



Liquid Applied Waterproofing For Roofs, Podia & Balconies



ROOFSHIELD PmB

PITCHMASTIC PmB

www.pitchmasticpmb.com

Liquid Roofing Protection

Specifying The Right Product - System Selector












Area Used

Uninsulated Roof Overlay	P6			
Warm Roofs		P8		
Inverted Roofs / Podia / Green Roofs			P10	
Metal Roofs				P12
Structural Protection for Car Parks				P13

Product Required

Roofshield PmB
Roofshield PmB
Blueshield PmB
Roofshield PmB
DeckProtect

Key To Symbols

-  Single point
-  Chemically resistant
-  UV stable
-  Flexible
-  Tough
-  Rapid
-  Heavy duty
-  Aesthetic
-  Longevity
-  Anti-slip
-  Fibre reinforced

All Encompassing Waterproofing

Roofshield PmB is a range of cold liquid applied systems that utilise the most effective technologies in roof protection today.

Roofshield PmB has been formulated by chemists to be safe, user friendly, and high performing.

Roofshield PmB offers clients the perfect balance between design, aesthetics and practical performance, with a track record of over 20 years.

Liquid Applied

Through the avoidance of seams, joints and fixings, potential weak spots are eliminated. The client is provided with a completely homogenous, seamless waterproofing solution, protecting their asset and allowing treatment of virtually all types of construction.

Cold Applied

Roofshield PmB cold applied systems offer key advantages over traditional methods:

- Safe to use within the vicinity of the general public
- No large plant or equipment required
- No hot works - removing potential fire hazards
- Reduced Health & Safety risks
- Minimises the impact on users, owners and operators
- Low odour version available

Market Leading Guarantees

To provide an unrivaled level of comfort to building owners, managers and occupiers, and to future-proof asset values, **Roofshield PmB** guarantees are frequently of a fully transferable, single point nature avoiding the all too common contractor/manufacture blame culture phenomenon.



Uninsulated Roof Overlay

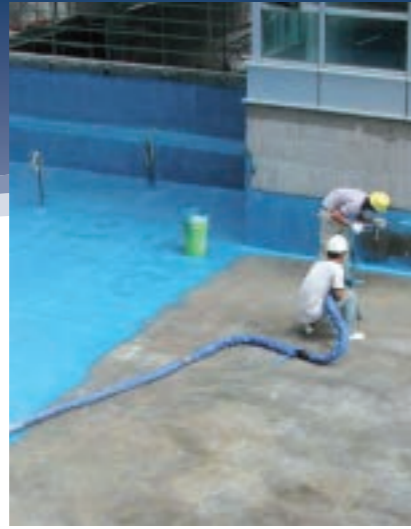


Inverted Roofs / Podia / Green Roofs



Metal Roofs

Specifying The Right Product



A Uninsulated Roof Overlay

ROOFSHIELD PmB

The **Roofshield PmB** system has been designed to overlay most flat roof substrates including existing failing coverings, without the disruptive and often costly need for removal.

Page 6

B Warm Roofs

ROOFSHIELD PmB

The **Roofshield PmB** warm roof systems are suitable for both new build and refurbishment projects with all elements from vapour control layer, adhesive, insulation and carrier membrane incorporated within the relatively lightweight roof build up.

Page 8

C Inverted Roofs / Podia / Green Roofs

BLUESHIELD PmB

The rapid curing spray applied **Blueshield PmB** system, when installed directly onto the structural deck, has an unrivaled track record for long term waterproofing of inverted and green roofs as well as complex and prestigious podia.

Page 10

D Metal Roofs

ROOFSHIELD PmB

The **Pitchmastic PmB** range of waterproofing products are suitable for locally repairing and overlaying metal roofs, including the treatment of cut edge corrosion.

Page 12

E Structural Protection for Car Parks

DECKPROTECT+

DeckProtect+ is a comprehensive range of cold liquid applied systems that utilise the most effective technologies in car park protection today. All **DeckProtect+** systems are designed by Pitchmastic PmB chemists to be safe and user friendly.

Page 13



Which System Should I Choose?

ROOFSHIELD PmB

A

Roofshield PmB Uninsulated Roof Overlay

The **Roofshield PmB** roof waterproofing range has been developed to solve the problems associated with the long-term waterproofing of flat, pitched and domed roofs.

