SIMSEAL®

think **SILICONE,** *think* **SIMSEAL**

SIMFLEX® FACADE

ADVANCED MS HYBRID POLYMER SEALANT

Description

Simflex® Facade is a high performance sealant, engineered using sophisticated MS Polymer technology. It boasts excellent UV resistance and weathering properties, complemented by a matte finish. Its low static charge reduces dust attraction, diminishing dirt streaks on facade cladding. This sealant maintains permanent elasticity after curing and can accommodate ±50% movement.

Designed for optimal performance, Simflex® Facade meets stringent ASTM C920 standards and supports LEED v4.1 credits with its low VOC emissions. Distinct from polyurethane sealants, it is free from solvents and isocyanates, thereby preventing post-cure shrinkage and bubbling. Additionally, its silicone oil-free formulation reduces aesthetic issues such as oil stains and dirt streaking, common with silicone sealants. It meets ASTM C1248 standards, ensuring minimal staining on porous substrates.

Key Performance Properties

- ±50% Movement capability
- Excellent UV resistance –
- Paintable
- Silicone oil-free – Non-staining on adjacent substrates
- Matte finish
- Low static charge – Less dirt streaking
- Isocyanate-free – No air bubbling
- Solvent-free – No shrinkage
- Primerless bonding to most surfaces

* In compliance with ASTM C1193-16 Standard Guide for Use of Joint Sealants, with minimum sealant thickness of 6 mm (movement joint)

Applications

Simflex® Facade is ideal for sealing concrete joints such as wall panel joints, expansion joints, and control joints, and is also suitable for facade cladding with metal panels or natural stones. Its efficacy extends to commercial areas, where its resistance to oils and cleaning chemicals simplifies maintenance. This versatile sealant is recommended for an array of applications including anodized aluminium, masonry, porcelain, coated metal, finished wood, epoxy and polyester panels, UPVC, polystyrene, and stainless steel.

Specifications

Typical data values should not be used as specifications. Please contact Simseal® for further information. A thin bead of sealant will tolerate more movement thatn a thick bead. Joint width and depth should be no less than 6mm. Maximum join widths should not exceed 35mm. Joint depths should be hald the width, with a maximum depth of 12mm.

Application

Carefully cut the tip of the sausage pack and place it into the caulking gun. Trim the nozzle at a 45° to 60° angle to achieve the desired diameter. Then, attach the nozzle to the caulking gun and secure it firmly. Apply the sealant in a continuous bead. For a smooth finish, shape the sealant bead using a clean, dry tool within the working time.

SIMFLEX® FACADE

Technical Data

PROPERTY	VALUE	
Curing System:	Moisture curing	
Specific gravity:	1.53 g/mL	
Maximum tensile strength:	1.0 N/mm²	ASTM D 412
Elongation at break:	530 %	ASTM D 412
Movement capability:	±50 %	ASTM C719
Shore A hardness:	27	ASTM C661
Staining on porous substrates:	No staining	ASTM C1248
Low VOC compliance:	Yes	SCAQMD Rule 1168
VOC content:	10.21 g/L	USEPA Method 24
Low VOC emission compliance:	Yes	CDPH v1.2

Skin Time:	20-40 minutes (at 25 °C & 50% R.H.)
Application Temperature:	5 °C – 40 °C
Service Temperature:	-30 °C – 90 °C

Clean Up

- Wet sealants can be cleaned up with acetone or mineral spirits.
- Cured sealants can only be removed mechanically.

Joint Design

- Joint dimension should be designed by taking into consideration the movement capability of the sealant and the anticipated joint movement
- Generally the joint width-to-depth ratio is 2:1 for joint width ≥12 mm, or 1:1 for joint width <12 mm
- Joint width: minimum = 6 mm, maximum = 35 mm *
- Joint depth: minimum = 6 mm, maximum = 12 mm

* Sealing joints with larger joint width is possible but sealant may sag in vertical applications.

Coverage

Width	Depth	Coverage (290 ml)*	Coverage (600ml)*
6mm	6mm	7.32 meter	15.15 meter
10mm	10mm	2.64 meter	5.45 meter
20mm	10mm	1.32 meter	2.73 meter
25mm	12mm	0.88 meter	1.82 meter

- The coverage figures shown above are approximate linear meter run based on 10% wastage assumption. Actual coverage may vary.
- Calculation formula:

X / [(Y x Z) x 1.1] = Coverage

X = volume of cartridge (or sausage) in ml,
Y = joint width in cm, Z = joint depth in cm,
1.1 = 10% wastage assumption,
Coverage = linear meter run in cm per cartridge (or sausage)

WHITE | OFF WHITE | CONCRETE GREY | SRI LANKAN BEIGE | BEIGE | FAWN

SANDSTONE | REDWOOD | BRONZE | DARK GREY | CHARCOAL | BLACK

Packaging

600mL Sausage -
Available in cartons of 20
Product packed in Australia

Health and safety

Avoid direct contact, especially with eyes and skin. Remove contact lenses before using sealant. If eye contact occurs, rinse with water for 15 minutes and seek medical attention if irritation persists. Use the product in well-ventilated areas and keep it out of reach of children. KEEP OUT OF REACH OF CHILDREN

Limitations

Not recommended for the following applications:

- Below waterline or permanent water immersion.
- Outdoor sealing/bonding adjacent to glass substrates.
- Polyethylene, polypropylene, polytetrafluoroethylene (Teflon), neoprene, and bituminous surfaces.
- Overcoated with
  - Alkyd resin paint - cure inhibition to the paint
  - Chlorinated paint - staining issue
  - Oil based paint - not compatible

For joints wider that 10mm, steel covers are essential for fork lift and vehicle traffic.

Caution

Toxic to aquatic life with long lasting effects. Collect spillage. Contains aminosilane. May produce an allergic reaction. Safety data sheet available on request. For further health and safety information, consult the latest safety data sheet.

Legal Notes

Simseal® has made every effort to ensure accurate information but cannot be held liable for any losses or damages arising from its use, due to uncontrollable variations in processing and workmanship. Users should verify the product's suitability through their own testing.