

RESICHEM 557 Polyroof EC 661 – solvent based urethane roof coating

Resichem 557 Polyroof EC 661 is a single pack solvent based moisture triggered elastomeric urethane coating. The product is supplied ready to use and is ideal for waterproofing GRP, Asbestos, Concrete, Metal and Mineral Felt Roofs. The coating has been designed to be used as an embedment coat with 225gm glass fibre chop strand matting and must be overcoated with Resichem 558 Polyroof UV 662 once cured.

- Flexible membrane for roofs and GRP structures
- Seamless waterproofing system
- Single component
- Cures at temperatures as low as 5°C/ 40°F

Typical applications

Suitable for coating the following surfaces -

Roofs gutters fibreglass structures

Surface Preparation

Resichem 557 Polyroof EC 661 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.

Concrete and non-porous surfaces

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

Plywood and wooden surfaces

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

Bituminous or asphalt surfaces

All surfaces must be primed using RESICHEM 559 BP Primer a low viscosity solvent based acrylic primer applied at a wet film thickness of 100 microns (4mil).

Mineral Felt surfaces

Resichem 557 Polyroof EC 661 can be applied directly onto felt surfaces that are in a sound condition

Metal surfaces

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

Previously coat surfaces

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

Splits, cracks, joints, seals and crazed areas

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 (Please speak to Resimac for more details).

All joints must be bridged using a 75mm bridging tape.

Mixing

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.

Once these 3 checks have been met, please proceed with mixing the product.

1. 557 Polyroof UV 661 is a single component material.
2. Agitate the product using an electric paddle mixer to ensure you have a consistent mix.

Application

Splits, cracks & joints

1. Once the tape has been applied to the surface apply a 250mm (10") wide band of 557 Polyroof EC 661 to the roof surface.
2. While the resin is still wet lay Resimac 200mm (8") wide polyester jointing material onto the wet resin surface.
3. The fabric and wet 557 Polyroof EC 661 must then be rolled using metal ribbed consolidation rollers to ensure the fabric has been fully soaked with 557 Polyroof EC 661.
4. Leave the material to cure for 6-8 hours at 20°C (68°F) before overcoating.

Full 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 661 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 EV 661 to the surface and leave to cure overnight.

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

Coverage Rates

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

20m ² at 1000 microns	215ft ² at 40mil
10m ² at 2000 microns	107ft ² 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.

Cure Times

At 20°C (68°F) the applied materials should be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures:

Touch Dry	2-3 hours
Minimum overcoating time	6-8 hours
Maximum overcoating time	Indefinite

Pack Sizes

This product is available in the following pack sizes –
20ltrs (5.3 US Gallon).

Colour

Single component – mid grey or black.

Over-coating times

Minimum - approximately 6-8 hours at 20°C (68°F).
Maximum – indefinite

Storage Life

2 years if unopened and store in normal dry conditions (15-30°C/ 60-86°F)

Other Technical Documents

Safety Data Sheets	-	Single component material
Product Specification Sheet	-	Technical Performance Information

Health and Safety

Please ensure good practice is observed at all times. Protective gloves, goggles & a disposable coverall must be worn during the mixing and application of this product. Before mixing and applying the material ensure you have read the fully detailed Safety Data Sheet.

Legal Notice:

The data contained within this Technical Data Sheet 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 if the product is suitable for use. Resimac accepts no liability arising out of the use of this information or the product described herein.