Roofshield PmB is a high solids, polyurethane coating which provides flexible, durable, long-lasting protection for up to 25 years before first full maintenance (depending upon which system is specified). The **Roofshield PmB** 25 year system has been awarded a British Board of Agrément (BBA) Certificate.

Roofshield PmB provides a cold liquid applied, breathable, seamless membrane, that moves with the roof and allows vapour release from the existing substrate.



Roofshield PmB is suitable for waterproofing many types of traditional roofing materials including felt, asphalt, bitumen, concrete, single ply membranes and profiled metal sheets.

A water-based alternative, **Roofshield PmB WB** (10 year system available), can provide a viable solution where paint odours need to be minimised.



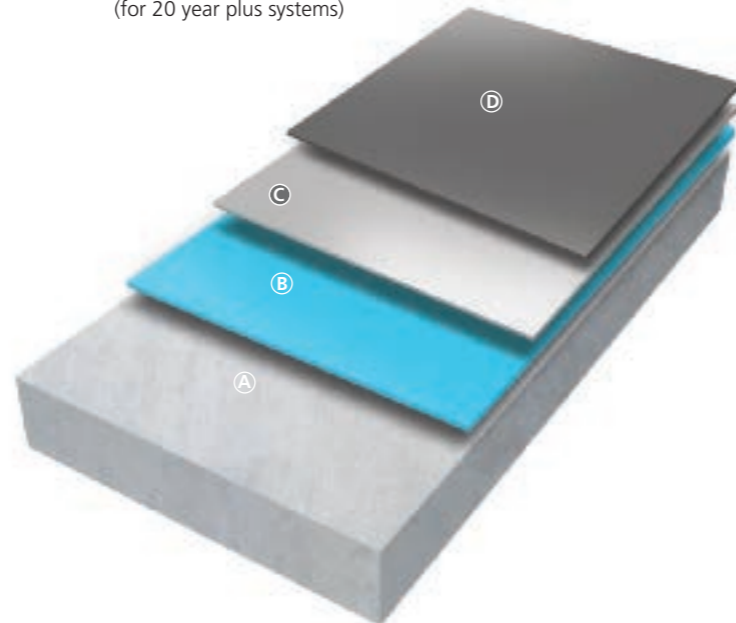
Coatings used in **Roofshield PmB** 25 year systems are approved by the British Board of Agrément.

Key features and benefits:

- Single Point Guarantee Options
- Cold liquid applied - no hot works on roof
- Safe to install - unobtrusive repairs
- Easy to apply and detail
- Compatible with most existing roof membranes
- No need to remove serviceable existing membranes, minimising landfill waste, and roof is protected during installation
- 10, 20 and 25 year systems available
- Low odour, water-based option (10 year system)
- British Board of Agrément (BBA) approved
- Permanently elastomeric and seamless
- Excellent resistance to ponded water
- Fibre reinforced for maximum film strength
- Easy to maintain - excellent through life costings as system can be re-applied at end of serviceable life

Typical build-up of the Roofshield PmB system

- A - Prepared existing roof substrate
- B - **Roofshield PmB** body coat
Roofshield PmB glass fibre reinforcement
- C - **Roofshield PmB** top coat
- D - Additional **Roofshield PmB** top coat (for 20 year plus systems)



The **Roofshield PmB** cold liquid applied waterproofing system is ideal for roof refurbishment projects, but equally suited to new build. It is compatible with the majority of existing roof membranes and is an ideal long-term solution to leaking flat roofs.

