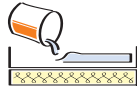




Cold Applied Liquid Coatings



since 1895



The Garland Company have manufactured and supplied a range of tried and tested Liquid Roof Waterproofing solutions for three decades. These coatings based on the latest plastics-based technology allow safe, fast to install, cost effective and seamless roof protection. Fully guaranteed for 10, 15 or 20 years Garland Liquid Roof Systems are the natural choice for UK specifiers.

What is Liquid Roofing?



Liquid roofing systems provide waterproofing and protection against all climatic conditions by means of a liquid applied material which cures to produce a totally seamless and waterproof barrier. These versatile products can be used as a coating or utilised in conjunction with fibreglass matting to provide additional reinforcement. Liquid roofing systems can be used to protect an entire roof or as a repair material for maintenance applications.

Liquid roofing systems are free from joints, seams, fixings and other potential risk areas that cause leaks in some traditional roofing systems. They may be utilised in both new build or refurbishment projects and offer a wide range of solutions to suit the specifiers requirements.

In refurbishment situations liquid roofing systems are usually applied over the existing waterproofing, therefore removal of the existing system is avoided, there is no need for any form of temporary roof, and contract time is faster than most conventional systems.

Liquid roofing systems are versatile and can be rapidly installed on most substrates. The seamless nature of the product makes for ease of application to even the most complex roof detail. Simple installation makes liquid roof systems fast to complete, cutting on-site time and keeping costs to a minimum.

The risk of accidents occurring on site is reduced as the necessity to strip off the failed system is removed. Also as the existing roof is kept intact, the work is completed with the minimum of noise and disruption to the building occupants beneath.



RAMP™ (Roof Asset Management Program)



To start increasing the life-cycle value of your properties, contact your local Garland Regional Technical Manager to organise a RAMP demonstration.

The Garland Company will conduct portfolio surveys and create a customised database of all relevant roofing information, from construction details and inspection reports to roof maintenance histories and digital documentation of problem areas. Using Garland's RAMP computer software, your Regional Technical Manager will then analyse your data and propose recommendations based on your specific needs and budget.

The Garland Company offers a truly nationwide service. To talk to your nearest Regional Technical Manager or to find out more information please contact us on:

Telephone: 01452 330 646 or 0800 3285560
Fax: 01452 330 657
Email: info@garlandukltd.co.uk

www.garlandukltd.co.uk

White Knight™

Versatile, energy saving and chemically resistant, White Knight is the ultimate liquid membrane refurbishment solution to provide additional reinforcement and weatherproofing to your roofing system. White Knight's reflective eggshell finish reduces roof temperatures more than traditional dark EPDM, CSPE, and PVC single ply membranes. This dramatically lowers the aging process of the product and the energy required to cool the interior of the building.



White Knight is a multi purpose single component polyurethane liquid waterproofing membrane, designed for new build and to maintain, restore and upgrade the performance of existing, aged, BUR and single ply roofs.

It is uniquely formulated to provide additional waterproofing protection to BUR and single ply membranes whilst providing a white ENERGY STAR rated reflective surface.*

This versatile product can be used as a coating, or it can be utilised in conjunction with fibreglass matting to provide additional reinforcement. White Knight can be used to coat an entire roof.

Product Benefits

Waterproofing protection - White Knight without reinforcement will provide up to 2500 microns (2.5mm) of additional waterproofing protection to an existing single ply membrane. This process will extend the life of the existing roofing system and allow reasonable time to budget for eventual replacement.

This ENERGY STAR rated product provides a reflective layer over various roof systems. This dramatically lowers the energy required to cool the interior of the building. In addition, white ENERGY STAR roofs help reduce smog and the urban heat island effect that is prevalent in many UK metropolitan areas.

UV Resistant - This high performance polyurethane coating protects roofing components from the harmful effects of UV.

Chemical Resistant - The White Knight system is uniquely formulated to provide superior chemical resistance to many oils, acids and other contaminants. Contact your local Garland Regional Technical Manager for specific chemicals and concentration levels.

User Friendly - The ease of application makes White Knight extremely fast and simple to install.



What is ENERGY STAR®?

