



# Sikaflex®-HP1

## Low Modulus One Part Polyurethane Elastic Sealant

### Technical Data Sheet

#### DESCRIPTION

**Sikaflex®-HP1** is a one part low modulus gun grade multi purpose polyurethane sealant.

#### USES

**Sikaflex-HP1** has been specially designed to solve most joint movement problems in external and internal applications such as:

- \* Weatherproofing joints between brickwork, blockwork, timber, PVC and concrete or metal frames.
- \* Sealing expansion and construction joints.
- \* Caulking joints.

#### ADVANTAGES

- \* Easy extrusion, application and smoothing.
- \* Fast cure rate.
- \* Can be painted.
- \* Outstanding weather resistance.
- \* Water resistant.
- \* Excellent resistance to ageing factors of cold, heat and ultraviolet light.
- \* Non-flowing.
- \* Highly elastic.
- \* Cures under the effect of atmospheric moisture without shrinkage and without releasing gas, alcohol or acid.

#### Technical Data (typical)

<b>Colour:</b>	White, black, brown, grey, beige
<b>Density:</b>	1.25 kg/litre
<b>Movement Accommodation Factor (MAF):</b>	25%
<b>BS ISO 11600 classification:</b>	F-25LM Mortar, brick, oak, anodised aluminium
<b>Service temperatures: Range:</b>	-30°C to +70°C
<b>Cure rate:</b>	2.0 mm/day (+23°C / 50% RH)
<b>Application temperature:</b>	+5°C min, +40°C max (Substrate and ambient)
<b>Shore A hardness:</b>	20 after 28 days (+23°C / 50% RH)
<b>Tack free time:</b>	4 - 6 hours (+23°C / 50% RH)
<b>Maximum joint width:</b>	35.0 mm
<b>Minimum joint depth for expansion joints:</b>	10.0 mm
<b>Modulus:</b>	0.10 N/mm <sup>2</sup> @ 50% elongation

All above values are approximate.

## 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 using suitable hand or mechanical preparation techniques.

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

## PRIMING

For maximum performance, priming is recommended for all designed movement joints. For the selection of the suitable primer, please consult the **Sikaflex Primer Chart**. Allow primer to become touch dry before applying sealant within minimum and maximum waiting times. When using **Sika Primer 3** on moist substrate, maximum substrate moisture content must not exceed 8% by wt.

## APPLICATION

- \* Insert **Sika® Joint Backing Rod** to required depth.
- \* Apply appropriate primer to joint sides and observe waiting time before application of **Sikaflex-HP1**.
- \* Insert cartridge into sealant gun and firmly extrude **Sikaflex-HP1** into the joint making sure that it is in full contact with the sides of the joint.
- \* Fill the joint, avoiding air entrapment.
- \* **Sikaflex-HP1** should be tooled to a smooth finish.

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.

## JOINT DESIGN

Refer to BASA/CIRIA Guidelines. (CIRIA Publication 80) and current British Standards.

## IMPORTANT CONSIDERATIONS

- \* **Sikaflex-HP1** should not be used for structural glazing.
- \* Protect the finished joint from water for at least X hours.
- \* **Sikaflex-HP1** should be used with care in resealing joints that were previously filled with silicone sealants. All silicone residue must be removed.
- \* Bonded elements may require additional holding or support during curing period.
- \* **Sikaflex-HP1** may be overpainted. However some coatings may crack if movement occurs, preliminary tests recommended.
- \* White colour material may discolour with age, durability will not be affected.
- \* Do not use **Sikaflex-HP1** in contact with materials containing bitumen or pitch.

## CLEANING

Clean tools immediately with **Sika Thinner C**.

## PACKAGING

Refer to latest price list.

## CONSUMPTION

Theoretical consumption of **Sikaflex-HP1** per 310cc sausage (without wastage):

$$\begin{aligned} \text{Length of joint per 310 cc (m)} &= \frac{310}{\text{Joint width (mm)} \times \text{joint depth (mm)}} \\ \text{Litres/metre run of joint} &= \frac{\text{Joint width (mm)} \times \text{joint depth (mm)}}{1000} \end{aligned}$$

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

## STORAGE AND SHELF LIFE

1 year from date of production if stored in cool, dry conditions (@ +10°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

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