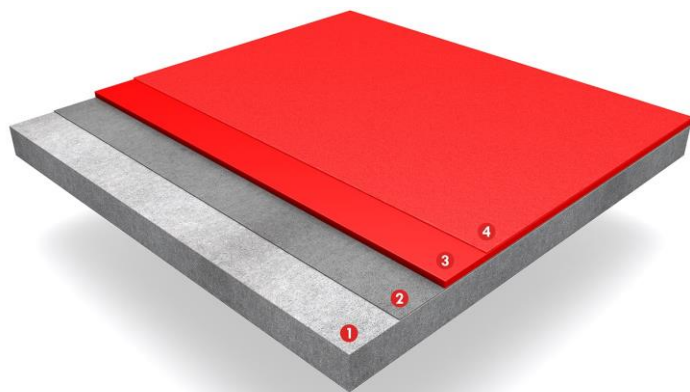


Dyed, rigid polyurethane resin system for high build smooth and non-slip floorings

System description	SICONOFLOOR PU HARD is a high build, rigid polyurethane flooring system, based on colorful polyurethane resin. The flooring is characterized by smooth surface finish, very high mechanical resistance and high chemical resistance, as well as, aesthetic and original appearance. It is a durable finish for mineral surfaces such as concrete or cement plaster and effectively prevents dusting of the substrate and protects it from soaking with liquids or mechanical damage.
Scope of application	SICONOFLOOR PU HARD is used for very durable pavements in: <ul style="list-style-type: none"> Highly loaded production halls, warehouses, workshops, Food processing plants (fruit processing, dairies, bakeries, kitchens, etc.), Premises with wet processes, Internal car parks and traffic routes (heavy traffic), Warehouses and loading ramps.
System properties	<ul style="list-style-type: none"> Very high resistance to abrasion, High impact resistance, High parameters of mechanical resistance (hardness, bending strength, tensile strength), Good chemical resistance, Possibility of the coating thickness and the slip resistance degree adjustment, Easy application, Colorful surface finish, Decorative appearance, Total thickness of the system 1.5-3.0 mm.



Construction of the system:

1. Concrete bed.
2. Siconofloor GF-E/GW-E priming coating.
3. Siconofloor PU-HB structural coating,
4. Siconofloor PU-MATIN matting varnish coating.

Technical properties of SICONOFLOOR PU HARD

Adhesion	> 1.5 N/mm ²
ShA hardness (after 7 days)	100°
ShA hardness (after 7 days)	70°
Resistance to abrasion	AR 0.5
Hygiene tests	Meets the requirements; Hygienic Certificate No. HK/B/0757/02/2015
Curing time (at a temperature of 20° C):	
Pedestrian traffic	24 h
Full load	7 days

Application

Substrate preparation	The concrete substrate should be firm, dry (with a moisture content up to 4%, for a moisture content of 5-15% the use of Siconofloor GW-E priming resin is recommended), clean, slightly rough, open-pored, constructed in accordance with building standards. All impurities such as: cement slurry, dust, oil content, traces of grease, fragments that are loose, unbound or weakly bound with the substrate and old coatings should be removed. Average concrete tensile strength as measured using the "pull-off" method should not be less than 1.5 MPa. The mature concrete should be sanded. The required time for concrete, cement screeds and repair materials maturation must be observed.
Preparation of materials	The various materials included in SICONOFLOOR PU-HB system must be prepared for their application in accordance with the data included in their Data Sheets.

SICONOFLOOR PU HARD application conditions

The substrate temperature should be higher by at least 3° C than the dew point temperature.	
Minimum ambient temperature	+10° C
Minimum temperature of the substrate	+10° C
Maximum temperature of the substrate and the environment	+25°C
Maximum relative humidity	80%

Application data - smooth system (thickness of 1.5-3.0 mm)

Order of application	Number of coatings	Type of coating	Name of material
1	1	Primer	Siconofloor GF-E; optionally Siconofloor GW-E
2	1	Wearing course	Siconofloor PU-HB
3	1	Matting coating (optional)	Siconofloor PU MATIN or Siconofloor PU SATIN

