

## PRODUCT DATA SHEET

# Sika® Tilofix

Polymer modified cementitious floor and wall tile adhesive

### DESCRIPTION

Sika® Tilofix is a polymer modified, cementitious, normal setting, self curing, floor and wall tile adhesive. Typically used for small, medium sized ceramic tiles on floor / wall and vitrified tiles upto 4 sqft on floor in residential environments. Suitable for bonding absorbent and partly absorbent ceramic and vitrified tiles to absorbent construction material substrates. Indoor use. IS 15477 Type 1 Adhesive.

### USES

Bonding the following types of tiles for floor and wall:

- Ceramic
- Earthenware

Bonding the following types of tiles for floor:

- Vitrified

Bonding tiles for the following applications:

- Balconies
- Bathrooms
- Kitchens
- Residential environments
- Terraces
- Wet areas

### CHARACTERISTICS / ADVANTAGES

- Bonding ceramic tiles on floor and wall
- Bonding vitrified tiles upto 4 sqft on floor
- Smooth application
- Typical bonding substrates: cementitious
- Suitable for absorbent ceramic and vitrified tiles
- Easy to use, only water to be added
- Better bond than conventional cement based mortar
- Self curing

### PRODUCT INFORMATION

<b>Chemical base</b>	Portland cement, polymers and selected aggregates
<b>Packaging</b>	20 kg bag and 40 kg bag
<b>Appearance / Colour</b>	Grey powder
<b>Shelf life</b>	12 months from date of production
<b>Storage conditions</b>	Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +35 °C.
<b>Product declaration</b>	IS 15477 Type 1 Adhesive

## TECHNICAL INFORMATION

Tensile adhesion strength	Initial / dry condition	$\geq 1.0 \text{ N/mm}^2$	(EN 12004-2 / ISO 13007-2 / IS 15477 : 2019, Annex A)
	After water immersion / wet condition	$\geq 0.5 \text{ N/mm}^2$	
	After heat ageing	$\geq 0.5 \text{ N/mm}^2$	
	After > 10 minutes, open time	$\geq 0.5 \text{ N/mm}^2$	

## SYSTEM INFORMATION

**System structure** Sika provides a full range of system solution in Tile setting. As a guide following products are available for use in different applications:

Category	Product
Tile adhesive - Type1	Sika® Tilofix
Tile adhesive - C1T	SikaCeram®-155
Tile adhesive - C2T	SikaCeram®-212
Tile adhesive - C2TE	SikaCeram®-255
Tile adhesive - C2TES1	SikaCeram®-288 H
Floor leveling	SikaCeram®-488 Floor Leveler
Epoxy tile grout	SikaCeram®-888 Tile Grout EP
Cementitious tile grout	Sika® Tilogrout

## APPLICATION INFORMATION

Mixing ratio	Packing	Water to powder ratio by weight	Quantity of water per bag
	20 kg	0.22–0.24	4.4–4.8 L
	40 kg	0.22–0.24	8.8–9.6 L

**Fresh mortar density** 1.8 ± 0.2 kg/L

**Consumption** Consumption is dependent on the substrate, surface profile, roughness and application technique.

As a guide for a single adhesive layer:

Size of tiles	Notched trowel size	Consumption
Small	6 mm	~4 kg/m <sup>2</sup>
Medium	8 mm	~5 kg/m <sup>2</sup>
Large	10 mm	~6 kg/m <sup>2</sup>

**Layer thickness** 3 mm min.

**Ambient air temperature** +5 °C min. / +45 °C max.

**Substrate temperature** +5 °C min. / +45 °C max.

**Maturing time** ~3 minutes

**Pot life** ~110 minutes (EN 12004-2 / ISO 13007-2)

**Open time** > 10 minutes ((EN 12004-2 / ISO 13007-2))

**Adjustability time** ~8 minutes

Applied product ready for use	Use	Waiting time
	Grouting floors / walkable	24–36 hours
	Grouting walls	4–6 hours
	Full traffic	~14 days

Values determined at laboratory conditions: 23 °C ± 2 °C, R.H. 50 % ± 5 %. Higher temperatures will reduce the indicated waiting times, lower temperatures increase them.

