



# **SISTA** F107 Windows & Glass

High performance universal neutral silicone

# **CHARACTERISTICS**

SISTA F107 Windows & Glass are low modulus, one component, ready-to-use, new neutral curing silicone sealants which contain a fungicide for sealing and bonding joints in sanitary and in facade joints when there is a risk of mildew formation.

SISTA F107 Windows & Glass combine the advantages of excellent primerless adhesion properties, neutrality and long shelf life.

SISTA F107 Windows & Glass are a new generation of neutral silicones and combine the advantages of oxime (very good workability, long shelf life) with the advantages of alkoxy (sustainable and health).

- · low modulus
- 25% movement capability
- easy to apply and to tool
- smooth and matt appearance
- · excellent UV-, weather and ageing resistance
- waterproof
- primerless adhesion on numerous substrates such as glass, tiles, ceramics, anodized or pure aluminium, steel, stainless steel, wood (painted or otherwise, see limitations), polyester, PC, PVC, clinker brick (glazed and unglazed)
- fast curing
- no residual tack
- non-corrosive to metals
- almost odourless during application
- MEKO and oxime free
- · resistance to fungal growth
- good resistance against conventional cleaning products and a lot of chemicals

# **APPLICATION FIELD**

SISTA F107 Windows & Glass can be used for:

- sanitary joints: baths, wash basins, showers, kitchens
- tiling joints
- expansion joints for traditional construction applications and heavy and light prefabrication (façade panels, curtain walls), when there is a risk of developing mildew (facades which are north-facing, in the shade, exposed to damp, etc.)
- controlled atmosphere rooms (refrigerated, clean rooms, etc.)
- outdoor and indoor applications



# **STANDARDS**

EN 15651-1 (CE-marking)	product type F-EXT-INT: sealant for facade for interior and exterior applications
EN 15651-2 (CE-marking)	product type G: sealant for glazing applications
EN 15651-3 (CE-marking)	product type S: sealant for sanitary applications
EN 15651-4 (CE-marking)	product type PW-INT: sealant for interior flooring applications
EN 13501-1	reaction to fire: class E
ISO 846-B	microbiological growth: level 0
ISO 11600	class F-25LM and G-25LM
DIN 18540 (Germany)	pass internal tests
Emicode	class EC 1+
VOC (France)	class A+
Indoor Air Comfort (Europe)	passed external tests at Eurofins



## **INSTRUCTIONS FOR USE**

SISTA F107 Windows & Glass are supplied ready-to-use and can be applied from the original packaging with no special pre-treatment.

## Surface preparation

All surfaces must be clean and dry, free from any dust and grease or anything which may be detrimental to correct adhesion of the sealant.

Residues of old sealant or other materials as well as mould on the substrate must be removed completely (if necessary, use a silicone remover).

Degreasing is performed using a pad soaked in solvent (alcohol or white spirit) followed by wiping with a clean cloth.

Dust should be removed using oil-free compressed air.

To get best sealing results it is recommended to mask edges of the joints with a tape before application of the sealant mass.

# Joint dimensions

The movement capability of the sealant as well as local regulations must be considered. In general, the joint width must be > 10 mm and < 35 mm and the joint width should be twice the depth.

Recommended standard dimensions for exterior facade elements (acc. DIN 18540):

design joint width, mm	15	20	25	30	35
minimum joint width, mm	10	15	20	25	30
joint depth, mm	8	10	12	15	15

Recommended minimum joint width for joints around windows and exterior doors: 10 mm.

## **Priming**

SISTA F107 Windows & Glass do not require a primer on most common substrates. Except in the case of immersion and especially on porous substrates the application of a specific primer is recommended, e. g. P800 or P819.

# **Sealant application**

Once a seal back-up material has been put in place (closed-cell polyethylene foam or open-cell polyurethane foam), the sealant should be applied ensuring that the seal is completely filled. Smoothing off the seal ensures good contact between the sealant and the bonding surfaces.

Directly after application, spray the joint with a mild detergent solution (soapy water) and smooth off with an appropriate tool.

Remove any tape immediately before surface skin is formed.

Smooth over any proud sealant edges immediately.

## Cleaning tools

Areas soiled with fresh sealant may be cleaned with a dry pad or a pad soaked in a solvent. Any cured sealant can be removed by scraping (e. g. using a razor blade) or by using a special silicone remover product.