Application data - non-slip system (1.0-2.0 mm)			
Order of application	Number of coatings	Type of coating	Name of material
1	1	Primer	Siconofloor GF – E; optionally Siconofloor GW-E
2	1	Quartz aggregate	Fire-dried quartz sand with grain-size of 0.4-0.8 mm
3	1-2	Wearing course	Siconofloor PU-HB is covered dry with aggregate with grain-size of 0.4-0.8 mm
4	1-2	Sealing coating	Siconofloor PU-HB
5	1	Matting coating (optional)	Siconofloor PU MATIN or Siconofloor PU SATIN
Application data - non-slip system (2.0-3.5 mm) Consult our expert before the execution			
Order of application	Number of coatings	Type of coating	Name of material
1	1	Primer	Siconofloor GF – E; optionally Siconofloor GW-E
2	1	Structural coating	Siconofloor PU-HB mixed with dried quartz sand with grain-size of 0.1-0.3 mm
3	1	Topping	Dry covered with colorful quartz sand 0.4-0.8 mm having the resin color.
4	1	Varnish	Siconofloor PU-HB
5	1	Matting coating (optional)	Siconofloor PU MATIN or Siconofloor PU SATIN
Method of application and consumption - smooth system		The concrete substrate should be primed in accordance with the instructions contained in the Siconofloor GF-E/GW-E primer Data Sheet. Siconofloor PU-HB material should be prepared in accordance with the instructions provided in the product Data Sheet. After A and B components mixing, the material must be poured in portions on the primed concrete substrate and evenly distributed with a squeegee spacer. Consumption of the resin depends on the flooring thickness - and usually amounts to approx. of 1.5-1.8 g/m ² /1 mm of the flooring thickness. The poured material must be bleed with a spiked roller. An optional coating, enhancing the mechanical parameters of the flooring, should be prepared in accordance with the Technical Data Sheet of Siconofloor PU MATIN or Siconofloor PU SATIN materials. After the last coating application, the drying temperature should be maintained at above +15°C for at least 18 hours.	
Method of application and consumption - low build control non-slip system (for internal use)		The concrete substrate should be primed in accordance with the instructions contained in the Siconofloor GF-E/GW-E primer Data Sheet. Immediately after the application, the primer should be covered with fire-dried quartz sand with grain-size of 0.4-0.8 mm, (depending on the required degree of slip resistance), in quantity of approx. 1.0 kg/m ² . After the primer curing any excess of sand must be removed. Siconofloor PU-HB material should be prepared in accordance with the instructions provided in the product Data Sheet. after A and B components mixing, the material must be poured in portions on the primed concrete substrate and evenly distributed with a metal trowel. Consumption of the resin depends on grain-size of the quartz sand used for covering the first coating and is approx. of 0.5-0.7 kg/m ² /1 mm of the flooring thickness. Then, the still uncured material coating must be dry covered with fire-dried quartz sand (it is best to use the sand of the same color as resin) with grain-size of 0.4-0.8 mm (consumption of approx. 3.5-4.5 kg/m ²). The coating must be allowed to cure for at least 24 hours (at +20° C). After that time, any excess of sand must be carefully removed with a brush and/or vacuum cleaner, and the whole must be first sanded depending on the desired non-slip effect and then vacuumed. The sealing coating - must be prepared in accordance with the Siconofloor PU-HB material Data Sheet. The material should be poured in portions on the cured and prepared resin coating together with quartz sand topping. Theoretical consumption of resin amounts to 0.5-0.7 kg/m ² . The target roughness of the flooring can be adjusted by number of the sealing coatings. After the last coating application, the drying temperature should be maintained at above +15° C for at least 18 hours.	
Comments and recommendations			
Health and safety conditions		The materials included in the system, should be used by trained execution team members only. Eye, respiratory system and skin protection devices must be used during the works execution. Adequate ventilation must be ensured when working in confined spaces and when drying. For detailed information on the risks, see the Safety Data Sheets of individual products, available on request. <i>The coating has no impact on health and the environment, when fully cured.</i>	
Conditions of the system components storage		The products included in the system and their components should not get into drains, soil or groundwater while uncured. It is essential that the remnants of material are definitively cured. The cured remnants of material should be disposed of in accordance with local regulations.	
Technical support		It is recommended to consult a technical advisor of the Manufacturer, in order to ascertain the correct use of the material and/or system, before using the system.	
Final remarks		The included technical specifications are based on laboratory tests. Actual measurements results may vary from the enclosed ones, due to circumstances beyond the control of Sicon LTD. All information is provided in good faith, taking into account the current state of the art and the experience gained. The manufacturer advises that the color of the executed flooring may vary. The resulting phenomenon does not indicate any defect or reduced technical parameters of the flooring. Any discoloration may occur due to the working or drying methods. It is recommended to execute certain surfaces with materials originating from one production run only. 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 Siconofloor PU Hard safety data sheets shall expire on the date of issue of this sheet.	