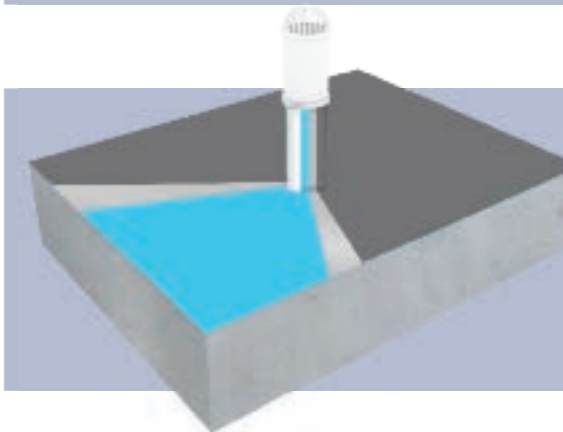
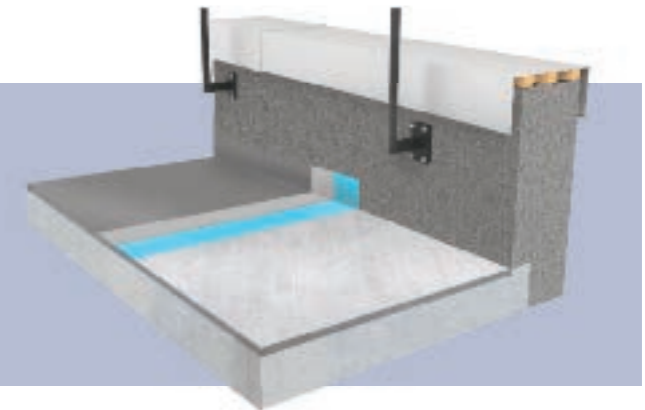
Unlike conventional roofing systems, it forms a completely seamless membrane on the roof and incorporates details with ease.

Rainwater outlets

With conventional roofing products it is very difficult to detail and waterproof these areas. With **Roofshield PmB** it's simple - the outlet grille is removed to allow the coating to be applied down into the rainwater outlet, then reinstated.

Parapet walls

To prevent water from entering the building where walls and roofs meet, a chase is conventionally cut in the brickwork into which the coating system is inserted and sealed (an alternative method is to fix and seal a termination bar over the coating termination). Rainwater runs down the wall, via the upstand coating detail and onto the protected roof.

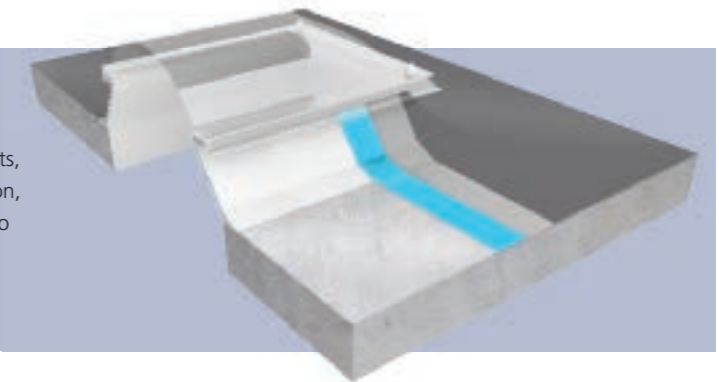


Vents and pipes

Any penetration through the existing roof membrane is a potential area for water ingress into the building. The **Roofshield PmB** coating system can be seamlessly applied to pipes and protrusions, protecting against such vulnerabilities.

Rooflights

The **Roofshield PmB** system can seamlessly incorporate rooflights, providing a waterproof, continuous membrane. During installation, rooflights are removed (wherever possible) to allow the coating to be applied to the upstand and opening.



Which System Should I Choose?



ROOFSHIELD PmB

B


Roofshield PmB Warm Roof Applications

If your roofing project requires a thermal upgrade to comply with Part L of the Building Regulations (Conservation of Heat & Power), then our **Roofshield PmB** warm roof system delivers the thermal improvements you need and can help reduce your energy bills. In the construction of this system, thermal insulation material lies immediately beneath the waterproofing system and on top of the roof deck and a special vapour control layer (designed to provide effective condensation control). Once installed **Roofshield PmB** helps lower energy costs by conserving heat within the building during colder months and also helps reduce energy costs associated with the cooling of buildings during warmer months.

Before the product is specified, a U value calculation is made either from drawings detailing the existing roof build up, or by taking a core sample of the roof. This provides a measure of how well the roof keeps heat inside the building. The resultant value determines the thickness of insulation required and is also used to ensure that condensation will not occur after the installation.

If your flat roof has significant areas where ponded water gathers, you may wish to consider a tapered warm roof scheme. This type of roof design creates falls in the new roof to provide efficient drainage of rainwater from the roof. The falls are created using tapered insulation boards, specially designed for warm deck flat roofing applications.

Roofshield PmB warm roofing systems offer a relatively lightweight installation and are very efficient at generating the thermal values required by Building Regulations.

 Coatings used in **Roofshield PmB** 25 year systems are approved by the British Board of Agrement.

