

SIMSEAL®

think SILICONE, think SIMSEAL

SIMFLEX®

MULTIBOND

GENERAL-PURPOSE ADVANCED MS SEALANT

Description

Simflex® Multibond is an all-purpose sealant utilising cutting-edge MS Polymer technology. As a single-component, elastomeric sealant, it demonstrates exceptional adhesion to a variety of surfaces, including concrete. It retains permanent elasticity and up to ±50% movement capability after curing.

This product adheres to the rigorous standards of ASTM C920 and supports LEED v4.1 credits. Differing from polyurethane sealants, Simflex® Multibond is devoid of solvents and isocyanates, ensuring no shrinkage or bubbling in the cured sealant. It's also silicone oil-free, reducing aesthetic issues like oil stains and dirt streaking typically associated with silicone sealants.

Key Performance Properties

- ±50 % Movement capability
- LEED compliant
- Better weathering resistance than PU sealants
- Paintable
- Low static charge – Less dirt streaking
- Silicone oil-free – Non-staining on adjacent substrates
- Isocyanate-free – No air bubbling
- Solvent-free – No shrinkage
- Primerless bonding to most surfaces

Applications

Simflex® Multibond is suitable for sealing various concrete joints, such as those in precast wall panels, expansion joints, control joints, and connection joints. It is particularly effective for window frame perimeter sealing, especially in cases where painting over the sealant is necessary. Additionally, it's recommended for sealing GRC panel systems, anodized aluminium, masonry, porcelain, coated metal, finished wood, epoxy and polyester panels, UPVC, polystyrene, and stainless steel.

WE RECOMMEND PRELIMINARY COMPATIBILITY TEST PRIOR TO APPLICATION TO ACHIEVE DESIRABLE RESULTS

Preparation

- Ensure the substrate surface is clean and dry, devoid of dirt, grease, oil, or water.
- Apply masking tapes for neat finish and remove within the working time.
- Use Primer for enhanced adhesion on porous substrates like concrete.
- For sealant depths over 10 mm, employ approved backing materials.



SIMFLEX® MULTIBOND

Technical Data

PROPERTY	VALUE	
Cure Method	Moisture curing	
Skin Time	20-60 min	
Curing system:	Moisture curing,	
Specific gravity:	1.54 g/mL	
Slump :	<1 mm	ASTM D2202
Elongation at break:	600 %	ASTM D412
Shore A hardness:	33	ASTM C661
Movement capability:	±50 %	ASTM C719
Elastic recovery:	>70 %	ISO 7389
Low VOC compliance:	Yes	SCAQMD Rule #1168
VOC content:	< 10g/L	USEPA Method 24
	0.08%	USEPA Method 310
Cure depth (24 hours) at 23 °C, 50% humidity:	Approx. 3 mm	

Clean Up

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

Joining 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:

$$X / [(Y \times Z) \times 1.1] = \text{Coverage}$$

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



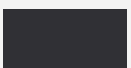
REDWOOD



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

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.