# Please note

The joint must be cleaned and maintained regularly.

Take care of a good and regular air circulation in the room where the sealant is applied.

Curing speed is depending on temperature, air humidity and on the dimensions of the joint. Low temperatures, low air humidity or big joint dimensions need longer curing speeds. Low temperatures, low air humidity or large joint dimensions need longer curing times.

## **TECHNICAL DATA**

## **Before curing**

Type of silicone	Neutral
Appearance	Paste
Density, (ISO 2811-1), g/ml	~1.02
Resistance to flow, (ISO 7390), mm	~0

#### Curing

Skin formation time ((+23 °C / 50% RH)), min	~15-20
Curing speed (+23°C, 50%, cross-section of joint 20x10mm), mm/day	~3
Application temperature, °C	+5 to +40

#### After curing

Shore A hardness (ISO 868)	~15
Movement capability, (ISO 11600), %	25
Max. joint width, mm	30
Change of volume ((ISO 10563)), %	<10
Temperature resistance, °C	-50 to +150

# **Mechanical properties**

Elastic recovery, % (on anodized aluminium - ISO 7389-A)	~85
Modulus at 100%% elongation, N/mm <sup>2</sup> (on anodized aluminium - ISO 8339-A)	~0.3
Elongation at break, % (on anodized aluminium - ISO 8339-A)	~250
Elongation at break (dumbell - ISO 37), %	~930

## **EXTERNAL TESTING**

SISTA F107 Windows & Glass have been tested with 5 typical disinfection and cleaning agents for cold/clean rooms (Surfanios Premium, Bacteranios SF, Anioxy-spore twin IP sterile concentre, Anios H2O2 6% IP sterile and Surfasafe Premium) by Anios with the result that both formulas are compatible.

The compatibility of hydrogen peroxide vapour for cold/clean rooms of SISTA F107 Windows & Glass has been tested by Bioquell with the result that both formulas passed the 10 cycles à 8 gr/m $^3$  and the 10 cycles à 10 gr/m $^3$ .

SISTA F107 Windows & Glass transparent compliant with NSF category S2 "application in and around food processing areas".

Article specific listing in NSF whitebook required (listed are: SISTA F109 transparent)

SISTA F107 Windows & Glass transparent has been tested by Hygiene Institut and meet the requirements in terms of microbial metabolic potential in accordance with VDI 6022, sheet 1<sup>st</sup> and are suitable for use in clean rooms in accordance with VDI 6083, sheet 18<sup>th</sup>.



## LIMITATIONS

For any applications on sensitive surfaces (e.g. mirrors) carry out preliminary testing to check compatibility with the sealant.

SISTA F107 Windows & Glass are not recommended for joints that are in direct food contact.

SISTA F107 Windows & Glass are not recommended for structural glazing applications.

SISTA F107 Windows & Glass must not be used as a secondary sealant in insulating glass units and must not come in contact with the edge seal of insulated glass.

SISTA F107 Windows & Glass must not come in contact with the interlayer of laminated (safety) glass.

SISTA F107 Windows & Glass are not recommended for swimming pool joints, for aquarium joints or for applications under water.

SISTA F107 Windows & Glass seals must not be over-painted (poor covering and adhesion of the paint).

Before using SISTA F107 Windows & Glass on painted substrates, paint has to be completely dry and cured. Prior compatibility tests are recommended, considering the variety of paints that exist and particularly with alkyd paints.

SISTA F107 Windows & Glass are not recommended on materials which can exude certain components over time (butyl sealant, EPDM rubbers, polychloroprenes, bitumen, etc.). Discolouration or reduction of adhesion properties could take place.

Application of SISTA F107 Windows & Glass on natural stone (e.g. marble, granite) is not recommended.

For applications on natural stone use a special natural stone silicone.

SISTA F107 Windows & Glass are not recommended for applications on PMMA (Plexiglass®), lead, PTFE (Teflon®), polyethylene and polypropylene.

# Storage

Store SISTA F107 Windows & Glass in a dry place between 5°C to 25 °C. Shelf life is 18 months in the original packaging after date of manufacture (the expiry date is shown on the packaging).

## **Packaging**

PE-cartridges (virgin, PCR 95 %) Sausages Drums

## Colour

translucent grey-translucent

# **HEALTH AND SAFETY**

Before using the product please see related Material Safety Data Sheet that is available on request.

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

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