

PRODUCT DATA SHEET

Sikafloor®-045 Rapid

RAPID-SETTING CONCRETE RAMPING & PATCHING MORTAR

DESCRIPTION

Sikafloor®-045 Rapid is a rapid setting concrete mortar used for ramping & patching applications for internal & external concrete.

USES

Applied by its self, or part of a system with suitable materials from Sikafloor®, Sikadur® SikaBond® & SikaTite® ranges.

- Rapid setting cement based concrete repair
- Ramping mortar for transition of high to low flooring sections
- Patching floors, stairs & walls

CHARACTERISTICS / ADVANTAGES

- Rapid drying / Fast setting
- Internal & external applications
- Non-combustible
- Very Low VOC
- High early strength 24hrs = 29MPa
- Walkable in as little as 40-50 minutes @ 23°C
- Installation of flooring in 70-100 minutes

APPROVALS / STANDARDS

Green Star (VOC-SCQMD Rule 1168)

PRODUCT INFORMATION

Chemical Base	Polymer modified cement mortar
Packaging	20 kg bag
Shelf Life	Unopened bags can be stored for up to 9 months in a cool, dry and weatherproof environment.
Storage Conditions	Bags must be stored off the floor. Avoid sitting bags in direct sunlight prior to application.
Appearance / Colour	Grey powder

TECHNICAL INFORMATION

Compressive Strength	1 day cure – 29 MPa 28 day cure – 48 MPa
Water Absorption	Porous

SYSTEM INFORMATION

System Structure	Porous Concrete	Very Porous Concrete	Non-porous Surface
	Sikafloor®-045 Rapid	Diluted Sikafloor® 01 Primer or Water	Sikafloor®-14 Prep N Prime
	Subsequent suitable materials	Sikafloor®-045 Rapid	Sikafloor®-045 Rapid
		Subsequent suitable materials	Subsequent suitable materials

APPLICATION INFORMATION

Mixing Ratio	3.9 - 4.1 Litres of clean, cool water
Yield	12 L - 12 mm @ 1m ²
Layer Thickness	1 - 50mm
Ambient Air Temperature	10°C - 35°C
Pot Life	10 Minutes @ 23°C
Initial Set Time	15 Minutes @ 23°C
Final Set Time	17 Minutes @ 23°C
Waiting Time / Overcoating	Allow 60 – 90 minutes at 23°C prior to subsequent applications

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

LIMITATIONS

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- Do not install Sikafloor®-045 Rapid over timber or metal substrates.
- Do not mix or apply Sikafloor®-045 Rapid in temperatures below 10°C and above 35°C and under hot and windy conditions.
- Keep product cool prior to mixing and do not leave bags in direct sun for extended periods.
- Protect from hot or strong winds and extremes of temperature for 12hrs after being applied to avoid rapid moisture loss leading to cracking or crazing.
- All construction/expansion joints in existing concrete must be reflected through Sikafloor product as soon as possible to do so.
- Not recommended as a trafficable surface.

ECOLOGY HEALTH AND SAFETY

CLEANING

Clean tools and equipment with warm water and detergent while the product is still wet.

HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other

safety related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

High speed heavy duty electric drill and mixing paddle. Suitable size bucket/vessel - 20L +

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete floors should be fully cured, structurally sound, clean, dry (NZS 1884), and free of surface contaminants and dust for Eg. Concrete must be porous and accept water penetration. Test by lightly sprinkling water on various areas of the substrate. If water penetrates, then a good bond with Sikafloor®-045 Rapid can be achieved. If water beads and fails to be absorbed by the concrete surface contaminants are present then loss of adhesion may occur. Contaminates that are present should be mechanically removed before installation. Concrete must be free of efflorescence and not subject to hydrostatic pressure. If the concrete substrate has efflorescence or high moisture (RH) and moisture sensitive flooring is being installed, Sikafloor® Moisture Barrier System may be considered (Sikafloor®-158 W Fast Barrier + Sikafloor®-14 Prep N Prime + Sikafloor®-045 Rapid). Contact your local Sika® office for further information.

Priming:

A bond strength of 1.2MPa between Sikafloor®-045 Rapid to a smooth porous concrete surface can be achieved without the use of a primer. For optimal adhesion or if the concrete is extremely porous (mechan-

ically prepared or broken concrete) a Sikafloor® Primer or pre-dampening with water may be considered. The use of a primer or wetting the surface with water enhances bond strength and reduce rapid moisture loss from mortar giving longer working time. See applications for further details.

MIXING

Mix the entire 20kg bag of powder with 3.9 - 4.1 Litres of clean, cool water. Slowly add powder to the water while mixing with a suitable electric drill and mixing paddle. Thoroughly mix for only 1 minutes to a lump free consistency and apply directly. Not mixing for the recommended time or additional water may result in product irregularities and possible product failure.

APPLICATION

Using Sikafloor®-045 Rapid prior to floor coverings:

Grading/Ramping

Once product is mixed immediately apply and begin working to heights required. Product can be worked/shaped/shaved with the back of a trowel up to 20 minutes after application.

Using Sikafloor®-045 Rapid to repair concrete:

Patching concrete

On a well prepared clean and roughened concrete surface a bonding primer is generally not required, but pre-dampening of the surface with water is recommended. After water has been applied and allowed to soak the concrete surface should achieve a dark matt appearance without glistening and surface pores and pits shall not contain water. The surface shall not be allowed to completely dry before application of Sikafloor®-045 Rapid.

If priming is preferred first diluted Sikafloor® 01 Primer 1:3 with water then apply by way of a brush till all areas have been coated and allow to dry. Once placed, a trowel is used to pack & shape Sikafloor®-045 Rapid into the concrete void. Sikafloor®-045 Rapid can also be left high of the finished surface required and shaved using the trowel until full set. Working time 15 - 20 min @ 23°C.

Note: Freshly applied Sikafloor®-045 Rapid must be protected from damp, condensation and all forms of water while curing for at least 24 hours.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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