

World Reference
in Waterproofing



Monarplan PVC

Single Ply Waterproofing Systems



Lightweight
Reliable
Versatile
Economical
Distinctive



Monarplan PVC **single ply waterproofing** from Icopal

PVC membranes from Icopal have been in use for over 30 years, covering roofs of all types and form. Whether it's domestic or commercial, public or private; Monarplan PVC membranes offer a flexible and lightweight waterproofing solution with a proven track record.

Monarplan is a flexible PVC (polyvinyl chloride) single ply membrane offering excellent characteristics of strength, elongation and weathering, making it ideal for new build or refurbishment projects.

All Monarplan membranes are reinforced and are available with or without a fleece backing providing scope for all methods of application, such as mechanically fastened, adhered or loose laid and ballasted.

Diversity

Monarplan PVC membranes have been successfully installed on a range of commercial and domestic projects including some of the following building types:

- Schools / Universities
- Hospitals
- Private residences
- Factories & Warehouses
- Offices
- Supermarkets
- Retail developments

Reliability

Clients and private customers can be reassured by the range of insurance backed guarantees and third party accreditations offered with Monarplan PVC membranes.

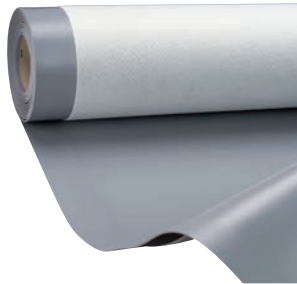
- Guarantees options for 10, 15 & 20 years
- BBA and ETA Certified product
- Sustainability - A+ BREEAM Rating*
- SPRA member

** subject to roof build up*



Monarplan Membranes

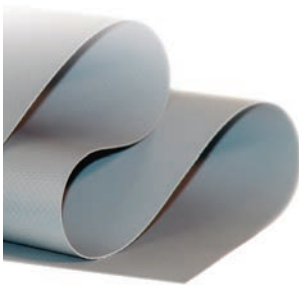
Monarplan is a flexible PVC-P single ply membrane offering excellent characteristics of strength, elongation and weathering making it ideal for new build or refurbishment projects. Membranes are reinforced and are available with or without a fleece backing providing scope for all methods of application and offering specifiers confidence in performance and unlimited freedom in design.



Monarplan GF Fleeceback

Monarplan GF Fleeceback is glass reinforced PVC membrane incorporating a polyester fleece backing. The factory laminated polyester backing allows the membrane to be fully adhered to the underlying substrate using a compatible cold applied adhesive and can be the ideal solution on curved, steep or undulating roof designs that prove challenging for other systems.

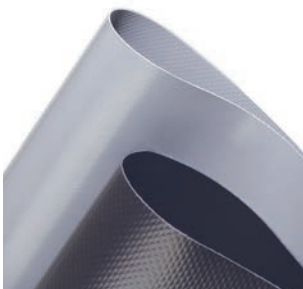
Thickness: 1.5mm + fleece
Roll Size: 2.12 x 15m



Monarplan G

Monarplan G incorporates a glass reinforcement encapsulated between two layers of extruded PVC. The membrane is manufactured with a fungicidal additive and is specifically designed for use within ballasted or green roof constructions where the membrane is buried. Monarplan G is resistant to micro organism attack and can provide a long lasting waterproof solution for roof areas that need to be waterproofed fast.

Thickness: 1.5mm
Roll Size: 2.12 x 15m



Monarplan FM

Monarplan FM is a polyester reinforced membrane designed specifically for use within mechanically fixed applications. The non-wick polyester fabric gives the membrane inherent tensile strength which is required to facilitate the use of steel fasteners to restrain the system against wind uplift. Mechanically fixed systems can be cost effective solutions, and are ideal where lightweight constructions are considered.

Thickness: 1.2mm / 1.5mm / 1.8mm
Roll Sizes: 1.5 x 20m (1.2mm only)
1.5 x 15m



Icopal is a member of the Single Ply Waterproofing Association [SPRA]. As an association, SPRA's guiding principle is to ensure that clients obtain high quality polymer based single ply roofing, through a partnership of quality assured manufacturers and contractors.

Features and Benefits



Performance

With over 30 years of history with synthetic products, Icopal have the knowledge and experience required to produce membranes of the highest quality offering exceptional long life cycle performance, reducing the impacts associated with environmental landfill and whole life cost expenditure.

