

the flexible cool roof

SPECIFICATION & APPLICATION GUIDE



THE NEXT GENERATION HYBRID ROOFING MEMBRANE

Seal It Liquid Membrane offers a modern alternative to traditional GRP, PU, silicone and bitumen roof coatings. Highly reflective and solvent-free, this easy to apply, one coat, non-flammable barrier is formulated for professional roofing applications and requires **no special training** to apply. The treatment is designed to be used on its own, however, in more demanding situations it can be used in conjunction with a primer, accelerator*, reinforcement mat and edge & trim sealer.

Altogether the system delivers a high performance, watertight, permanently flexible and extremely durable barrier coating for all existing roof substrates.



Seal It Liquid Membrane offers primerless adhesion on a wide variety of surfaces: metal, wood, brick, stone, polyester, glass, lead, bitumen coatings*, tile, plastics, polycarbonate, concrete, all applied cold without heating or bonding.

It is ideal for repairing flat roofs, pitch roofs (of angles less than 10°), flashing, guttering, roof lights and panels, chimney stacks, corrugated or plate roofing, zinc, steel, fibre-cement and façade panels creating an impermeable seal which repels water damage and provides resistance to degradation from natural weathering agents such as rain, snow and sunlight . Seal It Liquid Membrane is also suitable for zinc guttering, down pipes, ventilation ducts, etc.

Based on advanced hybrid technology and developed by the chemists at Bond It in the UK, this product remains permanently flexible once cured and will not harden or soften even under extremes of weather, temperature, UV radiation and external chemical attack.

SYSTEM COMPONENTS

Professional grade, one coat, hybrid roof treatment available in either white or grey. Its high performance formulation is solvent-free and non-flammable, making it safer to use and easier to apply coating. With outstanding water resistance, it is self-levelling, crack-bridging, non-shrinking and non-cracking.



SEAL IT LIQUID MEMBRANE



5L GREY: BDSIR5GR 5L WHITE: BDSIR5WH 20L GREY: BDSIR20GR 20L WHITE: BDSIR20WH

Compatible for use with almost all common roofing materials, under test conditions Seal It Liquid Membrane has been shown to have superb cool roof thermal properties, outperforming black bitumen by 36% at just 0.8mm thickness. It was also an impressive 11.3% more efficient than solar reflective paint, which all helps to reduce energy costs and wastage.



One-part and solvent-free, this is used to prepare bitumen surfaces and roofing felt prior to the application of Seal It Liquid Membrane. Seal It Primer enhances the bond strength of the top coat, is quick and easy to use and prevents bitumen coatings from staining through to the top coat.

SEAL IT PRIMER



2.5L CLEAR: BDOCRSP2

SYSTEM COMPONENTS

High grade 100% polyester fabric, non-woven and spunbonded to offer reinforcement in areas where you may have blisters, splits, seams, details, joints and penetrations. Once this matting is used with the Liquid Membrane the resulting coating typically has twice the strength. Seal It Reinforcing Mat is ideal for areas subject to high movement and is tear and puncture resistant.





25M: BDOCRSM25

SEAL IT EDGING SEALER



This is a hybrid polymer sealer which is suitable for filling cracks, edges, details and small gaps prior to the application of Seal It Liquid Membrane. Alternatively, it can be used *after* Seal It Liquid Membrane is applied to secure edgings or seals in order to create a self-terminating flashing or provide extra protection around roof elements such as chimneys, air vents, etc.



295ML GREY: BDOCRSSGR 295ML WHITE: BDOCRSSWH

SEAL IT REINFORCING MAT

GETTING STARTED

Protect any surfaces which do not require application in order to avoid accidental damage or contamination, this is especially important when applying the product by spray. If using masking tape or protection film, make sure they are fully bonded so as not to cause any trip hazards.

Check the weather forecast to ascertain application conditions and drying times as rain and humidity will affect the cure process. Normal application should be carried out when the outside temperature is above 5°C and should not be attempted if it is possible that the temperature will fall below 0°C within a 24-hour period after application has been carried out. For colder weather use of the Seal It Accelerator* will allow the product to cure at temperatures as low as -20°C and will improve the drying time in inclement weather.

The applied coating should be protected from foot traffic during the curing process to ensure a smooth finish with no compromise to the final strength and performance. A moisture scan may be required to ensure final cure is attained and no moisture is retained in the underlying roof system. Details such as vents, air intake ducts, air conditioning units, chimneys, etc. must be switched off prior to application and left off for at least 24 hours after application or until the coating has fully cured.

Seal It Liquid Membrane can be applied to damp surfaces. If there is standing water, brush this away and then apply the coating to the damp surface. Do not worry if it then rains and water pools on top of the product, it will not be affected and will continue to cure. Any areas subject to ponding or standing water can be treated (Seal It Liquid Membrane can withstand standing water for up to 72 hours). As with any application, excess water can cause damage and it is advisable that any roof systems have good drainage to minimise ponding.