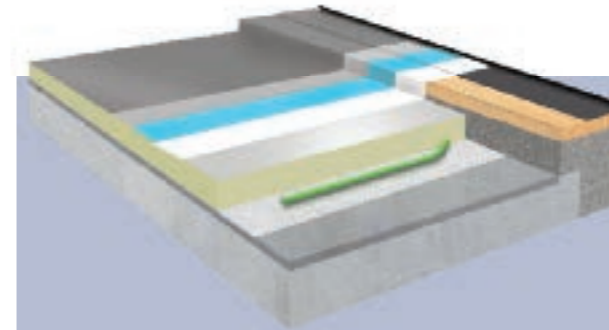
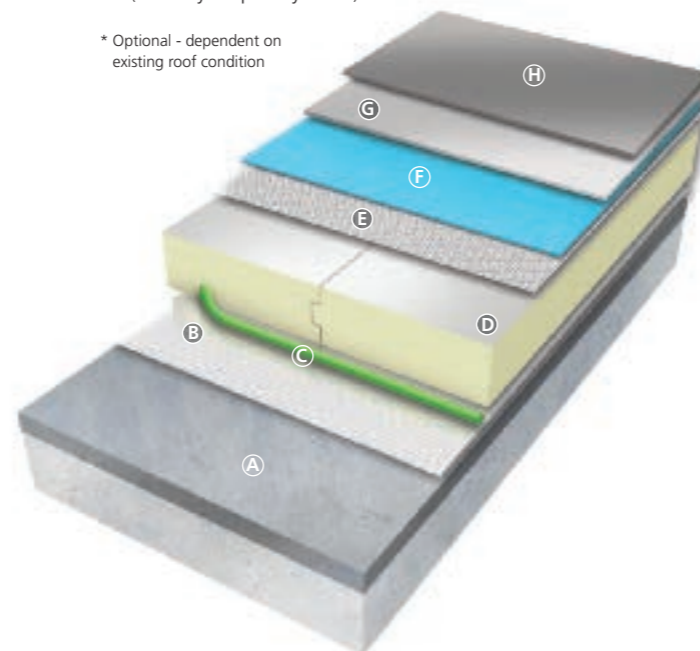
Key features and benefits:

- Single point guarantee options
- Cost effective
- Ideal roof refurbishment solution
- Improves thermal efficiency - reduces energy bills
- Relatively low weight loadings
- Provides all of the benefits of the **Roofshield PmB** system
- Tapered option improves drainage of rainwater
- Minimal disruption to building occupants during installation
- Systems up to 25 year life available

Typical build-up of the Roofshield PmB warm roof system

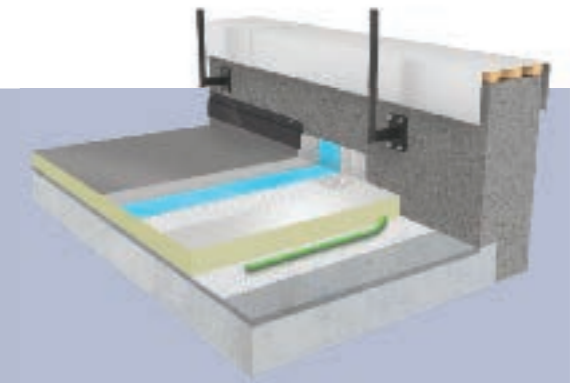
- A** - Prepared existing roof substrate
- B** - Vapour control layer*
- C** - Insulation Adhesive
- D** - Thermal insulation panel
- E** - Carrier membrane
- F** - **Roofshield PmB** body with **Roofshield PmB** Re-Pro
- G** - **Roofshield PmB** top coat
- H** - Additional **Roofshield PmB** top coat (for 20 year plus systems)

