BUILDING TRUST

PRODUCT DATA SHEET

SikaScreed® Rapid-75

Fast Setting Cementitious floor leveling Mortar

PRODUCT DESCRIPTION

SikaScreed® Rapid-75 is a polymer modified, rapid setting, load bearing and over-coatable, horizontal levelling mortar that is designed for application in a minimum layer thickness of 12 mm. It is shrinkage compensated, plus it has high abrasion resistance and compressive strength.

USES

SikaScreed® Rapid-75 is a floor screed to form ramps, level or raise concrete floors at a thickness between 12–75mm in one working step.
SikaScreed® Rapid-75 is useable as screed for industrial service conditions on it's own but especially when sealed with a PU or EP resin top coat from medium to high load (heavy-traffic + forklift pallet truck with impact load).
SikaScreed® Rapid-75 is useable as screed for exterior and interior areas.

CHARACTERISTICS / ADVANTAGES

- Pre-bagged for quality
- Just add water
- High early strength
- Rapid setting
- Contains no chloride admixtures
- Non corrosive to steel
- Can be overcoated

APPROVALS / STANDARDS

- Cement based screed CT-C70-F6-A1 according to EN 13813, declaration of performance 16232814, and provided with CE marking

PRODUCT INFORMATION

Chemical Base	Portland cement, selected aggregates and additives.	
Packaging	25kg bags	
Appearance / Colour	Powder, grey	
Shelf Life	6 months from date of production	
Storage Conditions	Store properly in original unopened, sealed and undamaged packaging in dry and cool conditions.	
Density	Bulk density	1.55 kg/litre
	Fresh mortar density	2250 kg/m³
Maximum Grain Size	Dmax: 4.0 mm	

TECHNICAL INFORMATION

Abrasion Resistance	AR 1		(EN 13892-4)
Compressive Strength	~35 N/mm²	1 day / +20°C	(EN 196-1)
	~55 N/mm²	7 day / +20°C	
	~70 N/mm²	28 day / +20°C	
Flexural Strength	~4.5 N/mm²	1 day / +20°C	(EN 196-1)
	~6.0 N/mm²	7 day / +20°C	
	~6.0 N/mm²	28 day / +20°C	

SYSTEM INFORMATION

System Structure	Priming	SikaScreed®-20 EBB
	Screed	Apply SikaScreed® Rapid-75 to the required thickness 12-75 mm
	Coating	All kinds Sikafloor® EP, PMMA and PU coatings

APPLICATION INFORMATION

Mixing Ratio	2.5 to 2.9 Litres of water for 25 kg powder	
Consumption	~ 2.25 kg/m²/mm	
Layer Thickness	Minimum	12 mm per operation
	Maximum	75 mm per operation
Ambient Air Temperature	minimum +5°C / maximum +30°C	
Substrate Temperature	minimum +5°C / maximum +30°C	
Pot Life	60 minutes at +20°C Lower or higher ambient and substrate temperatures retard or accelerate the above times significantly.	

VALUE BASE

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

- Do not mix with other cements or cement based screeds.
- No loading for at least 3 hours.
- Freshly applied SikaScreed® Rapid-75 must be protected from damp, condensation and water for at least 24 hours.
- Do not exceed the recommended water dosage.
- Do not add more water when the product is starting to set.
- Do not exceed the recommended thicknesses.
- Raw material-related variations in the color, texture, pores on the surface are in mineral systems (floor screeds) normally and no reason for complaint.
- Also under certain circumstances (drafts, sunlight, low humidity, etc.) fine "hairline cracks" can be expected.
- To ensure optimum of colour consistency, it is essential that the floor laying operation is as clean and protected from the environment as possible.
- Temperatures below +15 °C extend the drying times.
- Protect from direct sunlight, hot or strong winds and extremes of temperature to avoid cracking or crazing, small superficial hairline cracks or crazing are normal occurrence under these conditions and do not constitute a reason for claim.
- When overcoating with SikaCeram® or Sikabond® adhesives (or others), additional mechanical preparation may be required to remove any cement laitance which may have formed during application.
- A preliminary test area is recommended when other products are used for covering.
- Contact with vertical structures should be avoided by putting in a perimeter isolating strip.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

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

SUBSTRATE QUALITY / PRE-TREATMENT

BONDED SCREED
Concrete substrate must be structurally sound and of sufficient compressive strength (>25 N/mm²) with a minimum tensile adhesion strength of 1.5 N/mm².
Substrates must be clean, free of all contaminants such as dirt, oil, grease and loose friable material. Cement laitance, coatings or other surface treatments must be completely removed.
Cementitious substrates must be prepared mechanically using suitable abrasive blast cleaning or planing / scarifying equipment to remove cement laitance, coatings or other surface treatments and achieve an open textured gripping surface profile suitable for the overlying SikaScreed®.
Concrete and cementitious substrates surface preparation for SikaScreed®-20 EBB: Minimum substrate roughness of 0.5 mm according to EN 1766 or ≥ CSP 3 (International Concrete Repair Institute) or equivalent.
As a guide, substrate / SikaScreed® Rapid-75 tensile adhesion strength ≥ 1.5 N/mm² or a tensile failure in the substrate concrete or as specified in contract documentation.
For critical adhesion applications it is recommended that preliminary site trials incorporating adhesion pull-off tests to confirm substrate / SikaScreed® Rapid-75 tensile adhesion strengths are carried out to verify values are acceptable for the application.
All dust, loose and friable material must be completely removed from all surfaces before application of SikaScreed® Rapid-75, preferably by vacuum extraction equipment.
Dewpoint: Beware of condensation! The substrate and uncured floor must be at least 3 °C above dew point to reduce the risk of condensation, blooming or laitance on the floor finish.

MIXING

SikaScreed® Rapid-75 levelling mortar: 2.5 - 2.9 litres of water per 25 kg bag.
In a suitable container, mix the SikaScreed® Rapid-75 and water in the specified ratio with an electric mixer (maximum 500 rpm.) until it is smooth and homogeneous.
It is important to mix for minimum 3 minutes.

APPLICATION

BONDED SCREED
Bonding bridge
SikaScreed®-20 EBB: To the prepared dry or matt damp substrate without any standing water. Apply SikaScreed® Rapid-75 ‘wet on wet’ within 30 minutes of mixing (+20°C). Also refer to SikaScreed®-20 EBB Product Data Sheet.
Note: If the SikaScreed®-20 EBB bonding bridge has dried, it must be removed mechanically and replaced before application of SikaScreed® Rapid-75.
Mix the SikaScreed® Rapid-75 in a paddle mixer and apply on the correctly prepared substrate and screed off to level with battens. To obtain optimum surface strength, finish the SikaScreed® Rapid-75 with suitable trowels or floats. Do not use heavy troweling machines (like sit up power floating machines).
Spraying of water onto the surface as treatment is strongly prohibited and lead to less surface strength.
Don´t forget curing! Curing must start immediately after the last finishing operation, using polyethylene sheet.
In drafty areas, open spaces, and in a very dry climate, the freshly applied mortar immediately has to be covered with a polyethylene sheet (before finishing).
Don´t apply SikaScreed® Rapid-75 in a summery climate direct in the sunlight.
When expected temperatures are above +25°C, the start application must be after reaching the daily maximum temperature.
The substrate, the dry mortar (bags) and the water must be kept cool.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use.
Hardened/cured material can only be mechanically removed.

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.

SIKA LIMITED
Watchmead
Welwyn Garden City
Hertfordshire, AL7 1BQ
Tel: 01707 394444
Web: www.sika.co.uk
Twitter: @SikaLimited