

Repair Protect

**Upgrade** 



# Roof & Waterproofing systems

### **Introduction to Resimac**

Resimac manufactures a wide range of roof and waterproofing systems which are ideal for a wide range of surfaces including asbestos, cement, metal, concrete, bitumen & mineral felt.

Our roof and waterproofing systems are manufactured in the UK and exported to over 45 countries worldwide, we are able to provide local solutions in North America, South America, Africa, Europe, Middle East and Asia using our approved contractor network.

Our roofing and waterproofing systems are used in a wide range of industries and through our extensive worldwide network of contractors we are able to offer onsite technical support, training, presentations & seminars backed by project method statements & specifications.



Minimal surface preparation

Low temperature cure 5°C

Single coat primer

All year round application

1500 micron WFT top coat

Shower proof 15 minutes

**551 ER MEMBRANE** 

### 10 Year Waterproofing System

Single coat primer

**Excellent elongation** 

500 micron WFT base coat

IV stable

100gm reinforcement sheet

Water based

500 micron WFT top coat

Environmentally friendly

**550 WR MEMBRANE** 

## 15 Year Waterproofing System

Single coat primer

Excellent elongation

1000 micron WFT base coat

Water based

100gm reinforcement sheet

UV stable

500 micron WFT top coat

Environmentally friendly

**552 CSM MEMBRANE** 

**550 WR MEMBRANE** 

## 20 Year Waterproofing System

Single coat primer

Low temperature cure 5°

750 micron WFT base coat

All year round application

225gm reinforcement sheet

Shower proof 15 minutes

750 micron WFT top coat

UV stable

**554 RB MEMBRANE** 

### 25 Year Waterproofing System

Single coat primer

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1500 micron WFT base coat

All year round application

225gm reinforcement sheet

UV stable

1000 micron WFT top coat

Excellent elongation

557 POLYROOF EC 661

558 POLYROOF UV 662

### Resichem 551 ER Membrane

Resichem 551 ER Membrane is a solvent based fibrous acrylic coating designed for application onto manual prepared surfaces and in colder climates.

The coating has been designed to be applied to mineral felt, GRP, Metal and concrete surfaces. The product can be used for small in-situ repairs or as a low cost short term waterproofing system for roof surfaces.

#### Features of the product include

High build capability in a single coat Excellent flexibility and elongation Cures at low temperatures (5°C) Shower proof in 15 minutes

#### Benefits to the user include

Cost effective solution
All year round application

#### **Typical Applications include**

Leaking roof surfaces & GRP Structures







Over 600 linear meters of GRP valley gutter sealed with 551 ER Membrane









## **System application guide for 551 ER Membrane**

Application	Surface Preparation	Primer	No of coats	Application of 551 ER Membrane
Mineral felt flat roof	Cut out and repair damaged/blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat at 1.5mm WFT
Mineral felt roof pitched	Cut out and repair damaged/blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat at 1.5mm WFT
Asbestos flat roof	Cut out and repair damaged/blistered areas. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat at 1.5mm WFT
Previously coated flat roof	Cut out and repair damaged/blistered areas. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat at 1.5mm WFT
Previously coated roof pitched >15%	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat at 1.5mm WFT
Timber flat roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat at 1.5mm WFT
Timber pitched roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat at 1.5mm WFT
GRP surfaces	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat at 1.5mm WFT

### Resichem 550 WR Membrane

Resichem 550 WR Membrane is a water based acrylic membrane designed to give long term flexible waterproof protection to roofs, tank roofs and GRP structures.

The coating can be applied to a wide range of surfaces including mineral felt, concrete, GRP, metal and cement based sheeting. Once cured it will give a seamless, UV stable, flexible finish to any roof surface.

#### Features of the product include

High build capability in a single coat Excellent flexibility and elongation Versatile application, brush, roller or spray

#### Benefits to the user include

Cost effective solution
Long term waterproofing protection
10 years protection on roof surfaces

#### **Typical Applications include**

Wide range of roof surfaces, tank roofs, GRP Structures





3000m² flat concrete roof coated with 2 x coats of 550 WR Membrane









Metal roof primed with 506 Aluprime and coated with 550 WR Membrane

## System application guide for 550 WR Membrane

Application	Surface Preparation	Primer	No of coats	Application of 550 WR Membrane	Reinforcement
Mineral felt flat roof	Cut out and repair damaged/blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting
Mineral felt roof pitched >15%	Cut out and repair damaged/blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats at 500 microns WFT	Not needed
Asbestos flat roof	Cut out and repair damaged/blistered areas. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting
Previously coated flat roof	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting
Previously coated roof pitched >15%	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats at 500 microns WFT	Not needed
Plastisol cladding flat roof	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting
Plastisol cladding flat roof >15%	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats at 500 microns WFT	Not needed
Timber flat roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting
Timber pitched roof >15%	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	2 x coats at 500 microns WFT	Not needed
GRP surfaces	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats at 500 microns WFT	100gm glass fibre chop strand matting

### Resichem 552 CSM Membrane

Resichem 552 CSM Membrane is a high build water based acrylic membrane designed to give long term flexible waterproof protection to roofs, tank roofs and GRP structures.

