

PRODUCT DATA SHEET

Sika FastFix®-1100

Fast setting, high early and ultimate strength, shrinkage-compensated, thixotropic repair mortar

DESCRIPTION

Sika FastFix®-1100 is a single component, fast setting and hardening, thixotropic repair and bedding mortar that meets the requirements of class R4 according to EN 1504 part 3.

It is a ready-to-use repair material that contains hydraulic binders, well graded sands, specially selected fibres and special additives providing rapid strength build-up even at near-freezing temperatures, improved durability and unmatched low drying shrinkage.

When mixed with water, Sika FastFix®-1100 forms a thixotropic mortar suitable for trowel application at thicknesses ranging from 10 mm to 100 mm.

USES

- Engineered for the most demanding jobsite conditions where very short traffic disruption periods are required.
- Enables rapid reinstatement, thereby optimizing traffic management.
- Horizontal and inclined patch repair areas.
- Bedding small to medium size manhole frames.
- Bedding curb stones and pavement stones.

FEATURES

- User-friendly application with excellent workability.
- Versatile formulation suitable for both internal and external use.
- Very high early and final strengths.
- Reliable application even in cold weather conditions.
- Excellent adhesion and durability.
- Minimized cracking tendency due to constrained shrinkage by the use of fibres.
- Low shrinkage characteristics contributing to improved durability.
- Enhanced reinforcement protection due to very low water absorption and good carbonation resistance.
- Ultra rapid strength build-up, allowing full reopening to traffic within just 2 hours at +20 °C.
- Higher thickness application possible with the addition of gravel.
- Excellent freeze-thaw resistance.
- Maintains good skid resistance, including in wet conditions.

PRODUCT INFORMATION

Packaging	25 kg bags
Appearance and colour	Grey powder
Shelf life	9 months if stored at mentioned storage conditions.
Storage conditions	Store at ambient temperatures, out of direct sunlight, in cool, dry warehouse conditions and clear of the ground on pallets protected from rain.
Maximum grain size	3.0 mm
Total chloride ion content	≤ 0.05% (EN 1015-17)

TECHNICAL INFORMATION

Compressive strength	2 hours	~ 20 N/mm ²	(EN 12190; ASTM C109)
	4 hours	~ 30 N/mm ²	
	1 day	~ 45 N/mm ²	
	7 days	~ 60 N/mm ²	
	28 days	~ 70 N/mm ²	
Modulus of elasticity in compression	~ 35,000 N/mm ²		(EN 13412; ASTM C469-94)
Flexural-strength	1 day	≥ 6 N/mm ²	(EN 196-1; BS 6319-7)
	7 days	≥ 7 N/mm ²	
	28 days	≥ 9 N/mm ²	
Shrinkage	≤ 0.3 mm/m at 28 days		(EN 12617-4)
Tensile adhesion strength	≥ 3.0 N/mm ² at 28 days		(EN 1542; ASTM D4541)
Capillary absorption	≤ 0.1 kg.m ⁻² .h ^{-0.5} at 28 days		(EN 13057)

APPLICATION INFORMATION

Mixing ratio	3.1 to 3.6 L water per 25 kg bag.		
Yield	25 kg bag will yield ~ 12.9 litres of mortar.		
Layer thickness	Minimum	10 mm	
	Maximum	100 mm	
Material temperature	+5 °C to +30 °C		
Ambient air temperature	0 °C to +35 °C		
Substrate temperature	0 °C to +30 °C		
Pot Life	~ 20 minutes at +20 °C <small>Pot life varies with temperature. Elevated temperatures reduce pot life, whereas lower temperatures increase it.</small>		
Applied product ready for use	Open to light traffic (at +20 °C)	60 minutes	
	Open to heavy traffic (at +20 °C)	120 minutes	
Fresh mortar density	~ 2.20 kg/l		

BASIS OF PRODUCT DATA

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

LIMITATIONS OF USE

- Do not apply Sika FastFix®-1100 at temperatures below 0 °C or above + 30 °C.
- For repair applications over 100 mm, 7.5 kg of clean gravel (4-8 mm or 8-16 mm depending on the final thickness) must be added to 25 kg of Sika FastFix®-1100 powder.
- Other additions like cement or other substances that could affect the properties of Sika FastFix®-1100 are not allowed.
- Never add water or fresh mortar to a mortar mix which has already begun to set.
- Keep the mixing water ratio between the recommended limits.

- For application at low or near-freezing temperatures, the use of warm mixing water is recommended to prevent excessive delay in mortar hardening.
- Do not wet cure the material.
- Protect from rain and strong winds.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Concrete must be fully cured, clean, and structurally sound to ensure reliable adhesion. Remove all loose material, dust, laitance, oil, grease, and other contaminants. Prepare the substrate using non-impact, non-vibrating methods such as shot blasting, sandblasting, or high-pressure water blasting until sound aggregate is exposed.