* Optional - dependent on existing roof condition



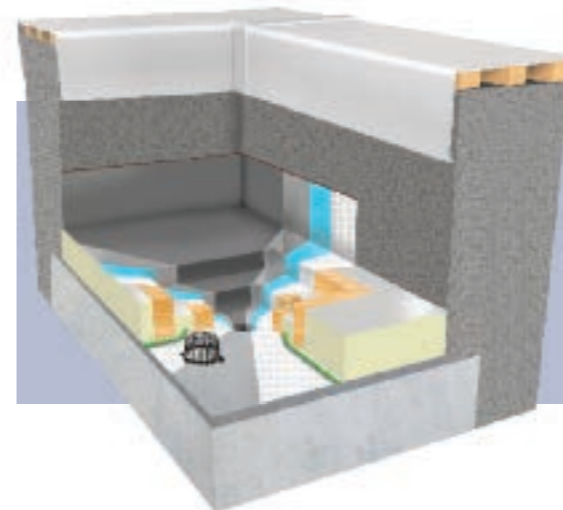
Roof edge trims

Here the insulation is terminated against the wall abutment and, with the aid of a carrier membrane, the waterproofing system is applied across the top of the detail and terminated within the upper lip of the edge trim. The termination is then protected using a flexible mastic sealant.



Parapet walls

The **Roofshield PmB** waterproofing system is taken a minimum of 150mm above the insulation and either terminated into a pre-cut chase or protected with a termination bar (illustrated opposite).

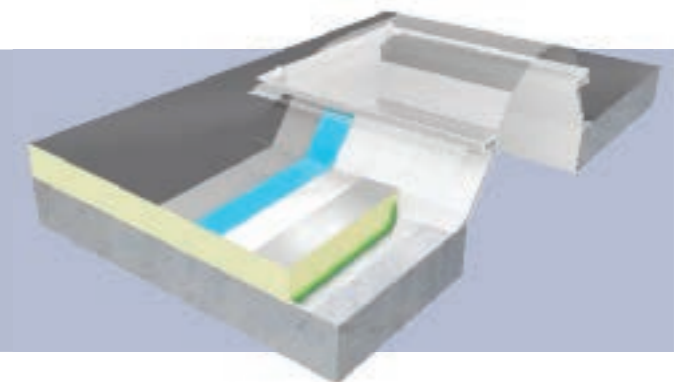


Rainwater outlets

To strengthen the edges of the insulation panels around the outlets, treated timber batten frames are fitted. This allows water to cascade into the outlet and also provides a better detail for maintenance.

Rooflights

After installing the thermal insulation assembly, the **Roofshield PmB** waterproofing system is applied as high as possible up the rooflight upstand detail. A clear protective glaze can also be applied to the rooflight if required.



Which System Should I Choose?



C

Blueshield PmB Inverted Roofs/Podia/ Green Roofs

In this construction the thermal insulation is applied on top of the structural waterproofing. This type of system is often referred to as a 'protected membrane', or 'upside down' roof. Like the **Blueshield PmB** warm roof system, the inverted system helps lower energy costs by reducing heat loss from the roof.

Blueshield PmB provides structural waterproofing below the insulation layer and directly over the existing roof substrate. Its seamless nature provides maximum protection and offers significant advantages over sheet and partially bonded systems.

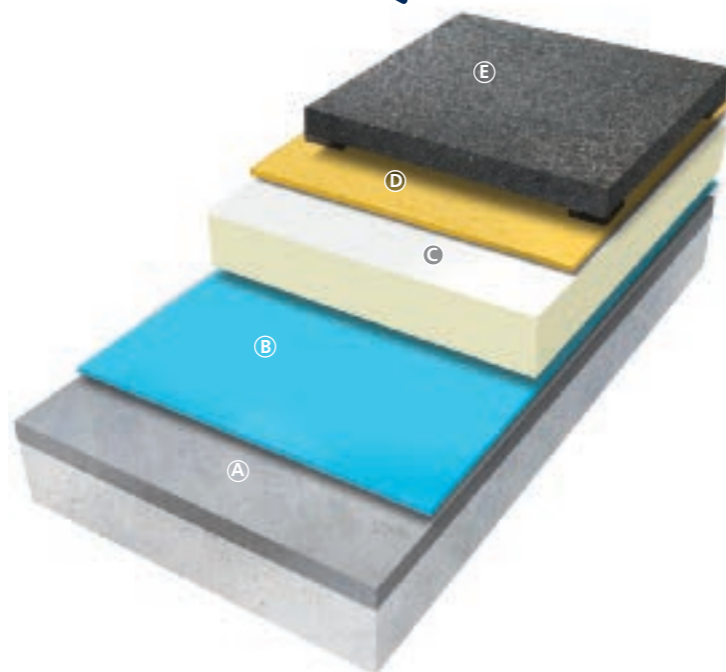
This system is usually finished with paving materials to provide an attractive appearance. This solution is ideal for roof terraces and balconies and will withstand heavy foot traffic. Alternatively, inverted roofs can be utilised with seedum banks to create green roofs or roof gardens.

