SILIKAL® RH 65 resin

Low viscous Methacrylic Resin for filler-rich indoor screeds on concrete of 5-20 mm

Expect more from your floor.

Silikal® RH 65 resin is a solvent free, fast curing MMA resin of very low viscosity. It is used for indoor screeds of 5-20 mm on concrete to equalize an uneven concrete surface. Screeds must be overlayed with a Silikal® coating system according to System A – D. The fast curing time of 1 hour, flexibility and filler rich formulation of 1 : 8 makes the mortar economical and can be applied at temperatures between 0 °C and +35 °C (refer to table of hardener).

Hot water loadings must be limited to +60 °C. Excess temperature up to +80 °C will be accepted for a short moment as long as the temperature of the complete layer does not adopt the higher degree.

Application

Layer thickness must be adjusted to the eveness of the concrete and to the mechanical loading and is recommended between 5 and 20 mm. Lower thickness must be avoided as the curing process will slow down. A higher thickness of more than 20 mm will cause shrinkage and tension.

For a proper application mix hardener first to the resin and add finally the filler mix. Normally there is no need to use pigments, however it could be an option.

Guideline recipe and batch quantities

Item	Component	Guideline recipe (Parts by weight)	Comments	Batch	
1	SILIKAL® RH 65 resin	11 %		6 – 6.25 kg	6 – 6.25 litres
2	SILIKAL® Filler 65	89 %	2 sacks	50 kg	25 litres
	Total:	**100 %**	**Average consumption: 2.4 kg/m² per mm thickness**	**approx. 56 kg**	**approx. 24 litres**
3	SILIKAL® Hardening Powder	1 – 5 % related to item 1	See “Hardener dosages” table for quantities	60 – 315 g	

Concrete surface must be treated by required roughening methods like ball/shot blasting or concrete grinder. After collecting dust by vacuum cleaner apply primer such as Silikal® RU 727, R 51 or R 52 resin. A small amount (0.5 kg/m²) of sand of 0,7 – 1,2 mm size must be sprinkled into the fresh primer before curing. Mix the formulation carefully to avoid filler lumbs and pour it onto the prepared surface. To controll the thickness use a pin regulated squeguee and then a trowel or scrape off the entire mortar with an aluminium rail

Characteristics of RH 65 as delivered

Property	Measuring method	Approx. value
Viscosity at +20 °C	DIN 53 015	< 50 mPa · s
Flow time at +20 °C, 4 mm cup	DIN 53 211	25 – 30 sec.
Density D_4^{20}	DIN 51 757	0.97 g/cm³
Flash point	DIN 51 755	+10 °C
Pot life at +20 °C (100 g, 5 % pbw. hardening powder)	approx. 18 min.	
Application temperature	0 °C to +35 °C	

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Characteristics of RH 65 in the hardened state

Property	Measuring method	Approx. value
Density	DIN 53 479	1.12 g/cm³
Ultimate elongation	DIN 53 455	75 %
Tensile strength	DIN 1164	8 N/mm²
Shore-D	DIN 53 505	40 – 45 units
Water absorption, 4 days	DIN 53 495	125 mg (50 · 50 · 4 mm)
Modulus of elasticity	DIN 53 457	205 N/mm²

Characteristics of RH 65 mortar (1 : 8 with filler) in the hardened state

Property	Measuring method	Approx. value
Compressive strength	DIN 1164	30 N/mm²
Tensile strength	DIN 1164	15 N/mm²
Modulus of elasticity	DIN 53 457	1200 N/mm²

Hardener dosages

Temperature	Hardening powder % pbw. *	Pot life approx. min.	Hardening time approx. min.
0 °C	5.0	20	80
+5 °C	4.0	19	70
+10 °C	3.0	19	65
+15 °C	2.0	18	60
+20 °C	1.5	18	55
+ 25 to +35 °C	1.0	12	50

* The quantity of hardening powder is always related to the quantity of resin including Additive I.
For further information, please refer to the separate product information sheet **"SILIKAL® Hardening Powder"**.

CE

SILIKAL GmbH · Ostring 23 · 63533 Mainhausen · Germany
10[1]
RH 65 - 001
EN 13813 SR-AR1-B1,5-IR4
Synthetic resins for internal uses
(Application in accordance with the newest technical information)

Reaction to fire:	E_{fl}
Release of corrosive substances (Synthetic Resin Screed):	SR
Water permeability:	NPD [2]
Wear resistance (Abrasion Resistance):	AR 1 [3]
Bond strength:	B 1,5
Impact resistance:	IR 4
Sound insulation:	NPD [2]
Sound absorption:	NPD [2]
Thermal resistance:	NPD [2]
Chemical resistance:	NPD [2]

CE-labelling

[1] Last two digits of the year in which the ce marking was affixed.
[2] NPD = No performance determined.
[3] Refers to a smooth surface without broadcasting.

Other applicable documents	Data sheet	Page
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The substrate	DUG	109 – 110
Fillers and pigments	FUP	111 – 112
Information on safety and protection	SUS	113 – 115
Storage and transport	LUT	116 – 117

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