ROADWAY BC-PU system shall expire on the date of issue of this sheet.</p>
Description of the product	Flexible, chemically cured, solvent-free, two-component polyurethane designed for insulation-sealing in Siconofloor Roadway systems. The basic application is a flexible structural resin that creates an insulation-surface layer for pavements, roads and bicycle paths on steel or concrete bridges, folding bridges, drawbridges and modular bridges.
Application	<ul style="list-style-type: none"> • Component of systems designed for communication engineering, • For waterproofing and sealing concrete and steel surfaces exposed to weather conditions and mechanical loads, e.g. pavements, footbridges, bicycle paths, ramps, multi-level car parks and industrial floors. • It can be applied as a flexible layer (interlayer) without mineral filler • Binder for creating repair mortars, screeds and levelling putties for steel systems.
Properties	<ul style="list-style-type: none"> • Very high adhesion to primed steel and concrete substrate, • Highly flexible material • Good chemical and mechanical resistance, • High density and viscosity, • Ease of application, • Frost resistance, • Reduced tendency to crystallise. • Possibility of additional saturation with quartz sand

Physical properties of Siconofloor Roadway BC-PU

Density (according to EN ISO 2811-1: 2012)	Component A	1.40~1.58 g/cm ³
Pot life	Component B	1.12~1.31 g/cm ³
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Hygiene tests	Component A coloured and odourless	
Practical mixture consumption	Component B transparent liquid with a characteristic odour	
Curing time	Complies with requirements;	
Viscosity (according to PN EN ISO 2555:2011)	Strongly depends on the intended use, the quality of the substrate (absorptivity), the application technique, application conditions, and the degree of roughness.	
	Light loads after 8 hours at 25°C	
	Full load capacity	7 days
	Component A	3400~8500 mPa*s
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Application

Preparation of the substrate	The material is spread on a pre-primed surface. Any loose substrate fragments, organic and inorganic impurities, cement milks that may have a negative impact on the connection of the Siconofloor Roadway BC-PU with the substrate should be removed. Any unevenness should be levelled by PCC material or a putty made of Siconofloor Roadway 130 material and quartz sand. The steel substrate should be cleaned to Sa 2½ grade, free from flaking. Before starting the laying process, the surface should be dusted off and the steel, galvanized and cornice elements should be protected against contamination.
Application conditions	<p>The substrate temperature should be +12~30°C. Note that the lower the temperature the longer it takes for SICONOFLOOR ROADWAY BC-PU to cure. The ambient temperature should be +12~30°C. The substrate should be dry, dust-free and degreased. 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.</p> <p>The newly laid SICONFLOOR ROADWAY BC-PU must be protected from humidity and direct action of water</p>

	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. Sp. z o.o Sp. K..
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. After initial mixing, transfer the material into a separate container and continue mixing. 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.
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