The system also fully upgrades the thermal performance of the roof, which means building owners can comply with Part L of the Building Regulations (Conservation of Heat & Power).

Typical build-up of the Blueshield PmB inverted roof system

- A - Concrete, Steel, Masonry Surface
- B - **Blueshield PmB** membrane
- C - Thermal insulation panel
- D - Filtration panel
- E - Overlay
 - Paving
 - Green roofs
 - Concrete
 - Decking
 - Asphalt
 - Ballast

BLUESHIELD PmB

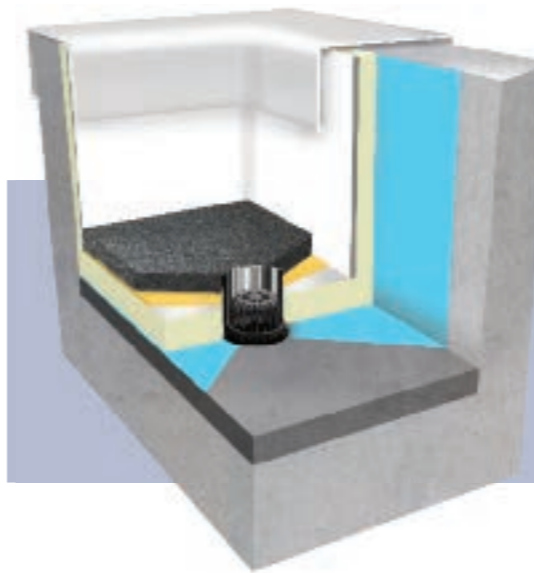


Key features and benefits:

- 100% effective with proven track record of over 30 years
- Rapid installation and cure allow for application to horizontal, vertical and soffit surfaces
- Superior crack-bridging and adhesion properties
- Materials can be applied to 24hours-7 day old concrete, at temperatures as low as 0°C
- Spray application ensures difficult detailing and penetrations are easily overcome
- Blueshield PmB requires no pre application chases or fillets
- Low odour
- Excellent chemical resistance
- Fully tested puncture resistance capabilities
- Effective root barrier in landscaped areas and suitable for use in areas permanently immersed in water
- Full integrity testing to all installations
- Manufactured and installed to ISO 9001:2008



Coatings used in **Blueshield PmB** 25 year systems are approved by the British Board of Agrément.



The **Blueshield PmB** inverted roof system completely upgrades the thermal performance of the roof - delivering compliance with Part L of the Building Regulations (Conservation of Heat & Power) - whilst providing long-term waterproofing and creative scope to dramatically improve the appearance of the roof by the introduction of paving or grass.

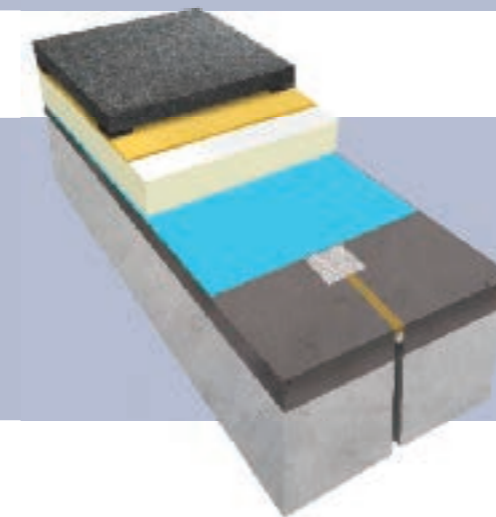
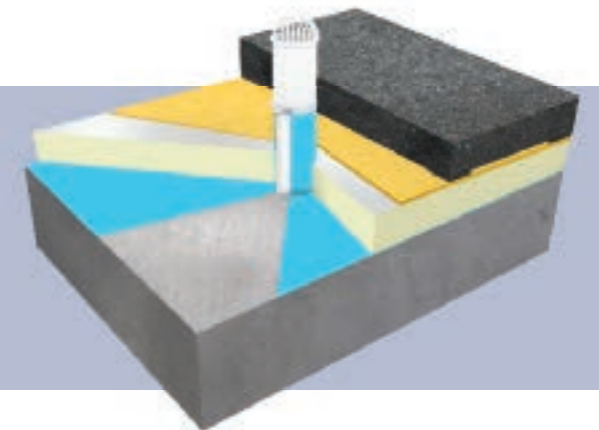
It can be used to create roof gardens and terraces and is also suitable for private balconies. It is ideal for new-build applications but equally suited to refurbishment.

