Product Data Sheet
12 February 2016

Construction

Sikaflex® Crystal Clear

COMPLETELY TRANSPARENT MULTIPURPOSE ADHESIVE AND SEALANT

Product Description	Sikaflex® Crystal Clear is a 1-component, solvent-free, multipurpose adhesive and sealant with a crystal clear appearance.
Uses	Sikaflex® Crystal Clear is designed as a multipurpose adhesive and is suitable for most surfaces including metal, glass, concrete, plaster, plasterboard, wood surfaces, painted enamel, polyester and plastics. Sikaflex® Crystal Clear is designed as a sealant for vertical and horizontal indoor connection joints between partition walls, for metal and wood constructions.
Characteristics / Advantages	■ 100% crystal clear / transparent ■ Good workability ■ Low shrinkage during cure ■ Especially for home improvement sector ■ Flexible and elastic ■ Can be used on damp concrete ■ Very good adhesion on many typical building materials
Approvals/Standards	EN 15651-1 F EXT-INT CC ISO 11600 F 20 LM

Product Data

Appearance / Colours	Transparent
Packaging	300 g cartridge (290 ml), 12 cartridges per box
Storage Conditions / Shelf-Life	Sikaflex® Crystal Clear has a shelf life of 12 months from the date of production, if it is stored properly in undamaged, original, sealed packaging, and if the storage conditions are met.

Technical Data

Chemical Base	Silane terminated polymer	
Density	1.05 kg/l approx.	(ISO 1183-1)
Tensile Strength	2.0 N/mm2 approx.	(ISO 37)
Shore A Hardness	30 approx. (after 28 days)	(ISO 868)
Elongation at Break	400% approx.	(ISO 37)
Elastic Recovery	70% approx.	(ISO 7389)
Tear Propagation Resistance	4.0 N/mm approx.	(ISO 34)
Service Temperature	−40 °C to +70 °C	
Joint Design		

System Information

Consumption / Joint Design	In spots: ▪ 1 cartridge for 100 x 3 cm spots (diameter = 3 cm; thickness = 0.4 cm) In stripes: ▪Using a nozzle with 5 mm diameter, bead yields approx. 15 m length per 290 ml cartridge (20 ml approx. per linear meter) The joint width must be designed to suit the joint movement required and the movement capability of the sealant. The joint width shall be ≥6 mm and ≤20 mm. A width to depth ratio of 2:1 must be maintained. Joints ≤10 mm in width are for crack control and therefore non-movement joints. What is relevant, is the joint width at the time of application of the sealant (guide value of +10 °C). For larger joints please contact our Technical Service Department.
Backing Material	Use open or closed cell foam backing rods.
Sag Flow	0 mm (20 mm profile, 23 °C) (ISO 7390)
Ambient Air Temperature	+5 °C to +40 °C, min. 3 °C above dew point temperature
Relative Air Humidity	30 % to 90 %
Substrate Temperature	+5 °C to +40 °C
Curing Rate	3 mm/24 hours approx. (23 °C / 50 % r.h.) (CQP 049-2)
Skin Time	30 minutes approx. (23 °C / 50 % r.h.) (CQP 019-1)

Substrate Preparation / Priming	For the application of Sikaflex® Crystal Clear all standard construction guidelines apply. **SUBSTRATE PREPARATION** The substrate must be clean, dry, sound and homogeneous, free from oils, grease, dust and loose or friable particles. Sikaflex® Crystal Clear adheres without primers and/or activators. However, for optimum adhesion and critical, high performance applications, such as on multi-story buildings, highly stressed joints, extreme weather exposure or water immersion, the following priming and/or pretreatment procedures shall be followed: **Non-porous substrates** Aluminium, anodised aluminium, stainless steel, PVC, galvanised steel, powder coated metals or glazed tiles have to be cleaned and pre-treated using Sika® Aktivator-205, wiped on with a clean towel. Before sealing, allow a flash-off time of > 15 minutes (< 6 hours). Other metals, such as copper, brass and titanium-zinc, also have to be cleaned and pre-treated using Sika® Aktivator-205,wiped on with a clean towel. After the necessary flash-off time, use a brush to apply Sika® Primer-3 N and allow a further flash-off time of > 30 minutes (< 8 hours) before sealing the joints. **Porous substrates** Concrete, aerated concrete and cement based renders, mortars and bricks shall be primed using Sika® Primer-3 N applied with a brush. Before sealing, allow a flash-off time of > 30 minutes (< 8 hours).For more detailed advice and instructions please contact the local Sika Technical Services Department. Note: Primers are adhesion promoters. They are neither a substitute for the correct cleaning of a surface, nor do they improve the strength of the surface significantly.

Application Instructions

Application Method / Tools	Sikaflex® Crystal Clear is supplied ready to use. **Bonding** After substrate preparation, apply Sikaflex® Crystal Clear in beads, strips or spots to the bonding surface in intervals of a few centimetres each. Use hand pressure only to set the element to be bonded into position. If necessary, use SikaTack® Panel Tape during the initial hours of curing. An incorrectly positioned element can easily be unfastened and repositioned during the first few minutes after application. Apply pressure again. Optimum bonding will be obtained after the complete curing of Sikaflex® Crystal Clear. The recommended adhesive layer thickness (depending on surface evenness) is ≤3 mm. Fresh, uncured adhesive remaining on the surface must be removed immediately. Final strength will be obtained after complete curing of Sikaflex® Crystal Clear. **Sealing** After the necessary substrate preparation, insert a suitable backing rod to the required depth and apply any primer if necessary. Insert a cartridge into the sealant gun and extrude Sikaflex® Crystal Clear into the joint making sure that it comes into full contact with the sides of the joint and avoids any air entrapment. Sikaflex® Crystal Clear sealant must be firmly tooled against the joint sides to ensure adequate adhesion. It is recommended to use masking tape where exact joint lines or neat lines are required. Remove the tape within the skin time. Do not use tooling products containing solvents.
Cleaning of Tools	Clean all tools and application equipment immediately after use with Sika® Remover-208 and/or Sika® Wonder Wipes. Once cured, residual material can only be removed mechanically.
Further Documents available	■ Pre-treatment Chart Sealing & Bonding ■ Safety Data Sheet (SDS)
Notes on Application / Limitations	▪Before bonding, check adhesion and resistance of paints and coatings by carrying out a trail. ▪Colour variations may occur due to exposure to chemicals, high temperatures and/or UV-radiation. However, a change in colour is purely of aesthetic nature and does not adversely influence the technical performance or durability of the product. ▪Before using Sikaflex® Crystal Clear on natural stone, please refer to Sika Technical Services for advice. ▪Do not use Sikaflex® Crystal Clear on bituminous substrates, natural rubber, EPDM rubber or on any building materials which might bleed oils, plasticizers

Construction

	or solvents that could attack the sealant. ▪Do not use Sikaflex® Crystal Clear to seal joints in and around swimming pools. ▪Do not use Sikaflex® Crystal Clear for joints under water pressure or for permanent water immersion. ▪Do not use outside on easily corroding substrates such as mild steel or iron. ▪Do not use for glass bonding if the bond line or the adhesive and/or substrate interface are directly exposed to sunlight. ▪Do not expose uncured Sikaflex® Crystal Clear to alcohol containing products as this may interfere with the curing reaction.
Health and Safety Information	For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet containing physical, ecological, toxicological and other safety-related 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 Australia Pty Limited
ABN 12 001 342 329

aus.sika.com
Tel: 1300 22 33 48