



# Sika® 1

## Waterproofing Admixture for Sand/Cement Render, Screeds and Mortar

### Technical Data Sheet

#### DESCRIPTION

**Sika 1** is an aqueous solution containing complex colloidal silicates. In the presence of water these swell and block the capillaries and pores in the applied sand/cement renders, screeds and mortar to provide an effective barrier against the transmission of liquid water.

#### USES

- \* Structural waterproof renders to resist water pressure below ground.
- \* Structural waterproof screeds to resist water pressure below ground.
- \* Waterproof renders to resist moisture and dampness above ground level.
- \* Internal waterproof tanking.
- \* General waterproofing admixture for mortar
- \* Part of the **Sika Watertight Concrete** system (See separate BBA certificate and data sheet).

#### ADVANTAGES

- \* Proven for more than 90 years.
- \* Pre batched system mortars available.
- \* For brick, concrete and stone substrates.
- \* Compatible with OPC and SRC.
- \* Can be applied against live water infiltration.
- \* Wall render and screed application.
- \* Can be used internally and externally.
- \* Excellent resistance to backwater pressure.
- \* Excellent vapour resistance.
- \* Complies with Water Quality Regulations.
- \* Certified by the British Board of Agrément.
- \* Complies with Building regulations (England, Wales, Scotland and Northern Ireland).
- \* Suitable for contact with potable water.

#### Technical Data (typical)

<b>Form:</b>	Liquid
<b>Colour:</b>	Yellow
<b>Liquid Density:</b>	1.05 kg/litre
<b>Chloride Content:</b>	Nil
<b>Freezing Point:</b>	0°C
<b>System Application Temperature</b>	5°C or above
<b>Suitability:</b>	All Portland cements including sulphate resisting.

Approved for potable water contact.  
Details available on request.

All above values are approximate.

#### Sika 1 Structural System Waterproofing Compliance:

BS8102:1990 - Code of practice for protection of structures against water from the ground.

**Sika 1** structural waterproof renders and screeds in 3 or 4 coats provides protection suitable for basements of the following grades:

#### Grade 1

Basic utility: Slight seepage and damp patches tolerable

#### Grade 2

Residential and Commercial: No water penetration but moisture vapour tolerable

#### Grade 3

Ventilated residential and working areas: A dry environment is required and water penetration is intolerable

#### Grade 4

Controlled environments, archives, computer rooms etc: A totally dry environment, vapour impermeable  
NOTE: Additional vapour proof Sika coating required over render system

Owing to the specialist nature of structural waterproofing, all work should be carried out by a Sika recommended contractor. Workmanship should comply with BS8000: Pt4: 1989 Code of Practice for waterproofing. Contact **Sika Limited** for contractor information.

## APPLICATIONS

### STRUCTURAL WATERPROOFING BELOW GROUND: RENDER AND FLOOR SCREED SYSTEM

#### General

All walls and floors should be sufficiently sound and solid to accept preparation techniques and the waterproofing system. This should be determined by suitably qualified personnel.

The correct installation of the **Sika 1** waterproofing system is the responsibility of the recommended contractor. In the unlikely event of the **Sika 1** waterproofing system cracking, debonding, leaking etc, the work shall be rectified by the contractor. In the event of a dispute the advice of an independent consultant experienced in this type of work should be sought to analyse the problem.

**Sika 1** liquid is diluted (1:10 by volume) with clean water and mixed with the appropriate pre batched mortar (see separate technical data sheet) by volume to produce wall render and floor screed mixes. Nominal thicknesses:-  
Wall render 20 mm (3 coats), 26 mm (4 coats)  
Floor screed 40 mm (3 coats).

Points of water infiltration should be sealed using and leak plugging, and quick setting waterproofing compounds such as Sika 2, 3 4 and 4a.

The correct detailing of lap joints, floor/wall joints, watertight joints, pipe/duct entries, fixings etc is essential for the performance of the **Sika 1** waterproofing system. Reference should be made to detailing sheets 1-4 inclusive.

The following guidelines indicate where a four coat render system should be considered:-

- \* Structures experiencing high water infiltration, and requiring water stopping (plugging), de-watering activities, high water tables, deep basements, local spring conditions etc.
- \* Grade 2, 3 and 4 structures where the render system will be difficult to maintain in the event of water penetration.

Advice should always be sought from independently qualified personnel with knowledge of the structure and local water/ground conditions. If in doubt a four coat render system should be used.

#### Handling Precautions

Sika products are generally harmless provided that certain precautions normally taken when handling chemicals are observed. The materials must not, for instance, be allowed to come in contact with foodstuffs or food utensils and measures should also be taken to prevent the uncured materials from coming in contact with the skin, since people with particularly sensitive skin may be affected. The use of protective clothing, goggles, barrier creams and rubber gloves is required. The skin should be thoroughly cleaned at the end of each working period either by washing with soap and warm water or by using a resin-removing cream - the use of powerful solvents is to be avoided. Disposable paper towels - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. In case of accidental eye or mouth contact, flush with water - consult a doctor immediately. Health and Safety information on Sika Products is available and we strongly advise that this is read prior to their use. Sika products are for professional use and should be stored in sealed containers away from the reach of children.

#### Important Note

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 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 proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent issue of the Technical Data Sheet for the product concerned, copies of which will be supplied on request.

**Please consult our Technical Sales Department for further information**

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The **Sika 1** waterproofing system must be cured correctly. Refer to Installation Guide for more details.

Reference should **ALWAYS** be made to the Detailing, Architectural and Engineering Consideration sheets, Agrément certificates and Installation Guide.

### WATERPROOF RENDER TO RESIST MOISTURE AND DAMPNESS ABOVE GROUND LEVEL

Nominal thickness 12.0 mm (2 coats).  
Refer to Installation Guide before applying system.

### SIKA WATERTIGHT CONCRETE

**Sika 1** can be used to produce a watertight concrete in conjunction with **Sikament 10**.  
Refer to separate **Watertight Concrete** technical data sheet.

### GENERAL WATERPROOFING ADMIXTURE

The addition of **Sika 1** to all types of mortar will increase the resistance to water damage due to frost and efflorescence. **Dilution:** 1:10 with the gauging water.

### IMPORTANT CONSIDERATIONS

- \* Do not mix plasticisers, lime, etc. with **Sika 1** mixes.
- \* NEVER scratch previous coats in render to form a key, as this may let dampness through.
- \* Do not penetrate **Sika 1** render or screed with fixings. Refer to Detail Sheet No 2

### PACKAGING

Refer to current price list.

### CONSUMPTION/DOSAGE

For structural waterproofing, waterproof render and watertight concrete refer to separate data sheets (**Sika 1 Prebatched Mortars** or **Sika 1 Watertight Concrete**).

As a general waterproofing admixture:  
1½ litres for 50 kg of cement

All above values are approximate

### STORAGE AND SHELF LIFE

Minimum 1 year in unopened original sealed containers stored in dry warehouse conditions (+10°C - +30°C).