Rainwater outlets

Where the roofing system meets rainwater outlets a stainless steel guard is fitted around the rainwater outlet cover. The thermal insulation and paving is shaped and offered up to the guard. Alternatively, ballast can be used to fill in the gap details.

Vents and pipes

The **Blueshield PmB** waterproofing system is continued up the pipe to give a termination of at least 150mm above the finished height of the overall assembly. A clip / tie is fitted to the pipe around the coating termination. This is then finished with a flexible sealant.

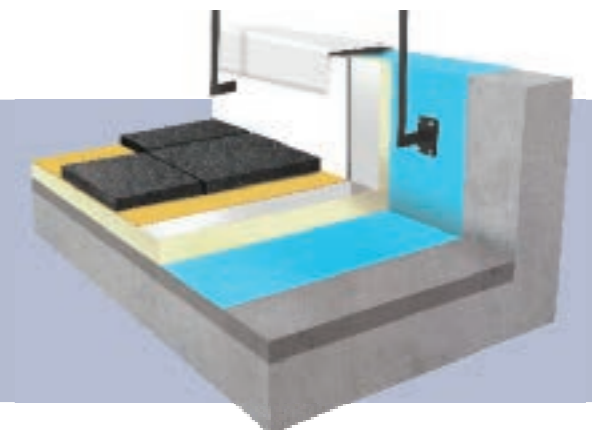


Expansion joints

Prior to application of the **Blueshield PmB** system, the gap of the expansion joint is sealed by the insertion of a backer rod followed by application of a flexible mastic sealant. To allow for movement, a bridging tape (nominally 50-100mm wide) is applied along the line of the joint.

Parapet walls

The **Blueshield PmB** waterproofing system is taken a minimum of 150mm above the overall assembly and either terminated into a precut chase or protected with a termination bar.



Which System Should I Choose?

ROOFSHIELD PmB



D

Roofshield PmB Metal Roof Systems

Waterproofing systems for metal roofs

Roofshield PmB Smooth (10 year system)

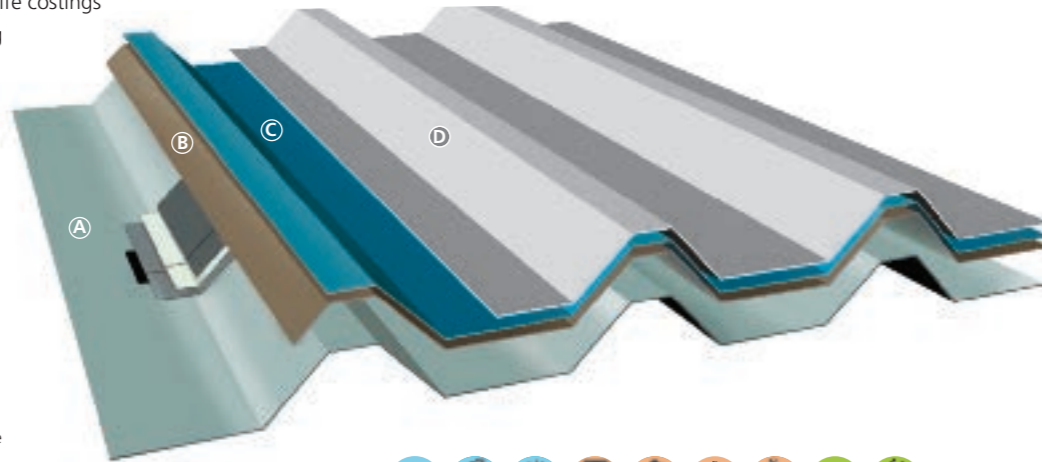
Roofshield PmB (25 year system)

Our waterproofing systems are suitable for refurbishing many types of traditional roofing materials, including felt, asbestos cement / fibre cement sheeting, profiled metal sheets, PVC plastisol, PVF2 and other factory coil coated substrates.

