

## TECHNICAL DATA SHEET

### GUARDIAN SEAL HIGH PERFORMANCE WATERPROOFING MEMBRANE

#### PRODUCT DESCRIPTION

**Guardian Seal** is a high-performance reinforced trafficable waterproofing membrane with exceptional long term UV stability. Suitable for hand or spray application with high adhesive strength.

#### PRODUCT ADVANTAGES

- **Guardian Seal** is a high performance waterborne elastomeric membrane.
- **Guardian Seal** has exceptional long term UV stability with permanent flexibility.
- **Guardian Seal** has very high adhesion onto most common building materials.
- **Guardian Seal** has a high build and is reinforced for maximum tensile strength.
- **Guardian Seal** is low VOC
- **Guardian Seal** is trafficable and has high resistance to puncturing and impact.
- **Guardian Seal** is resistant to fungal, algal, fire and chemical attacks.

#### APPLICATIONS

**Guardian Seal** is a hand or spray applied membrane for use on concrete roof areas, external walls, parapet walls, balconies, decks, silos and structure sealing. Also suitable for asbestos encapsulation.

#### SUITABLE SUBSTRATES

Guardian Seal is suitable for use onto bricks and concrete, ICF panels, metal sheeting, timber, plywood sheeting and structural screeds.

#### TECHNICAL DATA

Product Type	Reinforced Waterborne Membrane	One Component
Recommended Coats	2 Coats	
Recoat Time	4-6 hours	
Full Cure	7 days	
Colour	Grey or White	
Clean Up	Water	
Shelf Life	12 months	
Application	Hand Applied or Spray Applied	

## TEST DATA

VOC Content	10g/L (low)
Tensile Strength	3.65 MPa
Elongation	135%
Hardness	Durometer 'A' Value 78.5
Direct Tension Adhesion	2.0 MPa
Mandrel Bend Test (6mm)	Pass
Water Vapour Transmission	35.6g / m <sup>2</sup> / 24 hours
Permeance	1.46 x 10 <sup>-7</sup> g
Artificial Wear Resistance	1000 hours – no defects 4000 hours – no defects
Abrasion Resistance	0.18mm
VOC	1%

## SPECIFICATIONS

Trafficable Waterproofing			
	Application Rate	W.F.T	D.F.T
1 <sup>st</sup> Coat Guardian Seal	1.6m <sup>2</sup> / L	625 µm	300 µm
Embed Fibre Mesh – Wet			40 µm
2 <sup>nd</sup> Coat Guardian Seal	1.6m <sup>2</sup> / L	625 µm	300 µm
			640 µm
Anti-Carbonation Weatherproofing			
	Application Rate	W.F.T	D.F.T
1 <sup>st</sup> Coat Guardian Seal	4.8m <sup>2</sup> / L	210 µm	100 µm
2 <sup>nd</sup> Coat Guardian Seal	4.8m <sup>2</sup> / L	210 µm	100 µm
			200 µm

## APPLICATION INSTRUCTIONS

### Surface Preparation

- Surface must be clean, dry, sound, and free from dust, grease, curing compounds, release agents, loose particles, efflorescence, concrete laitance, or any other contaminants.
- Exposed reinforcing bars are to be cleaned of rust prior to repair.
- If cementitious repair products are used, they should be cured for a minimum of 7 days, however 28 days is recommended.
- Remove contaminants such as grease and oil with a heavy duty cleaner. Remove dust, loose dirt, flaking paint, rust as appropriate with high pressure water jetting, abrasive blasting or wire brushing.
- Substrates that are porous or dusty should be primed with a 2:1 dilution of Guardian Seal and water.

- Guardian Seal may be applied to thoroughly clean, dry and dust free surfaces without priming.
- If substrate is not dry, prime the surface with a suitable primer.
- Painted areas should be checked for soundness. Remove loose paint and prime allowing full cure.
- Note: Due to the wide variety of substrates available, adhesion testing is recommended in a trial area before full application.

### Application Conditions

- Substrate must be dry, with less than 15% moisture content. The use of suitable moisture meter is recommended.
- Recommend application during ambient temperatures of 7°C and 35°C. Do not apply if the relative humidity is above 85% during initial curing phases, or if rain is expected before curing.
- During humid conditions, use of a fan or increased air flow will assist curing.

### Application Method

- Apply MS20 bond breaking sealants to internal angles/corners (wall to wall junctions) as per waterproofing standard.
- Apply Guardian Seal with a membrane brush or membrane roller, spray system or similar.
- Apply first coat of Guardian Seal as per recommended coverage rate. Work from corners to central areas allowing time to cure.
- If only a bond breaking sealant has been used it is recommended to install a reinforcing fabric to all joints and corners in conjunction to the first coat of Guardian Seal.
- Apply a second coat of Guardian Seal as per the recommended coverage rate at a 90° angle to the coating direction of the first coat.
- Pre-Existing sealants/mastics – non-paintable silicones are not suitable and should be removed and covered over with MS20 sealant.
- Upright angles and protrusions including sharp corners form by junctions should be sealed with MS20.
- The ends of vertical membranes should be protected to avoid ingress of water behind the membrane.
- On parapet walls, if possible, the membrane should be carried to the top or slightly down the other side of the wall to eliminate water ingress.
- On high vertical walls or protrusions, the horizontal membrane should be turned up approximately 200mm and applied into a reglet (5mm wide and 10mm cut) and / or covered over with a protective flashing.

### Clean Up

- Uncured material may be removed with warm water and detergent. Cured material may be removed mechanically.

## MAINTENANCE & REPAIR

- Guardian Seal must be protected from damage by after trades and inspected prior to the application of any overcoat.
- Moisture blisters and bubbles may be repaired by cutting out the affected area, allowing substrate to properly dry and reapplication of membrane as per recommended coverage rates.
- Protect membrane from harsh chemicals, abrasion and other potentially damaging conditions.

## PRECAUTIONS

- Do not apply if the temperature is below 7°C or if relative humidity is above 85% or if rain is imminent.
- Do not allow ponding to occur between coats or before system is fully cured (7 days) Water should be mopped off to prevent damage during curing period.
- Guardian Seal is not suitable for permanent water immersion.

## SAFETY & HANDLING

**Please consult the Safety Data Sheet for further information.**

All applicable statutory regulations must be observed in the application of this product. Users must first read the Material Safety Data Sheet for Guardian Seal. Users should familiarize themselves with all the safety aspects of the product prior to use.

Please ensure the current Technical Data Sheet is consulted prior to specification or application of Siegel products. Siegel Pty Ltd will in many instances provide Area Specific Instruction Sheets which contain detailed instructions on how to achieve desired results for specific areas.

### Health & Safety

Health and Safety: Keep out of reach of children. May produce an allergic reaction. Safety data sheet available on request. Users must first read the Safety Data Sheet. Users should familiarize themselves with all the safety aspects of the product prior to usage.

### Product Disclaimer

Since the use and application of this product is beyond our control, we cannot be held responsible for product field performance. The information presented above is the result of our considerable experience with this product but is not to be construed as a performance warranty. In every case we recommend that the customer conducts their own testing and accordingly determines, to their satisfaction, its suitability for their purpose under the operating conditions in which they will use the product/s.