

Sikasil® IG-25

DECLARATION OF PERFORMANCE

No. 41500570

1	UNIQUE IDENTIFICATION CODE OF THE PRODUCT-TYPE:	41500570
2	INTENDED USE/S	ETA-05/0068/ ETAG 002 Part 1 Edition November 1999 (Revised March 2012) used as EAD Structural sealant for use in Insulating glass units
3	MANUFACTURER:	Sika Services AG Tüffenwies 16-22 8064 Zürich
4	AUTHORISED REPRESENTATIVE:	
5	SYSTEM/S OF AVCP:	System 1 for SSGS kit Types II and IV, System 2+ for SSGS kit Types I and III
6b	EUROPEAN ASSESSMENT DOCUMENT:	Guideline for European technical approval of "Structural sealant glazing systems", ETAG 002 Edition November 1999 (Revised March 2012) Part 1: "Supported and unsupported systems", ETAG 002-1, used as European Assessment Document (EAD) according to Article 66 Paragraph 3 of Regulation (EU) No 305/2011.
	European Technical Assessment:	ETA-05/0068 of 20/01/2016
	Technical Assessment Body:	Deutsches Institut für Bautechnik (DIBt)
	Notified body/ies:	0757

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7 DECLARED PERFORMANCE/S

3.1 Mechanical resistance and stability (BWR 1)

Requirements with respect to the mechanical resistance and stability of non-load bearing parts of the works are under the Essential Requirement safety in use, Section 3.4. Indications for design calculation see Annex 1

3.2 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class F (no performance determined)

The resistance to fire shall be assessed within the framework of the European Technical Assessment for the kit.

3.3 Hygiene, health and the environment (BWR 3) Contents and/or release of dangerous substances:

The chemical composition of the structural sealant has to be in compliance with the composition deposited at the Technical Assessment Body (DIBt).

Within the scope of this European Technical Assessment there may be other requirements applicable to the product (e.g. due to national laws, regulations and administrative provisions). These requirements need also to be complied with if applicable.

3.4 Safety and accessibility in use (BWR 4)

3.4.1 Essential characteristics for the structural bond according ETAG 002-1

Essential characteristic	Performance
Characteristic stress at rupture -tension $R_{u,5}$	0.84 MPa
Characteristic stress at rupture- dynamic shear $R_{u,s}$	0.61 MPa
Characteristic shear at rupture –static shear $R_{u,5}$	0.06 MPa
Modulus of elasticity in tension or compression tangential to the origin E_0	2.2 MPa
Modulus of elasticity in shear tangential to the origin G_0	0.73 MPa
Working time (at 23°C, 50% R.H.)	20 minutes
Tack-free time (at 23°C, 50% R.H.)	180 to 300 minutes
Time before transport of the bonded frame*	3 days

* An earlier transportation on work site is possible if the following two conditions are respected (see ETAG 002-1 Table 10 Checks during the production): The tested H-samples give the following result: Rupture 100% cohesive and breaking stress ≥ 0.7 MPa.

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3.4.2 Structural sealant - identification characteristics

Test	ETAG 002-1 reference	Result
Specific mass (mixed at 13/1 ratio)	5.2.1.1	$V_{\text{mean}} = 1.36 \text{ g/cm}^3$
Hardness Shore A	5.2.1.2	Mean of 42 (minimum of 34)
Thermogravimetric analysis	5.2.1.3	Curve kept in the technical file of the European Technical Assessment
Colour	5.2.1.4	Black colour

This European Technical Assessment is issued for the structural sealant Sikasil® IG-25 on the basis of agreed data/information, deposited with the DIBt, which identifies the product that has been assessed and judged. Changes to the product/production process, which could result in the deposited data/information being incorrect, should be notified to the DIBt before the changes are introduced. The DIBt will decide whether or not such changes affect the European Technical Assessment and consequently the validity of the CE-marking on the basis of the European Technical Assessment and if so whether further assessment/alterations of the European Technical Assessment shall be necessary.

