

## PRODUCT DATA SHEET

# EVERBUILD® EVERFLEX® 450 Builders Silicone

A premium quality low modulus neutral cure silicone sealant

### PRODUCT DESCRIPTION

EVERBUILD® EVERFLEX® 450 Builders Silicone is a premium quality low modulus non-corrosive neutral cure silicone sealant that adheres to virtually all substrates, both porous and non-porous. Typically used for construction expansion joints and perimeter pointing of all types of door and window frames.

### USES

- Perimeter pointing internally and externally around PVCu /wood and all other window frames.
- Sealing and as an adhesive onto PVCu, plastic trims and components.
- Bedding insulated glass units in accordance with relevant clauses of BS8000 Part 7.
- Suitable as an expansion joint sealant.
- Weather sealing and joint sealing to pre-formed panels.
- Sealing soft metals such as lead, copper and zinc.
- General glazing sealing and draughtproofing, including repair work over existing sealant.
- Glass to glass and glass to aluminium sealing.
- Parapet and roof weather sealing applications.

### CHARACTERISTICS / ADVANTAGES

- Excellent adhesion - adheres to most common surfaces including glass, metals, plastics and wood.
- Low dirt pick up - important in PVCu work.
- Excellent flexibility - +/- 25%.
- High resistance to plasticiser migration - may be used over water based and solvent based paints.
- Excellent external weathering properties.
- Suitable for use on polycarbonate.

Shrinkage <5% ISO10563.

### APPROVALS / STANDARDS

- Conforms to ISO11600 F and G 25 LM.
- Certified under the harmonized European standard EN15651 for façade, glazing, cold climate and sanitary applications in compliance with the Construction Product Regulation.
- Passed CFR 21. 177.2600(e) food contact test (except white).

### PRODUCT INFORMATION

<b>Packaging</b>	300ml cartridge
<b>Colour</b>	Buff, Black, Brown, Grey, Oak, Trans, White
<b>Shelf Life</b>	18 months from date of manufacture (12 months for white)
<b>Storage Conditions</b>	Store in original unopened containers between 5 and 25°C
<b>Density</b>	ca. 1.02 g/cm <sup>3</sup> ( 1.35 g/cm <sup>3</sup> white)

### TECHNICAL INFORMATION

Shore A Hardness	20
Tensile Strength	@ 100% elongation - 0.3MPa ISO 8339
Elongation at Break	>300% ISO8339
Elastic Recovery	>80%
Movement Capability	25% ISO11600
Service Temperature	-50°C to + 150°C
Joint Design	6mm - 50mm. Maximum depth, 50% of joint width
Consumption	10.5 linear meters as a 6mm diameter bead.
Curing Time	1-2mm per 24 hours
Skin Time	5 - 25 mins

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

The surfaces to be sealed must be clean, dry and free from dust, grease and other contaminants. Improve adhesion by wiping surface with EVERBUILD-PVC SOLVENT CLEANER (PVC), EVERBUILD GLASS CLEANER (glass) or white spirits (painted surfaces). Priming is generally not required, although we always advise testing small areas prior to use. If use of primer is desired for non-porous surface use Silicone Primer NP2 or for porous surface use Silicone Primer P1. Joint design should be as follows:  
Minimum width: 6mm. Movement capacity will be impaired if the depth of the joint is greater than the width. For maximum movement accommodation, it is recommended that:

1. The joint depth should be no less than 5mm
2. Joint depth should be 6mm for joints up to 10mm wide
3. Joints above 10mm in width should be half the width in depth e.g. 20mm wide and 10mm deep.

For deep joints, reduce depth by using EVERBUILD FIX AND FILL EXPANDING FOAM or a suitable joint backer rod. All joints should be designed so that the seal is placed in a position which does not retain water or form a water trap. Triangular fillets should be no less than 12mm across the face and should be finished with a flat or convex face.

### APPLICATION METHOD / TOOLS

Cut the tip of the cartridge taking care not to damage the thread. Apply nozzle and cut at an angle of 45° with an opening slightly larger than the gap to be sealed. Apply using a standard sealant gun. Best results will be obtained by keeping an even pressure on the trigger and keeping the gun at a constant angle to the surface being sealed. To ensure a proper bond, always smooth the sealant down with a spatula or piece of wood. An improved joint appearance can be achieved by placing masking tape to both sides of the joint, removing within 5 minutes of application.

### CLEANING OF TOOLS

Uncured sealant white spirit, cured sealant EVERFLEX SILICONE EATER.

### LIMITATIONS

- Do not use in conjunction with bitumen asphalt, neoprene and certain organic elastomers.
- Do not use in the manufacture of Aquariums. Use AQUA MATE.
- Do not use on substrates that bleed oil, solvents or plasticisers.
- Non overpaintable. Use WEATHER MATE.
- Use as a mirror adhesive; Not recommended- Use MIRROR MATE.

### VALUE BASE

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

### LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

### ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains 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.

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