



## 550 WR Membrane

Water based, single component waterproofing membrane for tank bases and roofs. Provides seamless, UV stable, and flexible protection against moisture ingress.

- Single pack, water based acrylic system
- Forms a seamless, flexible waterproof barrier
- UV stable for long term outdoor durability
- Suitable for tank bases, GRP, and roofing applications

**2025 Product Sheet**

## Typical Applications

550 WR Membrane is a single component, water based acrylic coating designed to deliver seamless waterproofing for external surfaces. It forms a flexible membrane that prevents moisture ingress and corrosion.

- Tank base sealing
- Flat and pitched roofs
- Fibreglass and GRP surfaces

## Coverage

20ltrs (5.3 gallons) of fully mixed product will give the following coverage rates

30m <sup>2</sup> at 750 microns	322ft <sup>2</sup> at 30mil
40m <sup>2</sup> at 500 microns	429ft <sup>2</sup> at 20mil

## Cure times

### Min overcoating time

10°C/50°F	6-8 hours
20°C/68°F	3-4 hours
30°C/86°F	1.5-2 hours
40°C/104°F	45-60 mins

## Characteristics

### Sag Resistance

Nil at 750microns

### Density

Mixed 1.25

### Solids Content

60%

### Pack Sizes

This product is available in the following pack sizes:  
20ltrs (5.3 gallons)

### Appearance

Single component      Light grey, white

### Volume Capacity

800cc/kg

### Storage Life

5 years if unopened and stored in normal dry conditions, 15-30°C (59-86°F)

## Mechanical Properties

### Heat Resistance

Resistant to dry heat up to 120°C (248°F) dependent on load.

### Water Vapour Permeability

Tested to ASTM D1653  
2 x 10<sup>-4</sup> perm.cm

### Direct Pull Adhesion

Tested to ASTM D4541  
28kg/cm<sup>2</sup> (400psi)

### Elongation

Tested to ASTM D412 160%

### Tensile Strength

Tested to ASTM D412  
42kg/cm<sup>2</sup> (600psi)

## Details & Legal

### Quality

All Resimac Products are supplied under the scope of the company's fully documented quality system.

### Warranty

Resimac warrants that the performance of the product supplied will conform to the typical descriptions quoted within this specification provided material is stored correctly and used according to the procedures detailed in this document.

*Please note that the coverage rates quoted are theoretical and do not take into consideration the profile or condition of the surface being repaired.*

# Application Guide

## A. Surface Preparation

### Tank Base: Metal repair

- 1 Badly pitted sections of steel may be rebuilt using 101 Metal Repair Paste or 302 Epoxy Repair Paste.
- 2 The repair paste should be allowed to cure as per the relevant technical data and machined/sanded smooth prior to the priming of the repair area.

### Tank Base: Concrete repair

- 1 Cracked and damaged concrete must be repaired using 570 Concrete Patch Repair XF, 571 Concrete Repair LW or 576 Quartz Screed.
- 2 Cracks shall be V-cut with an angle grinder to increase the open dimensions to a nominal 5-10mm width and depth.

**PLEASE NOTE:** All surfaces need to be cleaned appropriately and must be free from mould, moss, algae, dust and debris. The surface of the concrete and steel must be mechanically abraded with grinders and abrasive pads to a minimum ST3 surface cleanliness. The surfaces should then be cleaned with fresh water, preferably via high pressure cleaning, and allowed to dry.

### Health & Safety

Please ensure good practice is observed at all times during the mixing and application of this product. Protective gloves and other recommended personal protective equipment must be worn during the mixing and application of this product.

Before mixing and applying the material, please ensure you have read and fully understood all information.

### Roof Surface: Metal surfaces, GRP & previously coated

- 1 Surfaces must be manually abraded and coated with 506 Aluprime, applied by brush or roller to a nominal thickness of 150 microns.
- 2 The primer should then be allowed to cure overnight.

### Roof Surface: Timber

- 1 Surfaces should be primed with 503 SPEP, applied by brush or roller to a nominal thickness of 150 microns.
- 2 The primer should then be allowed to cure overnight.

### Roof Surface: Cementitious & bitumen felt

- 1 Surfaces should be primed with 559 BP Primer, applied by roller or brush to a nominal 100 microns.
- 2 Cement based substrates may also be primed with 503 SPEP at a nominal thickness of 150 microns.
- 3 The primer should then be allowed to cure overnight.