3.4.3 Complementary products for preparing the structural seal adhesion surface

The following product shall be used as a cleaning product for the glass-glass adhesion: "Sika VENTOTEC Cleaner Glass & Metal".

3.5 Protection against noise (BWR 5)

Not applicable

3.6 Energy economy and heat retention (BWR 6)

Essential characteristic	Performance
Thermal conductivity	0.35 W/(m K)

3.7 Sustainable use of natural resources (BWR 7)

For the sustainable use of natural resources no performance was investigated for this product.

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3.8 General aspects

The verification of durability is part of testing the essential characteristics. Durability is only ensured if the specifications of intended use according to Sections 3.1 to 3.8 of this ETA are taken into account.

SIKA should ensure that the essential information concerning the structural sealant Sikasil® IG-25 is circulated to the applicator of the structural sealant.

The structural sealant Sikasil® IG-25 is fabricated in the manufacturing plant mentioned on page 1.

The maximum storage life of the sealant is given in the data sheet and the labelling.

The structural sealant Sikasil® IG-25 shall be mixed at a ratio base (A) | catalyst (B) by weight of 13/1. It shall be applied between 5 °C and 35 °C under workshop conditions. The bonding shall be tooled before the working time has been reached, preferably within 10 minutes after the extrusion. It is important to realise that the working time may vary depending on temperature and relative humidity. For details the technical service of SIKA should be contacted.

No relative displacement of the panes in the insulating glass units may occur once the working time has been reached.

In all cases it should be checked that there is no condensation on the substrates prior to the sealant application. Water stagnation in the vicinity of structural seal shall be eliminated constructively.

For facade cleaning it is recommended to use a 1 % (approx.) solution in water of a neutral detergent with pH-value of 7 approximately.

Nevertheless, the assessment of the facade cleaning product shall be done within the framework of the European Technical Assessment (ETA) for the kit in order to check that those cleaning agents do not affect other kit products (gaskets, weather sealant, etc).

The whole kit, respectively the facade system, in which the structural sealant is used, will have to be verified. For this purpose a complementary European Technical Assessment for the kit according to ETAG 002 and an associated control plan are required. In the European Technical Assessment of the kit additional components of the kit, such as mechanical devices, should be assessed and the essential controls should be defined.

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Annex 1

Indications for design calculation

For the calculation of the structural bond the total safety factor $\gamma_{tot} = 6.0$ is recommended and for permanent loads a creep factor of 10. The following values for calculation result from this:

Design stress in tension: $\sigma_{des} = 0.14$ MPa

Design stress in dynamic shear: $\tau_{des} = 0.101$ MPa

Design stress in static shear: $\tau_{des\infty} = 0.01$ MPa

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**8 APPROPRIATE TECHNICAL DOCUMENTATION AND/OR -
SPECIFIC TECHNICAL DOCUMENTATION**

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

Name: Stamatios Kollias
Function: TMM Industry / Sealing &
Bonding Manager
At Athens on 16 April 2019



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Name: Spyros Hatzifotis
Function: Managing Director

At Athens on 16 April 2019




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End of information as required by Regulation (EU) No 305/2011

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FULL CE MARKING

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Sika Services AG, Zurich, Switzerland
41500570
ETAG 002 Part 1 Edition November 1999 (Revised March 2012) used as EAD
Notified Body 0757
Structural sealant for use in Insulating glass units

3.1 Mechanical resistance and stability (BWR 1)

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CE MARKING TO BE PLACED ON THE LABEL

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Sika Services AG, Zurich, Switzerland
41500570
ETAG 002 Part 1 Edition November 1999 (Revised March 2012) used as EAD
Notified Body 0757
Structural sealant for use in Insulating glass units
For details see accompanying documents
dop.sika.com

ECOLOGY, HEALTH AND SAFETY INFORMATION (REACH)

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.

LEGAL 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 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 products 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.

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Sika Hellas ABEE
Protomagias 15
14568 Kryoneri
Attica-Greece
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BUILDING TRUST