Preparation of Substrates: Surfaces should be clean, free from any oil, grease, dust, debris, loosely bonded coatings or any other contaminants that may affect adhesion. All surfaces should be degreased, either with hot water or with a pad soaked in solvent, followed by wiping with a clean cloth. All loose materials must be removed by brushing, scraping or high-pressure water. New concrete and mortars must be at least 28 days old. Any organic growth should be treated with Bond It Mould Stop Fungicidal Wash or equivalent - see <u>www.bond-it.co.uk</u>.





Irregular masonry surfaces should be filled and levelled before applying Seal It Liquid Membrane. Cracks greater than 2mm wide should be filled prior to application. This can be done with Seal It Cracks and Edging Sealer or for larger gaps use the Seal It Reinforcing Mat, which can be cut to size and used to pack the gap.





APPLICATION

Once surface preparation has been completed and substrate is ready to receive the coating, it is advisable to seal flashing details, joints, cracks and seams, etc. with Seal It Cracks and Edging Sealer to ensure a watertight finish. We recommend a small discreet area approximately 1m² is treated with any of the Seal It products prior to applying to the full surface area for the purpose of identifying any adverse reaction between product and the substrate.

Priming: If you are covering bitumen or felt based products, priming is required. This can only be done when the outside temperature is above 5°C as the product is water based and would be subject to freezing. Surfaces to be primed should be free from dirt, oil, grease, dust or loosely bonded coatings or any other contaminants that may affect adhesion. Organic growth should be removed/treated with Bond It Mould Stop. Surfaces MUST be dry and stable prior to application. Apply a single coat of Seal It Primer to the surface with a brush or roller. Follow coverage rate to ensure minimum thickness is achieved. Leave to fully cure, (normally overnight). In cold weather it may require 48 hours to fully cure. White patches in the film indicate it requires more drying time.

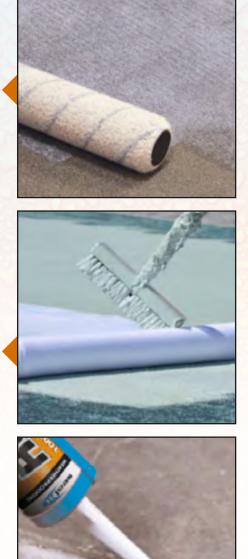
It is essential that bituminous materials are completely covered with Seal It Primer prior to application of Seal It Liquid Membrane. Care must be given to rough surfaces such as bitumen felt, where any gaps in primer coverage can lead to product failure. Two coats of Seal It Primer are required on uneven surfaces and over water-based bitumen coatings. Allow each coat to dry fully before overcoating.

Coverage: 1 litre of Seal It Primer will prepare approximately 2-3m².

Repairs and Reinforcement: Any minor roof damage such as blisters, tears or missing material need to be repaired prior to coating application. This should be done using the Seal It Cracks and Edging Sealer (see below) or for larger areas Seal It Reinforcing Mat.

This fibre-based matting can also be incorporated as part of the system where general reinforcement would be beneficial or where areas are subject to movement or wearing as it will provide 50% extra strength. The reinforcing mat is applied like a sandwich between two coats of Seal It Liquid Membrane: the mat can be applied either straight off the roll or cut to size prior to use.

Apply a 1mm coat of Seal It Liquid Membrane and press the reinforcing mat into it with light pressure whilst the coating is still wet (refer to separate instructions for use of Seal It Liquid Membrane). A minimum overlap of 5cm is recommended between adjoining strips of the reinforcing mat. Use a small amount of Seal It Liquid Membrane to adhere the overlapping region. When the first coat has dried sufficiently to walk on (approximately 8 hours depending on conditions) apply a second layer of Seal It Liquid Membrane to fully cover the mat and bring total thickness to at least 1mm. When using as a patch repair over blisters, splits, etc. then the mat and coating must extend at least 5cm beyond the affected area.



Seal It Cracks and Edging Sealer can be used prior to application of Seal It Liquid Membrane coating to make good any cracks, edges, details and other openings in the substrate. Application of this product and the Seal It Liquid Membrane must not be over 5 days apart (adhesion between the two products will be affected if applied after 5 days). Apply in a continuous bead along the area. Smooth by tooling with a soapy solution and once cured rinse with clean water before applying the barrier coating. Remove any excess material and clean tools immediately with white spirit. Replace plastic cap after use It is also essential that bitumen surfaces, roof felts, etc. are properly and completely primed before application of Seal It Cracks and Edging Sealer or product failure WILL occur.

APPLICATION Continued

Single Coat Application of Seal It Liquid Membrane: Remove all surplus packaging from inside the tin, including desiccant and protective films. We would advise stirring the coating thoroughly before use but take care not to introduce too much air into the tub. Once the container is opened and the product is exposed to the air it will start to cure so **apply immediately**.

Do not dilute. Apply product to the surface with a brush (longer bristle brushes are recommended on rough substrates), short pile roller, trowel, spatula, squeegee or industrial spray equipment.