ENERGY STAR® is a registered trademark of the USA Government and represents a collaboration between the United States Department of Energy, the United States Environmental Protection Agency and influential manufacturers such as The Garland Company. The ENERGY STAR Programme represents a voluntary partnership between businesses, organisations and the USA Federal Government to promote energy efficiency and environmental activities.



ENERGY STAR labelled roof products are reflective and can reduce roof surface temperature by up to 20°F., decreasing the amount of heat transferred into a building.

ENERGY STAR labelled roof products are designed to help save money on utility bills and reduce energy waste. Installing reflective roofs help reduce the heat island effect, decreasing the amount of smog in the air and benefiting the entire community.

Whilst this is a USA initiative, UK specifiers can take considerable comfort from our adherence to these rigorous standards.

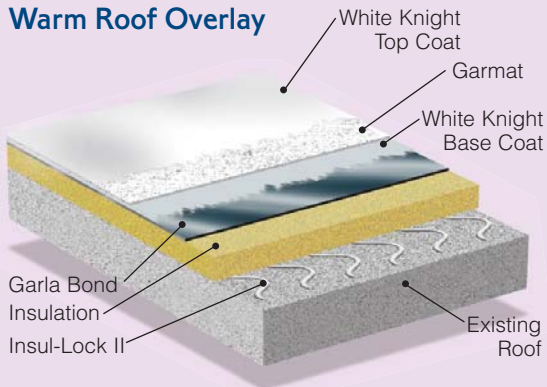


*The Energy Star rating applies to white colour only.

Guaranteed Systems

Due to the ease of application and flexibility of the system, White Knight can be used as a coating to create an insulated roof system (Warm Roof) or refurbish an existing roof (Cold Roof) when required. This versatile product can be specified in the most demanding of applications where traditional systems would not be suitable. Bespoke recommendations and specifications will be produced by your Regional Technical Manager, who will constantly monitor the progress of the application to issue the long-term guarantee.

Warm Roof Overlay



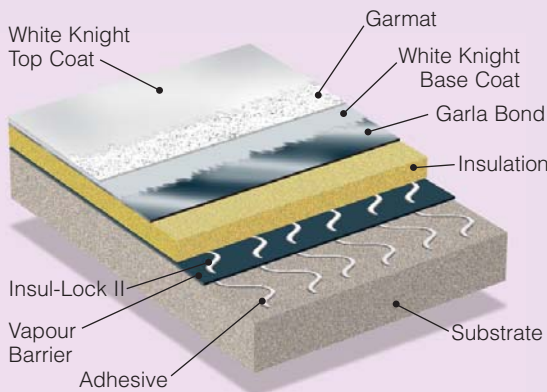
Warm Roof Application

For either new build or retrofit applications Garland's White Knight seamless urethane solution is the perfect choice. By using a combination of cold applied urethane products and next generation bituminous membranes we are able to install a fully cold applied warm roof system, which is not only quick and easy to install (which reduces labour costs on installation) but will offer exceptional long-term performance and therefore reducing the life cycle costs.

Cold Roof Coating Application

White Knight can be used as a coating over an existing roof system, such as mineral surfaced modified bitumen or smooth surfaced mastic asphalt. In some cases the existing membrane does not need to be removed - this would depend upon several factors, the most important being that the underlying insulation is dry and no moisture is trapped in the system. This 'Cold Roof' application would attract a standard Garland guarantee from

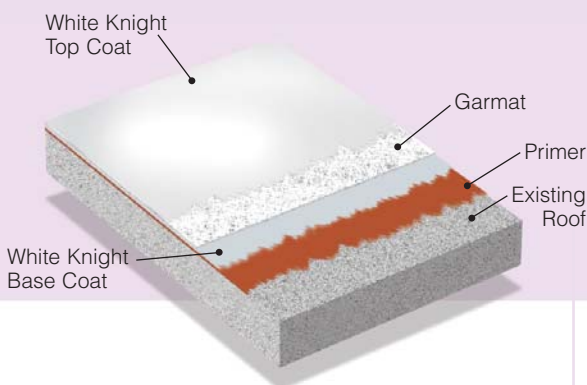
Warm Roof



Garla Therm insulation boards are bonded to the substrate by means of a low-rise single part, fast curing urethane adhesive. Once the insulation boards are fully bonded, a layer of Garla Bond self-adhesive membrane is laid on top ensuring that all laps are sealed, therefore creating a waterproof membrane, ensuring no water ingress to the system. A White Knight liquid system is applied to the membrane at a thickness dependant upon guarantee requirements.

