



# SikaFirestop

## One Part Silicate Based Intumescent Fire Proof Sealant

### Technical Data Sheet

#### DESCRIPTION

**SikaFirestop** is a one part gun applied fire proof intumescent sealant, based on polymerised inorganic silicate. It has outstanding resistance to fire with temperatures upto 1000°C. At temperatures in excess of 250°C, carbon dioxide gas is produced causing the material to swell.

#### USES

**SikaFirestop** is suitable for all types of non moving joints and seals in fire compartments such as:

- \* Fire doors.
- \* Plugging and sealing of gaps in walls, chimneys and linings
- \* Sealing of all service and non service penetrations.
- \* Cracks in walls.

#### ADVANTAGES

- \* Excellent adhesion to most construction materials.
- \* Single component - no site mixing.
- \* Easy to use.
- \* Excellent fire resistance - tested "Flame On".
- \* Outstanding resistance to fire.
- \* Inorganic - non ignitable and does not give off fumes in fire.

#### FIRE RESISTANCE

Many fire resistant sealants and caulks are tested in configuration that involves sealing the external face of the fire compartment (ie the sealant is insulated from the heat source) in order to achieve a particular rating. This is not typical of many of the installations made in practice, so **SikaFirestop** has been tested in the "face on" position representing the sealant being exposed directly to a heat source.

#### Technical Data (typical)

<b>Colour:</b>	Black
<b>Density:</b>	1.97 kg/litre
<b>Service temperatures: Range:</b>	-40°C to +1000°C
<b>Cure rate:</b>	2 mm/day
<b>Application temperature:</b>	+5°C min, +30°C max (Substrate and ambient)
<b>Tack free time:</b>	6 to 12 hours (+23°C / 50% RH)

All above values are approximate.

#### FIRE RATING PERFORMANCE OF SikaFirestop IN JOINTS

Substrates	Joint Width	30 minute		60 minute		120 minute		240 minute	
		Vertical & Floor	Overhead (Soffit)	Vertical & Floor	Overhead (Soffit)	Vertical & Floor	Overhead (Soffit)	Vertical & Floor	Overhead (Soffit)
Steel to Steel	25mm	S	S	S	S	S	S	S	S
Steel to Concrete	25mm	S	S	S	S	S	S	S	S
Concrete to Concrete	25mm	S	S	S	S	S	S	S	S
Concrete to Concrete	45mm	S	S	S	S	S	S	S	S
Lightweight Block to Concrete	25mm	S	S	S	S	S	S	S	S
Lightweight Block to Lightweight Block	25mm	S	S	S	S	S	S	S	S

Tested in accordance with the principals of BS 476 Part 20 S = Suitable Rating for all joints up to width specified.  
Recommendations extracted from integrity results given in Warres No 48334.

## SURFACE PREPARATION

All surfaces must be sound, clean, dry and free from any surface contaminants.

All loose particles, paint, laitance, rust and other poorly adhering materials should be removed with a rotary mechanical wire brush, grinding or grit blasting followed by blowing out with oil free compressed air.

Iron and steel should be protected by an anti-corrosion primer such as **Icosit® EG1** prior to sealing.

## PRIMING

No priming required.

## APPLICATION

- \* Insert **Sika® Joint Backing Rod** to required depth.
- \* Insert cartridge into sealant gun and firmly extrude **SikaFirestop** into the joint making sure that it is in full contact with the sides of the joint.
- \* Fill the joint, avoiding air entrapment.
- \* **SikaFirestop** should be tooled firmly against joint sides to ensure good adhesion.

Also refer to BASA/CIRIA application guidelines.

Masking tape should be used where sharp exact joint lines or exceptionally neat lines are required. Remove the tape whilst the sealant is still soft.

## IMPORTANT CONSIDERATIONS

- \* **SikaFirestop** should not be used for structural glazing.
- \* **SikaFirestop** is overpaintable. Only use compatible fire rated coatings.
- \* Do not use **SikaFirestop** in contact with materials containing bitumen or pitch.
- \* **SikaFirestop** should only be used for joints with little or no movement. For use with expansion joints **SikaFirestop** should be used in conjunction with **SikaFiresil** applied over (see separate data sheet).
- \* For best results use opened cartridges the same day.

## CLEANING

Clean tools immediately with water.

## PACKAGING

Refer to latest price list.

## CONSUMPTION

Theoretical consumption of **SikaFirestop** per 310cc sausage (without wastage):

$$\text{Length of joint (m)} = \frac{310}{\text{Joint width (mm)} \times \text{joint depth (mm)}}$$

$$\text{Litres/metre run of joint} = \frac{\text{Joint width (mm)} \times \text{joint depth (mm)}}{1000}$$

$$\text{No of cartridges / sausages required for joint} = \frac{\text{Joint width (mm)} \times \text{joint depth (mm)} \times \text{length (m)}}{\text{volume of cartridge/sausage (ml)}}$$

## STORAGE AND SHELF LIFE

12 months from date of production if stored in cool, dry conditions (@ +5°C to +25°C).

### 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

SIKA LIMITED

Watchmead, Welwyn Garden City, Hertfordshire, AL7 1BQ

Tel: 01707 394444 Email: sika@uk.sika.com

Fax: 01707 329129 www.sika.com

