

# SIMSHIELD™ PROTECTIVE TOP COAT

# **ACRYLIC, HIGHLY FLEXIBLE MEMBRANE TOP COAT**

# **Description**

**Simshield Protective Top Coat** is a highly flexible water-based 100% acrylic coating designed for use on roofs, decks and balconies. It is ideal for extreme weather conditions and its high-viscosity formulation is designed for application on both vertical and horizontal substrates. It is well suited to application by Graco airless spray equipment (recommended).

Simshield Protective Coat dries to a semi-gloss finish and reflects heat to reduce thermal heat transmission. It does not soften or attract dirt/stains and has excellent chemical resistance and durability. It may be easily cleaned with mild detergents and water and includes algaecides to reduce mould and algal growth.



Simshield Protective Coat is designed for long-term outdoor exposure and remains flexible under extreme elongation and under constant exposure to moisture. It is UV resistant and can be used in exposed areas without embrittlement.

Simshield Protective Coat is a harder coating and will withstand moderate foot traffic. It is suitable for application over a wide range of substrates including (following application of Simshield Waterproof Sealant):

- Concrete
- Masonry
- · Fibre-cement sheeting
- Plaster board
- Brick
- Render

- Plastics
- Metal
- Timber

Simshield Protective Coat may be applied to damp surfaces although freedom from surface water and continual dampness is essential for sufficient curing to occur. Damp surfaces will increase drying/curing time

# **Technical Data**

PROPERTY	VALUE
Number of Coats: Coverage Rate: Drying Time: Dry: Fully Cured	1-3 2 - 3m² per litre (dependant on substrate) Recoat 1-2 hours (at 24°C) 6 - 12 hours (at 24°C) Up to 2 days
Cleanup:	Simshield is dry when it forms a firm skin.  Before curing - with water  After curing - solvents
Shef Life:	12 – 18 months in uncontaminated container kept well sealed and out of direct sunlight. Viscosity may increase during extended storage or in high temperatures. Stir with an electric mixer until homogenous should thickening occur. Store out of direct sunlight below 38oC
Application Temp Application	3°C - 40°C Brush, Roller or HVLP/Airless Spray

## **Key Performance Properties**

- Vulcanised bonding to Simshield Waterproof Sealant
- Safe and easy to use
- Excellent water resistance
- Self cross linking polymer for durability
- Highly flexible (accommodates movement and minor cracking in substrate)
- UV stable designed for long term outdoor exposure
- Suitable for application on horizontal or vertical surfaces
- Suitable for interior or exterior use
- Permanently flexible, excellent resistance to embrittlement



#### **APPLICATION DIRECTION**

All surfaces should be clean, sound and free from dry or loose material. Check for presence of waxes, mould release or bond breaking agents, oils or other contaminants than may affect adhesion before application. Given the wide variety of substrates and site specific conditions, it is advisable to check adhesion prior to job commencement. Moulds, lichen or fungal growth should be treated with a suitable algaecide or if unavailable with a dilute bleach solution (1 part household bleach to 2 parts water) to kill any spores. Leave the bleach solution in contact with the surface for approx 10 minutes then liberally rinse with clean water and allow to completely dry. Masonry should be flush pointed. Make good any defects in surfaces. Remove any dags, high points or protrusions prior to application. Any laitance in concrete surfaces should be removed with wire brush or by grit blasting.

#### Primina

Porous, friable or dusty surfaces should be coated with Simshield Waterproof Sealant prior to application of Simshield Protective Top Coat to ensure adhesion.

#### **Movement Joints**

All expansion and movement joints between differing substrates should be sealed with a suitable sealant. Reinforcement with Simshield GEO Textile is recommended where movement is possible. Allow pre-treatments to dry overnight before general application of the membrane.

#### Corners

Apply a polyurethane sealant or concrete render, in accordance to the manufacturer's instructions and finish to form a solid, coved or 45° fillet extending at least 8mm on to the adjacent surfaces.

Once the sealant is dry apply the membrane directly over the sealant and on to the adjacent surfaces. For additional protection Simshield GEO Textile can be applied over the waterproof sealant before application of the membrane.

# Cracks and Gaps

Cracks and gaps should be pre-filled and sealed with an appropriate elastomeric sealant, preferably a polyurethane sealant, and allowed to cure. For additional protection Simshield GEO Textile can be applied over the sealant before application of the membrane. Visible cracks in the substrate should be pre-treated with a flexible polyurethane sealant or additional coats of the membrane. Larger cracks should be routed out to form a 'V' and then filled and sealed with a polyurethane waterproof joint sealant. The sealant should be finished slightly proud of the surface and allowed to cure. Once dry, apply a thick coat of the membrane extending at least 50mm on either side. Allow to dry and then apply the membrane to the entire surface.

#### **Sheet Joins**

Timber or FC sheet joins should ideally be fully coated with a polyurethane sealant prior to butting together and fixing. All joins should be fully filled and finished flush or slightly proud of the surface.

Once dry, apply a thick coat of the membrane extending at least 50mm on either side. Allow to dry and then apply the membrane to the entire surface. For additional protection, a polyester-backed reinforcing bond breaker tape can be applied over the sealant before the application of the membrane.

# Waste Outlets, Penetrations and Angles

Floor wastes should be rebated in to the floor to allow water to readily drain and its perimeter edges and gaps completely sealed with a polyurethane sealant. Plastic or metal angles should be securely embedded in to a continuous, gap free bed of a polyurethane sealant / mastic.

### **Application Method**

Apply by brush or spray to obtain a consistent and even coating. Simshield Protective Top Coat should be applied in two coats applied at right angles to result in a smoother finish and faster curing times.

The membrane should be applied to at least 0.5mm dry film thickness. If the first coat does not result in a dry film thickness of at least 0.5mm, then a subsequent coat(s) will be required. Coat all areas liberally working the product into any voids or depressions. Where GEO Textile is to be used apply first coat to the required area and while still wet embed the fabric ensuring no air is trapped.



Apply a second coat of the membrane at right angles to the previous application. Allow to dry before applying screeds, tiles, or any other coverings. If exposed to weather, do not apply if rain is imminent (within one hour at 24°C), or if the temperature is below 5°C or above 40°C. Applying the membrane during cold weather, where there is limited or no air flow over the membrane may result in the membrane failing to dry. In enclosed areas introducing air flow by using a fan will assist in curing. Simshield Protective Top Coat is not designed for use in areas where permanent immersion is likely (E.g. ponds or tanks) or in situations where hydrostatic pressures are to be expected, such as basements and below grade construction.

# **PACKAGING**

Available Sizes: 5L, 15L, 20L, 205L, 1000L Weights: 5.5kg, 16.5kg, 22kg, 225kg, 1100kg Made in Australia

# **TECHNICAL ADVICE**

1300 SILICONE info@simseal.com.au

# **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.