10 - 25 years. In principal the substrate would be primed followed by the initial base coat layer, the reinforcing fibreglass matting would be laid into the base coat and completely absorbed - after the recommended cure time, the top coat of White Knight in grey or white would be applied. Normal full cure time is 24 hours depending on weather conditions.

Cold Roof Coating



The Garland Company recognise the clients needs. Providing long-term waterproofing solutions to even the most complex problems is our primary interest. Time tested liquid systems provide optimum protection for your property and its interior. Below are further cold applied product ranges currently on offer to our UK specifier and contractor partners.

Concretite®

Concretite is a heavy-bodied, ready-to-use emulsified poly-resin paint. It damp proofs and decorates all types of exterior and interior masonry surfaces. Concretite will not peel, chip, blister or crack. It hides rust stains and discolourations, and it is non-fading and washable. Concretite is suitable for application over painted and unpainted surfaces of cement, concrete, brick, stone, stucco, tile, plaster and composite boards.



Seal-A-Pore™ V.O.C.

Seal-A-Pore V.O.C. is a silicone emulsion designed to damp-proof above ground masonry surfaces. It contains a silane/siloxane silicone blend that provides water repellence by chemically reacting with the substrate. Seal-A-Pore V.O.C. is designed to penetrate deeply into brick and mortar - producing a hydrophobic treatment that inhibits water absorption. It coats the tiny pores in brick and mortar, yet allows the passageways to remain open. Seal-A-Pore V.O.C. also allows water already in the masonry to egress to the outside.

TS-2136™

TS-2136 is a moisture-curing, single-component, rigid polyurethane sealant that when cured offers the performance of a two-part sealant with the ease of installation of a one-part. It is designed to maintain an effective bond and seal between materials of similar and dissimilar surfaces, porosities and with coefficients of expansion.

TS-2136 is intended for use in expansion and control joints between components such as precast panels, curtain walling, copings, window and door perimeters and glazing details.

Insul-Lock™ II

Insul-Lock II insulation adhesive is a low rise, fast setting, solvent free, modified polyurethane adhesive, designed to adhere approved insulation to structural decks, base membranes/layers and smooth surfaced BUR.

Garla Bond

Garla Bond self adhesive membrane offers superior waterproofing protection with ease of installation, ultimately saving money on installation costs whilst also eliminating the risk of water ingress, when using conventional carrier membranes applied in adhesives. Garla Bond is a 3mm fully reinforced modified membrane which has a peel off back sheet exposing a highly adhesive self stick layer. Once the Garla Therm boards are installed with the joints correctly staggered, all dust and debris is swept from the board, exposing a clean dry surface.

The rolls of Garla Bond are set as in conventional BUR then back rolled to expose either end of the roll. The peel off back sheet is then removed and the membrane is fully bonded to the top of the insulation board. When the next roll of Garla Bond is installed the side and head laps are immediately sealed forming a waterproof layer which is also a perfect surface to install the White Knight system. The advantages of using Garla Bond over a conventional carrier layer include:

- Reduced mess and clear up compared to adhesives (reduced disposal costs).
- Reduced material loss (every part of the roll can be used).
- Reduction of installation time (therefore reduction in the overall cost of the job).
- Immediately forms a waterproof membrane.
- Non Toxic (inert material).
- Creates a perfect substrate to apply the White Knight.
- Incorporates a reinforcing scrim which gives the system strength and added flexibility.
- Adds another layer of water proofing to the system.
- Removes the need for torches and kettles on site.





Garland realise that no two roof problems are the same and depending upon substrate, condition or budget, a one product recommendation will not be applicable. With this in mind, we offer specialist roof coatings that take this into consideration. Using the latest Acrylic and Elastomeric Technology your Garland Regional Technical Manager can offer bespoke recommendations to ensure you are given the correct solution to maximise the value of your roof asset.

