



## 557 Polyroof EC

Single component, solvent based urethane roof coating for embedment applications. Forms a seamless, flexible waterproof membrane ideal for emergency and long term protection.

- Moisture cured, flexible waterproof membrane
- Cures from 5°C (41°F), ideal for cold weather application
- Used with 225gsm glass fibre for added strength
- Compatible with GRP, felt, concrete, metal, and asbestos roofing

2025 Product Sheet

## Typical Applications

557 Polyroof EC is a solvent based, moisture triggered urethane coating designed to provide flexible, long term waterproofing for roofs, gutters, and external surfaces. Supplied as a single component system, it cures to form a seamless, elastomeric membrane that adheres to GRP, asbestos, concrete, felt, and metal substrates.

- All roof surfaces
- Gutters
- Fibreglass structures

## Cure times

Touch dry		Min overcoating time		Max overcoating time
10°C/50°F	6-10 hours	10°C/50°F	18-24 hours	Indefinite
20°C/68°F	4-6 hours	20°C/68°F	12-16 hours	
30°C/86°F	2-3 hours	30°C/86°F	6-8 hours	
40°C/104°F	1-1.5 hours	40°C/104°F	3-4 hours	

## Characteristics

### Appearance

Single component      Dark grey

### Solids Content

85%

### Volume Capacity

800cc/kg

### Sag Resistance

Nil at 1000 microns

### Density

Mixed      1.25

### Storage Life

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

## Coverage

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

20m² at 1000 microns	215ft² at 40mil
10m² at 2000 microns	107ft² at 80mil

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

## Mechanical Properties

### Elongation

Tested to ASTM D412 280%

### Tensile Strength

Tested to ASTM D412

32kg/cm<sup>2</sup> (460psi)

### Direct Pull Adhesion

Tested to ASTM D4541

35kg/cm<sup>2</sup> (500psi)

### Water Vapour Permeability

Tested to ASTM D1653

2 x 10<sup>4</sup> perm.cm

### Tear Strength

Tested to ASTM D624

19 N/mm

### Impact Resistance

Tested to ASTM D2794

13.55 Joules

### UV Resistance

Tested to ASTM G53

5000 hours unaffected

### Heat Resistance

Resistant to dry heat up to 100°C  
(212°F) dependent on load.

## Details & Legal

### Pack Sizes

This product is available in the following pack sizes:

20ltrs (5.3 US gallons)

### 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.

# Application Guide

## A. Surface Preparation

### Non-porous surfaces:

- 1 All surfaces must be primed using 506 Aluprime a low viscosity solvent based epoxy primer applied at a wet film thickness of 150 microns (6mil).

### Plywood and wooden surfaces:

- 1 All surfaces must be primed using 503 SPEP a low viscosity epoxy primer applied at a wet film thickness of 150 microns (6mil).

### Asphalt surfaces:

- 1 All surfaces must be primed using 503 SPEP a low viscosity solvent free epoxy primer applied at a wet film thickness of 150 microns (6mil).

### Mineral Felt surfaces:

- 1 557 Polyroof EC can be applied directly onto felt surfaces that are in a sound condition.

### Concrete/cementitious surfaces:

- 1 All surfaces must be primed using 503 SPEP a low viscosity epoxy primer applied at a wet film thickness of 150 microns (6mil).

## 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.

#### **Metal surfaces:**

- 1 All surfaces must be primed using 506 Aluprime a low viscosity solvent based epoxy primer applied at a wet film thickness of 150 microns (6mil).

#### **Previously coated surfaces:**

- 1 It is good practice to carry out an adhesion check prior to applying any of the Resimac coating products.

#### **Splits, cracks, joints, seals & crazed areas:**

- 1 Pay particular attention to clean out any splits, cracks or joints and seals by scraping or brushing off with a stiff bristle brush. Fill any uneven surfaces with an appropriate filler.
- 2 All joints must be bridged using a 75mm bridging tape.

*557 Polyroof EC is ready for use on flat roofs, pitched roofs, weathered asphalt, bituminous surfaces, concrete, brickwork, fibreglass, felt, metal, plywood and wooden substrates. All surfaces have to be cleaned appropriately and must be free from mould, moss, algae, dust and debris. The surface of the roof must be pressure washed at a minimum 2000psi. The roof surface must be dried off using squeegees or allowed to dry overnight.*

## **B. Product Preparation**

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

- 1 The product is at a temperature between 15–25°C (60–77°F).
- 2 The ambient & surface temperature is above 5°C (40°F).
- 3 The ambient & surface temperatures are not less than 3°C (6°F) above the dew point.

## **C. Mixing**

#### **Single component:**

- 1 Agitate the product using an electric paddle mixer to ensure you have a consistent mix.



## B. Product Preparation

### Splits, cracks & joints:

- 1 Once the tape has been applied to the surface apply a 250mm (10") wide band of 557 Polyroof EC to the roof surface.
- 2 While the resin is still wet lay Resimac 200mm (8") wide glass fibre jointing material onto the wet resin surface.
- 3 The fabric and wet 557 Polyroof EC must then be rolled using metal ribbed consolidation rollers to ensure the fabric has been fully soaked with 557 Polyroof EC.
- 4 Leave the material to cure for 6-8 hours at 20°C (68°F) before overcoating.

*PLEASE NOTE: Application temperature should be between 5-35°C (40-95°F).*

### Full 1<sup>st</sup> coat of roof surface:

- 1 This product can be applied by brush, roller or squeegee.
- 2 This product must be applied in a single coat at 1-2mm (40-80mil) wet film thickness using rollers or squeegees.
- 3 While the coating is still wet, 225gm Glass Fibre chop strand matting must be embedded into the surface as part of the 20 year + roofing system.
- 4 Once the glass fibre chop strand matting has been laid onto the wet resin surface it can be rolled using ribbed metal consolidation rollers to ensure the 557 Polyroof EC resin system fully impregnates the glass fibre layer.
- 5 Once the surface has been consolidated using the metal ribbed rollers apply an encapsulation layer of 557 Polyroof EC to the surface and leave to cure overnight.

### Topcoat:

- 1 Must be applied at a nominal 500-700 microns thickness in 1 or 2 coats.
- 2 Apply by brush or roller, there is no reinforcing required in the topcoat.

## 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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