Feather edging is not permitted. All repair boundaries must be cut vertically to provide a defined minimum edge depth of 10 mm. If reinforcement is exposed, clean it to a minimum Sa 2 finish in accordance with ISO 8501-1 / ISO 12944-4, ensuring the back of the bar is also treated. Replace reinforcement where section loss compromises structural integrity, and maintain a minimum 20 mm cover when installing new steel. The mortar may be applied at ambient temperatures down to +10 °C; however, the substrate temperature must remain above 0 °C and below +30 °C. Frozen concrete or metal components must be fully thawed before application. Ensure the substrate and reinforcement temperatures remain as uniform as possible during placement and curing.

MIXING

It is strongly recommended that only full bags are mixed. Damaged or opened bags should not be used. First pour the clean water in the mixing container and afterwards, while mixing, add 2/3 of the Sika FastFix®-1100 slowly and steadily into the water. Continue mixing for at least 1 minute. After 1 minute, add the rest of the powder and mix continuously until a homogeneous mortar is obtained. Mix Sika FastFix®-1100 with a suitable paddle attached to a powerful, slow speed electric drill (max 400 rpm). The total mixing time is 3 to 4 minutes until a homogenous, plastic consistency is obtained. Only use clean uncontaminated water.

Note: When adjusting consistency through the addition of extra water, the specified mixing time must be strictly maintained. Do not prepare quantities exceeding what can be applied within the material's pot life (~ 20 minutes at +20 °C).

APPLICATION

Concrete substrates and any metal parts coming in contact with Sika FastFix®-1100 need to be defrosted. The prepared substrate should be pre-soaked, preferably for 24 hours, but at least 2 hours before applying Sika FastFix®-1100. The surface must be mat damp (saturated surface-dry), without standing water. For optimum curing of the product the temperatures during application of Sika FastFix®-1100 must be between 0 °C and +30 °C. Do not apply Sika FastFix®-1100 if the temperature is expected to drop below 0 °C during application or within 24 hours.

General Repair

In order to ensure optimum adhesion, a slurry coat of Sika FastFix®-1100 is brush applied onto the pre-dampened substrate prior to repair applications. Apply the mixed Sika FastFix®-1100 mortar to the substrate, wet-on-wet and spread to the required layer thickness (max. 100 mm). Compact the mortar using trowel. Go over the surface with a levelling board and rub down with a wooden board. Smooth surface with a finishing trowel if necessary.

Use as bedding mortar

Place Sika FastFix®-1100 onto the pre-dampened substrate and overfill slightly to allow for proper compaction. Gently lower the manhole frame, curb, or pavement stone into the fresh mortar and align to the required level. Ensure that the entire bedding area is evenly covered with mortar before lowering the element. Spot applications or partial filling after initial leveling are not permitted.

CURING TREATMENT

Sika FastFix®-1100 is basically self-curing. Wet curing is not advised.

When working at near-freezing temperatures, cover Sika FastFix®-1100 with insulation materials or dry cloths until sufficiently hardened, preferably for 24 hours or until Sika FastFix®-1100 is to be opened for traffic.

CLEANING OF EQUIPMENT

Tools and mixer must be cleaned immediately after use with water. Cured material can only be removed mechanically.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 Gulf B.S.C. (c)

Tel: +973 177 38188
Email: info@bh.sika.com
Sika Kuwait Cons. Mat. & Paints Co WLL
Tel: +965 22 282 296
Email: sika.kuwait@kw.sika.com
Web: gcc.sika.com

Sika UAE LLC

Sika UAE LLC (Branch)
Sika International Chemicals LLC
Tel: +971 4 439 8200
Email: info@ae.sika.com
Web: gcc.sika.com

Sika Saudi Arabia Limited

Riyadh / Jeddah / Dammam / Rabigh
Tel: +966 9200 22167
Email: info@sa.sika.com
Web: gcc.sika.com

Sika MB LLC

Oman
Tel: +968 22 826 500
Email: info@om.sika.com
Web: gcc.sika.com



ISO 9001, 14001, 45001 – SGS:
- Sika UAE LLC
- Sika International Chemicals LLC
- Sika Gulf B.S.C. (c)
ISO 9001, 14001 – SGS:
- Sika Saudi Arabia Limited
ISO 9001, 14001 – TÜV:
- Sika UAE LLC (Branch)
ISO 9001 – SGS:
- Sika MB LLC

All products are supplied under a management system certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and ISO 45001.



Product Data Sheet

Sika FastFix®-1100

April 2026, Version 02.01
020302040040247103