Aesthetic

Monarplan PVC is available in light grey (RAL7001) and anthracite (RAL7015) colours as standard, enabling the roof to blend seamlessly into a built up area, or to match other construction materials. The range also brings significant design freedom, giving architects the opportunity to create highly distinctive buildings or to sympathetically renovate existing roofs. The pigments used to colour the upper layer of the Monarplan membrane guarantee colour fastness, UV protection, and resistance to ageing. Other colours are available to special order.



Environmental Responsibility

As manufacturers, Icopal are committed to the integration of environmentally considerate activities across all aspects of business. As such, all Icopal manufacturing sites adopt environmental practices and procedures and many manage and control their performance through the ISO 14001 environmental management system.

One of the main environmental benefits associated with PVC is its versatility and ability to re-use waste matter generated during the production process. Waste from membrane cutting, colour changes etc. can be recycled into re-usable material and returned to the manufacturing process, where it can be used to create further membrane or other PVC products

Guarantee

As a world leader in the manufacture of waterproofing membranes, we pride ourselves on providing the most comprehensive guarantees available in the flat roof waterproofing industry. Icopal guarantees are underwritten by a range of insurance policies covering design, product failure and consequential damage for periods of 10, 15 and 20 years. Icopal's Product Guarantee insurance is arranged with first class security on the London Insurance Market.

Secure Welding

Monarplan PVC is a thermoplastic membrane. As a result, overlapping sheets can be welded together to form a homogeneous lap using hot air equipment (eg. manual hot air welders or automatic equipment).



Product Support

Whether it is new build or refurbishment, Icopal's Technical Support Services will ensure all aspects of the proposed roofing scheme comply with all the latest Building Regulations and codes of practice.

Product Support

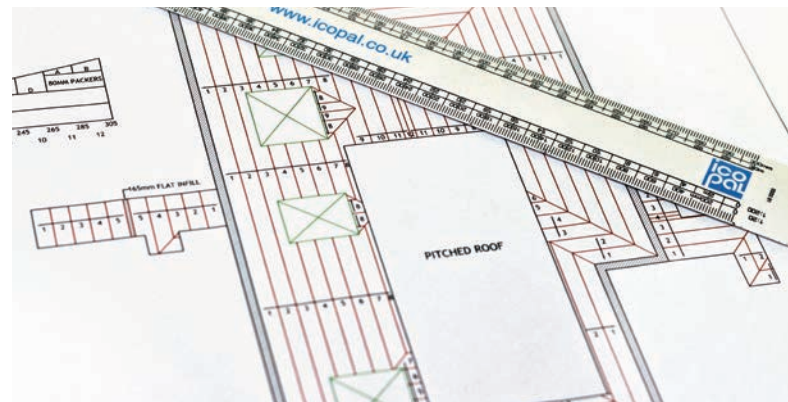
Complying with the latest building regulations and codes of practice, Icopal's technical support team ensures that the critical issues and design requirements are identified and resolved in the early stages of the project, removing unwanted waste from the decision process and reducing on site cost and improving build efficiency.

Site Inspection

Acting on behalf of the client, surveyor, architect or other nominated agent, Icopal Area Technical Managers can provide a comprehensive roof inspection and condition report prior to making any recommendations for remedial action. All site inspections include a detailed commentary with photographic record and core samples, where appropriate.

Specifications

Should it be requested, bespoke system specifications are generated following the completion of the site inspection report. Specifications can be created in NBS J42 or in Icopal's in-house spec-writer format. Each specification will include such things as project specific drawings and make reference to current regulations and standards, ensuring compliance at all times.



Calculations & Designs

Icopal's Technical Service Department can provide the following range of services:

- U-Value calculations
- Condensation risk assessments
- Standard and bespoke technical drawings
- Tapered insulation designs
- Wind uplift
- Acoustics

Approved Contractors

Icopal recommend the use of trained and approved installers for all their waterproofing systems as a trained operative is required to demonstrate professional levels of competency in all aspects of membrane detailing and application. To receive the current list of Monarplan PVC trained contractors or to become a Monarplan trained contractor, please contact Icopal's Technical Service Department on 0161 865 4444 or send an email to technical.uk@icopal.com.

Repair and Maintenance

All roof waterproofing systems require periodical inspection and maintenance. BS 6229: 2003 recommends that all flat roofs be inspected twice yearly; (eg. autumn and spring) so that potentially blocked gutters or outlets can be cleared. In areas of high dust or pollution, inspections should be carried out more frequently.