The coating can be applied to a wide range of surfaces including mineral felt, concrete, GRP, metal and cement based sheeting. Once cured it will give a seamless, UV stable, flexible finish to any roof surface.

#### Features of the product include

High build capability in a single coat Excellent flexibility and elongation Versatile application, brush, roller or spray

#### Benefits to the user include

Cost effective solution Long term waterproofing protection 15 year protection on roof surfaces

#### **Typical Applications include**

Wide range of roof surfaces, tank roofs, GRP Structures



Factory roof resurfaced using 552 CSM Membrane and 550 WR Membrane top coat



## System application guide for 552 CSM Membrane

Application	Surface Preparation	Primer	No of coats	Application of 552 CSM Membrane	Reinforcement
Mineral felt flat roof	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting
Mineral felt roof pitched >15%	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	Not needed
Asbestos flat roof	Cut out and repair damaged/ blistered areas. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting
Previously coated flat roof	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting
Previously coated roof pitched >15%	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	Not needed
Plastisol cladding flat roof	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting
Plastisol cladding flat roof >15%	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	Not needed
Timber flat roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting
Timber pitched roof >15%	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	Not needed
GRP surfaces	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 552 CSM at 1000 microns WFT 1 x coat of 550 WR at 500 microns WFT	100gm glass fibre chop strand matting

### Resichem 554 RB Membrane

Resichem 554 RB Membrane is a rubberised acrylic system which is ideal for protecting roof surfaces. The product can be applied to primed mineral felt, GRP, concrete, metal and asbestos roofs at temperatures as low as 5°C and will be shower resistant in 15 minutes.

#### Features of the product include

High build capability in a single coat Excellent flexibility and elongation Cures at low temperatures (5°C) Shower proof in 15 minutes

#### Benefits to the user include

Cost effective solution Long term waterproofing protection 20 year protection on roof surfaces

### **Typical Applications include**

Wide range of roof surfaces, tank roofs, GRP Structures



Mineral felt roof with leaking joints sealed with 2 x coats of 554 RB Membrane











New roof construction waterproofed with 554 RB membrane and glass fibre matting

## System application guide for 554 RB Membrane

Application	Surface Preparation	Primer	No of coats	Application of 554 RB Membrane	Reinforcement
Mineral felt flat roof	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting
Mineral felt roof pitched >15%	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	Not needed
Asbestos flat roof	Cut out and repair damaged/ blistered areas. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting
Previously coated flat roof	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting
Previously coated roof pitched >15%	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	Not needed
Plastisol cladding flat roof	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting
Plastisol cladding flat roof >15%	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	Not needed
Timber flat roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting
Timber pitched roof >15%	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	Not needed
GRP surfaces	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	2 x coats of 554 RB at 750 microns WFT	225gm glass fibre chop strand matting

## Resichem 557 Polyroof EC & 558 Polyroof UV System

Resichem 557 Polyroof EC & Polyroof UV are single pack solvent based moisture triggered elastomeric urethane coatings. The products are supplied ready to use and are ideal for waterproofing GRP, Asbestos, Concrete, Metal and Mineral Felt Roofs. The coating system is based on a single coat of 557 Polyroof EC with 225gm glass fibre chop strand matting and a single top coat of 558 Polyroof UV.

#### Features of the product include

High build capability in a single coat Excellent elongation (280%)
Cures at low temperatures (5°C)

#### Benefits to the user include

Cost effective solution Long term waterproofing protection 25 year protection on roof surfaces

#### **Typical Applications include**

Wide range of roof surfaces, tank roofs, GRP Structures







Factory roof protected using the 557 Polyroof EC & 557 Polyroof UV system

## System application guide for 557 Polyroof EC/ 558 Polyroof UV

Application	Surface Preparation	Primer	No of coats	Application of 557 & 558	Reinforcement
Mineral felt flat roof	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	No primer needed	N/A	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting
Mineral felt roof pitched >15%	Cut out and repair damaged/ blistered areas. Remove all loose chippings. Treat with fungicidal cleaner, pressure wash.	No primer needed	N/A	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	Not needed
Asbestos flat roof	Cut out and repair damaged/ blistered areas. Treat with fungicidal cleaner, pressure wash.	559 BP Primer applied 100 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting
Previously coated flat roof	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting
Previously coated roof pitched >15%	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	Not needed
Plastisol cladding flat roof	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	510 MCU 126 applied at 125 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting
Plastisol cladding flat roof >15%	Remove any loose coating back to a sound edge. Remove any flaking corrosion. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	Not needed
Timber flat roof	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting
Timber pitched roof >15%	Ensure timber is clean and dry (<5% moisture content)	503 SPEP applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	Not needed
GRP surfaces	Remove any loose coating back to a sound edge. Treat with fungicidal cleaner, pressure wash.	506 Aluprime applied 150 microns WFT	1	1 x coat of 557 EC at 1.5mm WFT 1 x coat of 558 UV at 1mm WFT	225gm glass fibre chop strand matting

