

ROOF GLASS & GUTTER

HIGH PERFORMANCE SEALANT

Description

Roof Glass & Gutter High Performance Sealant is a silicone sealant with excellent resistance to weathering, UV radiation, vibration, moisture, ozone, temperature extremes, airborne pollutants, and many cleaning detergents and solvents. It is a single-component elastomeric sealant that is permanently elastic upon curing and has a movement capability of $\pm 50\%$.

Specially formulated to achieve superior performance and feature low VOC emission and content, Roof Glass & Gutter is able to comply with the stringent requirements of ASTM C920 as well as contribute to the Leadership in Energy and Environmental Design (LEED) v4.1 credit.

Roof Glass & Gutter also conforms to MS-1583: Part 1: 2003 – Suitability of Non-Metallic Product for use in contact in water intended for human consumption with regard to their effect on the quality of water. Additionally, Roof Glass & Gutter Grey meets the requirements for AS/NZS 4020:2005, testing of products for use in contact with drinking water.

Technical Data

PROPERTY	VALUE
Cure System:	Moisture curing, neutral
Skin Time:	10-30 min (at 25°C & 50% R.H.)
Specific gravity:	1.02 g/mL
Slump:	Non Slump
Maximum tensile strength:	1.3 N/mm ² ASTM D412
Elongation at Break:	370% ASTM D412
Movement capability:	$\pm 50\%$ ASTM C719 $\pm 25\%$ ISO 11600
Shore A hardness:	25 ASTM C661
Low VOC compliance:	Yes SCAQMD Rule 1168
VOC content:	43.68g/L USEPA Method 24 0.86% USEPA Method 310

Key Performance Properties

- 100% neutral silicone
- Certified Green Building Standard
- Food Contact Safe
- $\pm 50\%$ movement capability
- Excellent weathering resistance
- Permanently flexible
- Indoor and outdoor use



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Applicable Tests / Standards

Roof Glass & Gutter meets the requirements of:

- ASTM C920 & ASTM C719, Type S, Grade NS, Class 50, Use NT, M, A & G
- ISO 11600, F Class 25 LM
- Leadership in Energy and Environmental Design (LEED) v4.1 EQ compliant
- Low VOC - USEPA Method 24 under SCAQMD Rule 1168 & USEPA Method 310
- FDA 21 CFR Part 175.300 (Food Contact Safe)
- AS/NZS 4020:2005, Testing of Products for Use in Contact With Drinking Water. (Roof Glass & Gutter Grey)
- Sirim Test - ASTM D412: 2016 & MS1583-Part 1-2003
- RoHS I, RoHS II, RoHS III & SVHC

Application

- Well-suited for a strong weatherproof seal on most common building materials such as glass, aluminium, galvanised and zinc-coated steel, painted surfaces, brick, concrete and mirror bonding.
- Ideal for sealing metal lap joints in roofing, guttering and cladding applications.

Preparation

- Substrate surface must be dry and clean; free of dirt, grease, oil, or standing water.
- For a neat finishing, use masking tape and remove it within the working time.
- For sealant designs with depth of over 10 mm, use approved backing materials.
- 602 Primer is recommended especially for porous substrates such as concrete for excellent adhesion.

Application Direction

Cartridges:

1. Cut the cartridge tip carefully.
2. Cut the nozzle into an appropriate diameter at an angle of approximately 45° to 60°.
3. Use a caulking gun and extrude the sealant with a single bead.
4. Tool the sealant bead with a clean and dry tool within the working time for a smooth finishing.

Clean Up

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

Joint Design

- The specified sealant bead size should be calculated to comply with the compression and extension capabilities of the sealant in relation to the anticipated joint width due to expansion and contraction.
- Minimum bead size should not be less than 3 mm to accommodate movement.
- Sealant design joint width-to-depth ratio should be 2:1.

Width	Depth	Coverage (300 ml)*
6mm	6mm	7.58 meter
10mm	10mm	2.73 meter
20mm	10mm	1.36 meter
25mm	12mm	0.91 meter

* The coverage figures shown above are approximate lineal 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** = lineal meter run in cm per cartridge (or sausage)

Packaging

300mL Cartridge - Available in cartons of 20 Product packed in Australia

Limitations

- Not recommended for following applications:
- Structural glazing applications.
- Below waterline or permanent water immersion.
- Traffic areas subject to abrasion.
- Polycarbonate and polyacrylate, if under tension.
- Applications that requires the sealant to be painted.
- Neoprene rubber.

Caution

Product releases methylethylketoxime during application and curing. May cause an allergic skin reaction. If medical advice is needed, have product container or label at hand. Avoid breathing dust/fume/gas/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. **Keep out of reach of children.** 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.