Our systems are designed to tackle the vulnerable areas of metal roofs, which are typically concentrated around the joints and fixings. Accordingly, these areas are treated with localised additional reinforcements before the system top coats are applied. Once installed our systems provide a seamless waterproof coating over the existing roof. They deliver flexible, durable, lasting protection from 10-25 years.

Key features and benefits of waterproofing systems:

- Cold liquid applied – no hot works
- Can be used over most pitched roof types
- Safe and easy to apply – unobtrusive repairs
- 10-25 year systems available
- Cost effective alternative to re-roofing
- Seamless and flexible membrane
- Easy to maintain and excellent through life costings
- Improves the appearance of the building
- UV stable
- Deals with cut edge corrosion issues



Waterproofing system for gutters

The **Roofshield PmB** system can also be used to waterproof Finlock (modular concrete), valley, galvanised steel and Mansard gutters.

Once applied the **Roofshield PmB** system provides a joint free, seamless and smooth waterproof barrier, offering long term protection to the gutter and allowing water to run away freely.

Typical build-up of a metal roof system

- A - Substrate
- B - Primer
- C - Pitchmastic PmB Waterproofing System
- D - Top Coat (Optional)

Coatings used in **Roofshield PmB** 25 year systems are approved by the British Board of Agrément.



E

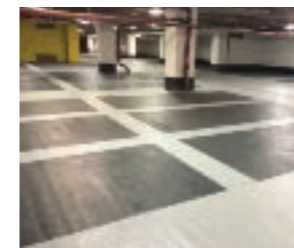
DeckProtect+ Structural Protection for Car Parks

DeckProtect+ is a comprehensive range of cold liquid applied systems that utilise the most effective technologies in car park protection today. All DeckProtect+ systems are designed by Pitchmastic PmB chemists to be safe and user friendly. Unlike other systems they enhance and combine polymeric (Pu), epoxy (EP), methyl methacrylate (MMA) and concrete repair technologies allowing specialist contractors to tailor a solution that meets all the requirements of a new build or car park refurbishment project. Whatever kind of solution you need there is a DeckProtect+ product to suit.

The DeckProtect+ range offers clients the perfect balance between design aesthetics and practical performance:

- Tough and durable
- Exceptional crack bridging and elongation
- Fast curing – Ideal for a rapid return to service
- Excellent longevity
- Robust and hard wearing
- Excellent skid resistance
- Safe
- Quality aesthetics and colour range

DECKPROTECT+



The Complete Structural Waterproofing Solution



Our Group

Pitchmastic PmB are part of the USL Group of companies - a global manufacturer and installer of specialist construction products offering turnkey solutions for bridges, tunnels, car parks, roofs, utilities, oil & gas projects.

Our Brands



www.usluk.com

Roof Surveys & Bespoke Specifications

Through licensed applicators and independent roof consultancies, Pitchmastic PmB undertake extensive surveys of all roof types to identify defects, sources of leaks and reasons for deterioration.

This includes Electronic Leak Detection, Thermal Imaging and Flood Testing.

Our pre-contract free of charge services include:

- Site surveys including targeted core sampling
- Substrate adhesion testing
- Substrate compatibility testing
- Bespoke specifications
- Project specific CAD details
- Budget Costs

Once your project commences, we provide friendly and knowledgeable technical support through to completion.

Research & Development

To ensure that we remain at the forefront of the industry, we develop and constantly innovate. Pitchmastic PmB has in-house research and development facilities to carry out testing to BE EN 1504, European Technical Approvals and DIN Standards.

Manufacturing & Environmental

All Pitchmastic PmB products are manufactured under the international ISO 9001 Quality Management standard ensuring that our products satisfy the customers quality requirements and comply with any regulations applicable to those products.

All products are manufactured in the UK under international ISO 14001 Environmental Management standards confirming our commitment to the minimisation of the environment impact of our activities. In the interests of ecological corporate development we strive to achieve constant improvements in our company's environmental awareness.

Technical & On-Site Support

All of our clients receive the same level of technical service, support and backup right through to the delivery of the finished project.

To assist our clients in the selection, design and ultimately the procurement of the most effective solution for their roofing projects, our technical team also offer a free of charge 12 month inspection service to ensure your roof surface is performing as expected.



PITCHMASTIC PmB

PITCHMASTIC PmB

International

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