## **Waterproofing Systems Testing and Product Characteristics**

	550	551	552	554	557	558
Elongation Tested to ASTM D412	160%	100%	160%	140%	280%	280%
Tensile Strength Tested to ASTM D624	42kg/cm² (600psi)	42kg/cm² (600psi)	42kg/cm² (600psi)	32kg/cm² (460psi)	32kg/cm² (460psi)	32kg/cm² (460psi)
Direct Pull Adhesion Tested to ASTM D541	28kg/cm² (400psi)	16kg/cm² (230psi)	28kg/cm² (400psi)	28kg/cm² (400psi)	35kg/cm² (500psi)	35kg/cm² (500psi)
Water Vapour Permeability Tested to ASTM D1653	2 x 10 <sup>4</sup> perm.cm	2 x 10 <sup>4</sup> perm.cm	2 x 10 <sup>4</sup> perm.cm	2 x 10⁴ perm.cm	2 x 10 <sup>4</sup> perm.cm	2 x 10 <sup>4</sup> perm.cm
Tear Strength Tested to ASTM D624	17 N/mm	14 N/mm	17 N/mm	16 N/mm	19 N/mm	19 N/mm
Impact Resistance Tested to ASTM D2794	8.5 joules	8.5 joules	8.5 joules	9.3 joules	13.55 joules	13.55 joules
UV Resistance Tested to ASTM G53	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours	5000 hours
Solids	60%	70%	60%	50%	85%	85%
Density gm per cm³	1.25	1.35	1.25	1.35	1.25	1.25
Dry heat resistance	120	100	120	100	100	100
Sag Resistance	750 microns	1000 microns	750 microns	750 microns	1000 microns	1000 microns

	5°C			10°C			20°C			30°C		
	Touch dry	Minimum overcoat	Maximum overcoat	Touch dry	Minimum overcoat	Maximum overcoat	Touch dry	Minimum overcoat	Maximum overcoat	Touch dry	Minimum overcoat	Maximum overcoat
<i>550</i>	N/A	N/A	N/A	4-6hrs	12-16hrs	indefinite	2-3hrs	6-8hrs	indefinite	60-90mins	3-4hrs	indefinite
551	36hrs	6days	indefinite	24hrs	4days	indefinite	12hrs	48hrs	indefinite	6hrs	24hrs	indefinite
552	N/A	N/A	N/A	4-6hrs	12-16hrs	indefinite	2-3hrs	6-8hrs	indefinite	60-90mins	3-4hrs	indefinite
554	6hrs	24hrs	indefinite	4hrs	16hrs	indefinite	2hrs	8hrs	Indefinite	60mins	4hrs	indefinite
557	6-9hrs	18-24hrs	indefinite	4-6hrs	12-16hrs	indefinite	2-3hrs	6-8hrs	indefinite	60-90mins	3-4hrs	indefinite
558	6-9hrs	18-24hrs	indefinite	4-6hrs	12-16hrs	indefinite	2-3hrs	6-8hrs	indefinite	60-90mins	3-4hrs	indefinite
503	6hrs	9hrs	4.5days	4hrs	6hrs	72hrs	2hrs	3hrs	36hrs	60mins	90mins	18hrs
506	6hrs	9hrs	4.5days	4hrs	6hrs	72hrs	2hrs	3hrs	36hrs	60mins	90mins	18hrs
510	6hrs	12hrs	21days	4hrs	8hrs	14days	2hrs	4hrs	7days	60mins	2hrs	3.5days
559	6hrs	12hrs	indefinite	4hrs	16hrs	indefinite	2hrs	8hrs	indefinite	60mins	4hrs	indefinite

## **Resimac Technical Support and Expertise**



Formed in 2009 and based in the North of England, Resimac manufactures a wide range of solvent free epoxy and polyurethane coatings and engineering materials for the Marine, Chemical, Water, Power, Oil and Gas Industries.



We are able to offer expert technical advice onsite or online 24 hours a day, 7 days a week in over 45 countries worldwide.



Contact us direct by email, telephone or by visiting our website.

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With over 50 contractors worldwide we are able to offer fast and effective solutions in many of the worlds major industrial areas.



**Anti Slip Floor Coatings** 

**Chemical Tank & Vessel Lining** 

**Condensation Prevention** 

**Containment Areas** 

**CUI Prevention** 

**Drinking Water Tank Linings** 

**Engine Blocks** 

**External Surfaces** 

**Filters** 

Flange Face Repair & Reforming

Floor Resurfacing

**Heat Exchanger Repair** 

**Heat Protection** 

**HVAC Repair & Linings** 

Pipe Repair & Pipe Wrapping

Plate bonding

**Pump & Process System Repairs** 

### **Roof & Waterproofing Systems**

**Rudders & Bow Thrusters** 

**Tank Base Sealing** 

**Transformer Repairs** 

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