The coating should be evenly applied at a rate of approximately $1m^2$ per 1L at 1mm thickness according to the porosity and roughness of the surface to be treated. It is recommended the coating is extended beyond the substrate to create a self-terminating flashing or use Seal It Cracks and Edging Sealer to seal edges. Take care when conditions are windy and using spray method, in particular, avoid contact with substrates not requiring coating. Product can be removed before it cures with acetone, Bond It White Spirit or Bond It Monster Wipes.

Coverage: 1 Litre of Seal It Liquid Membrane will cover approximately 1m² at 1mm thickness.

Spray Application: This product should be sprayed using a high pressure, airless pump capable of producing a minimum of 4000 PSI at the spray gun head. The pump should have a minimum of 11 litres per minute output rate and be fed by a 5:1 transfer pump to prevent formation of air pockets. Use a fully compatible pump system and ensure hoses are BUNA-N jacketed to prevent moisture contamination. Hoses should have a minimum I.D of ³/₄" and an adequate working pressure. Recommended spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, and have a minimum opening of 0.022 and a 50° fan tip. Do not use contaminated hoses that may have been used for emulsions or acrylic products as the moisture retained in the hose may activate the curing of the material prematurely.

Spray Seal It Liquid Membrane at an application rate of 1L per 1m² at 1mm thickness. Be careful of overspray on finished sections as it could discolour already cured areas.

Finishing: Seal It Cracks and Edging Sealer can be used prior to application of Seal It Liquid Membrane to make good any cracks, joints and other apertures in the substrate. It can also be used after Seal It Liquid Membrane application to secure edgings and seals to create a self-terminating flashing or provide watertight joints. Application of this product and the Seal It Liquid Membrane must not be over 5 days apart. Apply in a continuous bead along the area. Smooth the joint by tooling with a soapy solution. Remove any excess material and clean tools immediately with white spirit. Replace plastic cap after use. It is also essential that bitumen surfaces, roof felts, etc. are properly and completely primed before application of Seal It Cracks and Edging Sealer or product failure WILL occur.





CHECKLIST

A final inspection of the completed project should be carried out to ensure the perfect finish has been achieved. If patches look thin or undercoated, recoating may be required to ensure the optimum thickness of 2mm is attained. Check all areas are fully stuck to the substrate. Typical signs of poor adhesion would present itself as flaking or blistering, also pin-holing can occur if product is too aerated. We would recommend these areas are recoated with a layer of Seal It Liquid Membrane. If the coating is damaged or punctured, cut away any damaged areas, making sure the underlying surface is clean and dry. Recoat the damaged area (with reinforcing mat if used) to the same thickness and feather out on to the existing coating with a minimum of 5-10cm beyond the existing coating to ensure secure bonding.

Drying and Curing: Seal It Liquid Membrane will be tack free after approximately 2 hours after application (@23°C and a relative humidity of 50%). It is capable of resisting heavy rain 3 hours after application. Once application is complete the surface should be subjected to as little traffic as possible. The area should not be fully trafficked for at least 72 hours to preserve integrity of coating. Damage to the roof by other trades will not be the responsibility of Bond It.

Limitations: Not recommended for use when temperatures of less than 5°C are expected in the next 24 hours unless used in conjunction with the Seal It Accelerator*. Not suitable for use on low surface energy plastics such as PE, PP and PTFE. Adhesion to EPDM sheets needs to be checked on a small test area before proceeding. Do not use on surfaces that bleed oils or plasticisers. Damp substrates can cause blisters in the cured coating. If the minimum thickness is not achieved, cracks and structural failure in the coating may occur. Only walk on roof surfaces restored with Seal It Liquid Membrane for maintenance purposes.

This is not a wearing surface and is not anti-slip and, as such, should not be used as a pedestrian walkway, deck or frequently trafficked area. Small chip aggregate can be added to the coating to provide limited slip resistance if the area will be subject to light/occasional foot traffic. It is also not recommended for areas where there is low atmospheric moisture present as product will not cure.

Storage: Shelf life of Seal It Liquid Membrane is 12 months from its date of manufacture when stored at a temperature between +5°C and +30°C in its original unopened packaging. Once opened this product will begin to cure and is recommended that the full tub is consumed.

Disposal of Containers: Do not leave empty containers where residue could be harmful to children, animals or the environment. Replace lids and remove any containers and waste material from site to a central disposal point in accordance with local regulations.

NOTE: Instructions for use are for general guidance only, since site conditions and labour are beyond our control. It is the user's responsibility to check and determine suitability of use for specific applications. Always follow manufacturer's instructions carefully. Our liability is limited to replacement or refund of cost of product. Technical and safety data sheets on all Bond It products can be downloaded from <u>www.bond-it.co.uk</u>.

*Accelerator available 2020





G16 River Bank Way, Lowfields Business Park, Elland, West Yorkshire HX5 9DN. Tel: 01422 315300, Fax: 01422 315310 sales@bond-it.co.uk www.bond-it.co.uk