**PLEASE NOTE:** All roof surfaces must be cleaned with a fungicidal wash and high-pressure water.

### Tank Base: Priming

- 1 All surfaces (concrete and steel) shall be primed with 506 Aluprime.
- 2 Applied at a nominal 150 micron wet film thickness. The repair area shall extend a minimum height of 250mm up the tank face and out onto the concrete to a minimum 250mm.
- 3 Where possible the coating shall be terminated on a vertical face of the concrete (depending in the configuration of the slab).
- 4 The 506 Aluprime must be allowed to cure overnight and overcoated within 36 hours of application.

### Tank Base: Filling of annular void

- 1 Where the void between steel tank and concrete plinth is greater than 3mm, the gap should be packed with a flexible filler.
- 2 This can be a proprietary expanding foam, rubber sheet or foam backer rod, trimmed flush to the substrates as required.
- 3 The void shall then be taped with a proprietary, 75mm minimum width plastic backed (duct) tape.
- 4 The tape shall cover the gap and extend out onto both the primed steel and concrete substrates by a minimum of 25mm, multiple layers of tape can be overlapped to fully encapsulate the void.

## B. Product Preparation

**Prior to mixing, please ensure the following:**

- 1 Ensure materials are at a temperature between 15–25°C (60–77°F).
- 2 The ambient & surface temperature is above 10°C (50°F).
- 3 The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

## D. Application

**Tank base applications:**

- 1 Apply the 1st coat of material using medium pile rollers and brushes at a nominal wet film thickness of 750 microns (30mil).
- 2 Place pre-cut sections of 804 or 806 Reinforcing sheet into the wet material and back roll to fully encapsulate.
- 3 Allow the coating to cure for a minimum 3–4 hours at 20°C (68°F).
- 4 Apply the 2nd coat of 550 WR using medium pile rollers and brushes at a wet film thickness of 500 microns (20mil).
- 5 Allow the coating to cure overnight.

## C. Mixing

**Mix the complete unit of material (20ltrs):**

- 1 550 WR Membrane is a single component material.
- 2 Agitate the product using an electric paddle mixer to ensure you have a consistent mix of acrylic emulsion.

**Roof applications:**

- 1 Apply the 1st coat of material using medium pile rollers and brushes at a nominal wet film thickness of 750 microns (30mil).
- 2 Embed a layer of 804 or 806 reinforcing sheet into the wet material, back roll to encapsulate. Overlapping to ensure no uncovered areas.
- 3 Allow the coating to cure for a minimum 3–4 hours at 20°C (68°F).
- 4 Apply the 2nd coat of 550 WR using medium pile rollers and brushes at a wet film thickness of 500 microns (20mil).
- 5 Allow the coating to cure overnight.

# Quick Application Guide

## Tank base applications:



### Step 1

Ensure you have:

- 1 x 20ltr unit
- 1 x 804 reinforcing sheet
- (or) 806 reinforcing sheet
- 1 x spatula
- 1 x medium pile roller
- 1 x paint brush



### Step 2

Apply the 1st coat of material using medium pile rollers and brushes at a nominal wet film thickness of 750 microns (30mil).



### Step 3

Place pre-cut sections of 804/806 Reinforcing Sheet into the wet material and back roll to fully encapsulate. Allow the coating to cure for a minimum 3-4 hours at 20°C (68°F).



### Step 4

Encapsulate the Reinforcing Sheet with more 550 WB Membrane if needed.



### Step 5

Allow the coating to cure for a minimum 3-4 hours at 20°C (68°F). Apply the 2nd coat using a medium pile rollers without any reinforcing sheet.

# Quick Application Guide

## Roof applications:



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Ensure you have:

- 1 x 20ltr unit
- 1 x 804 reinforcing sheet (or) 806 reinforcing sheet
- 1 x spatula
- 1 x medium pile roller
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Encapsulate the Reinforcing Sheet with more 550 WB Membrane if needed.



### Step 5

Allow the coating to cure for a minimum 3-4 hours at 20°C (68°F). Apply the 2nd coat using a medium pile rollers without any reinforcing sheet.

## About Resimac

A UK based manufacturer of epoxy and polyurethane coatings and repair materials.

From our head office in the heart of rural North Yorkshire, England we supply our range of Epoxy, Polyurethane & Silicone coatings and repair materials to the Oil & Gas, Petrochemical, Marine, Paper & Pulp, Water, Power Generation & Chemical Industries.

## Legal Notice

The data contained within this Product Specification is furnished for information only and is believed to be reliable at the time of issue. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the responsibility of the customer to determine the products suitability for use. Resimac accepts no liability arising out of the use of this information or the product described herein.

## Information & Enquiries

For more information and technical data please visit our website or contact us.

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