## 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.

## IMPORTANT CONSIDERATIONS

- Gypsum plaster and anhydrite screed substrates must have a maximum moisture content of 0.5 %.
- If a waterproofing layer is required under the tiles, cement-based and acrylic-based products are suitable for use under Sika® Tilofix.
- Avoid application in direct sunlight and/or strong wind / draughts.
- Protect from adverse weather conditions, such as extremely high or low (freezing) temperatures, rain, for at least 12–24 hours from application.
- Do not apply on metal or wood surfaces.
- Do not add anything to the product that is not specified in this Product Data Sheet.
- Do not use for any applications not explicitly described in this Product Data Sheet.

## ECOLOGY, 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

### SUBSTRATE QUALITY / PRE-TREATMENT

- Cementitious substrates must be sufficiently cured and dried (2–6 weeks). All substrates must be structurally sound, able to support the weight of the new tiling and provide a stable and securely fixed background. Surfaces shall be clean, dry, free of any loose or friable particles, contaminants such as dust, dirt, oil, wax, polish grease, cement laitance or efflorescence.
- Depending on the substrate condition and contaminants to be removed from the surface, use adequate preparation techniques to remove all traces of any materials that could reduce the product's adhesion to the substrate. Smooth surfaces should be roughened lightly to improve adhesion. To confirm adequate surface preparation and coating adhesion, carry out a small trial before full application.
- Any small surface defects and variations in level, profile, or around exposed aggregates can be prefilled and levelled with an additional layer of Sika® Tilofix to a maximum thickness of 5 mm, applied at least 24 hrs before full adhesive application. For larger and thicker areas of surface reprofiling and making good, use appropriate mortars from the Sika MonoTop® or SikaCeram® Level range. Cracks in substrates must be identified and sealed appropriately e.g. with Sikadur® epoxy resins.
- For applications in hot climates / environments, or on absorbent substrates, thoroughly pre-dampen the surface immediately prior to product application.

Avoid any ponding / standing water on the surface. Surface must not be damp to touch.

- For tiling in wet rooms, a suitable Sika® waterproofing product / system should be applied to the substrate before tiling.

### MIXING

- Pour the recommended amount of clean cold water into a suitable, clean mixing container.
- Slowly add Sika® Tilofix powder to the water and then mix thoroughly using a low speed (< 500 rpm) drill mixer until the material is fully mixed and lump free. Avoid entraining air into the mix by over mixing.
- Allow the product to 'mature' for 2–3 minutes before remixing for 30 seconds.
- The finished mix has a creamy consistency, uniformly coloured and is easy to apply and spread.

### APPLICATION

- Sika® Tilofix is applied using a suitable notched trowel.
- Apply adhesive to the prepared fixing surface with the appropriate trowel and comb to the required bed thickness. Coverage on the back of the tiles should be 100 %.
- Tiling must be carried out on freshly applied adhesive, exerting adequate pressure to ensure complete and uniform contact with the adhesive for optimum bond.
- If a skin forms on the surface of the adhesive, immediately remove the adhesive layer with the trowel, discard material and apply a fresh layer of Sika® Tilofix adhesive.
- Adjust tiles if required.
- Clean off surplus adhesive from tile face and between tile joints before the adhesive has dried.
- After the required waiting time apply the appropriate grout into the tile joints.
- Sika® Tilofix is ideal for laying absorbent ceramic and vitrified tiles up to 900 cm<sup>2</sup> (e.g. 30 × 30 cm), for indoor application only.
- Tiles > 900 cm<sup>2</sup> (e.g. 30 × 30 cm), the double-spreading (buttering) technique is always recommended.

### CLEANING OF TOOLS

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

## LOCAL RESTRICTIONS

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

## 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 India Pvt. Ltd.

620, Diamond Harbour Road  
Commercial Complex II  
Kolkata - 700 034  
Tel : +91 33 24472448  
Fax : +91 33 23978688  
Mail : info.india@in.sika.com



### Product Data Sheet

Sika® Tilofix  
April 2021, Version 02.01  
021710101000000002

SikaTilofix-en-IN-(04-2021)-2-1.pdf