Specialist Coatings



Pyramic™

Pyramic is a white, non-toxic, fire retardant roof coating formulated from water-based, pure acrylic, self-curing latex polymers. Pyramic also contains unique “bleed-blocking” polymers that make it very suitable for use over asphalt surfaces. It is designed for application by brush, roller or spray. Once cured, Pyramic preserves asphalt or metal roof surfaces and reduces under roof temperatures to create a more pleasant interior working environment that is less costly to maintain.

Ultra-Shield™

Since its introduction in 1995, the Ultra-Shield Elastomeric Coating System has been successfully applied over hundreds of thousands of square metres of metal, cementitious and asbestos transite panelled roofs. It is an ideal restoration alternative for customers and clients who want an attractive, energy efficient and long lasting solution to roof problems. The Ultra-Shield System consists of a family of interrelated, compatible products, each is designed to perform a specific repair function while working in unison with its other family members to produce a repair system. The Ultra-Shield family includes:

Ultra-Shield White:

A white reflective, top coat for metal, and asbestos roof panel applications.

Ultra-Shield White FR:

A fire retardant, FM approved version of the Ultra-Shield White.

Ultra-Shield Rubberised Base Coat:

An off white undercoat applied as the initial coat in the Ultra-Shield System.

Ultra-Shield Seam Sealer:

A brush grade seam sealer for waterproofing fasteners and seams.

Ultra-Shield Skylight Sealer:

A clear sealer to rejuvenate fibreglass skylight panels.

The Ultra-Shield System qualifies for a 10 - year guarantee. Ultra-Shield White and its companion products are solvent borne SBS coatings. Solvent borne coatings dry to a continuous film, and, unlike water based materials they are noted for their tenacious bonding characteristics, self priming, peel resistance and chemical resistance.

Other desirable characteristics include:

- Superior adhesion.
- Low perm rating (moisture cannot penetrate the coating).
- Excellent resistance to ponding water.
- Superior expansion and recovery capability.
- Resistant to algae, fungus and wash off.
- Cold weather compatibility.
- Exceptional chemical resistance, except for solvents.
- Excellent reflectivity provides energy savings and thermal shock resistance.

Ultra-Shield White carries FM rating and also Energy Star accreditation.

Garland Approved Contractors

To achieve long-term performance from any BUR system it is vital that strict criteria is adhered to at the installation stage. Garland will only recommend contracting companies whose attitudes towards site performance and client care are in line with the same high principles as their own.



The quality of your planning and specification demands the services of a like minded contracting organisation. The Garland Company will provide you with a list of approved partnered companies who have met the criteria set down in our stringent approval process.

We strive to partner with company's possessing only the highest standards of workmanship at this critical stage of your project. We insist on competent pricing, proficient site practice and effective contract management from all our approved contractors.

But assigning a contractor is not the end of our involvement in the project. Your Garland Regional Technical Manager will monitor the performance of the contractor over the course of the project, and ensure that all works are being carried out in line with the specification, to codes of practise and that they also meet all aesthetic considerations.

Once work is completed a thorough inspection of the project will ensure that the contractor has met all the considerations laid down in the original specification and that all works are completed to the full satisfaction of The Garland Company and the specifying client.

The workmanship of our approved contractor network is approved and guaranteed against failure under the terms and conditions of the subsequent Garland guarantee.



The Garland Guarantee

All Garland high performance roofing systems come with the commitment of a long-term guarantee so your building stays dry and leak free. Garland stands behind that commitment, knowing that each application comprises of a uniquely engineered roofing system that was installed by a highly proficient Garland Approved Contractor.

Depending upon product and criteria, guarantees of up to a thirty year duration are available to our UK clients. Your Garland Regional Technical Manager will discuss your guarantee requirements and provide a proposal based on system choice and duration available. Full details of guarantees and criteria are available on request.

Clients can take comfort from the guarantee being issued following stringent inspections that ensure all criteria have been met.

Garland are confident that owing to the provision of a complete roofing service that is second to none in the UK roofing industry your guarantee certificate will stay in the project file for the duration of the roofs long and unblemished life. It is reassuring however to know that a guarantee of integrity is in place should it be required.

Along with Garland long-term guarantees, specifying clients can take comfort from the existence of British Board of Agreement (BBA) accreditation and the FM approval certification for certain products in the Garland range of systems.





since 1895

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