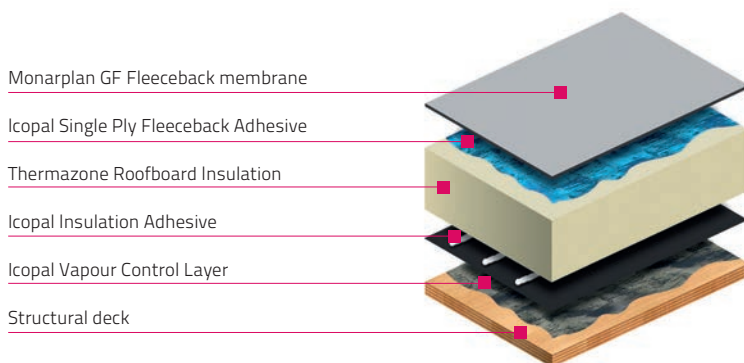
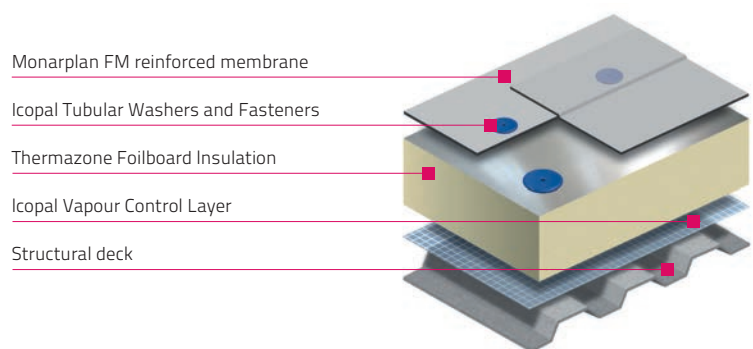


Methods of **Application**

With today's construction trends of highly intricate and complex structures and the requirement for higher thermal insulation values, only membranes which aspire to the highest quality standards and possess unquestionable technical properties, will be considered in the design process. The versatility of Monarplan PVC ensures the designer total freedom and security when specifying the roof waterproofing system.

Mechanically Fastened System

Mechanically fixed systems are often favoured above timber or metal decks where the exposure of the fastener on the underside of the structure is not a consideration. This method of application involves the use of thermally broken fasteners fixed at pre-determined centres and is a fast and cost effective method of installing the single ply membrane which is less dependent upon amicable weather conditions.

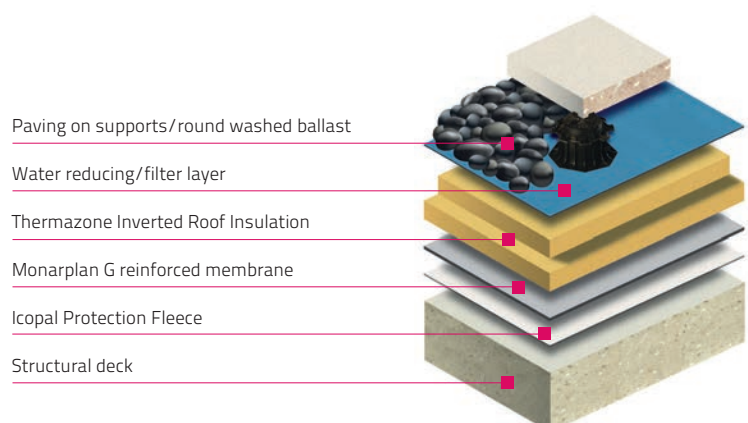


Fully Adhered System

Fully adhered systems are more commonly used above concrete substrates where the process of installing mechanical fixings is invasive and labour intensive. Fully adhered systems are reliant upon suitable weather conditions (which should be considered). However, complex geometries and pitched surfaces can be accommodated with great success. Fully adhered membranes can also provide a superior surface finish.

Inverted Ballasted Roof System

Inverted roof systems offer an excellent solution for situations where access or recreation are a priority. Ballasted systems also provide maximum resistance against membrane damage, UV degradation, thermal shock, fire or noise.



Warm Ballasted Roof System

The Monarplan G membrane is loose-laid and welded together at the overlaps prior to the application of the ballast which holds the membrane in place. This method offers maximum restraint to wind uplift and fast application times, while providing protection from mechanical and solar/UV damage.

Paving on supports/round washed ballast

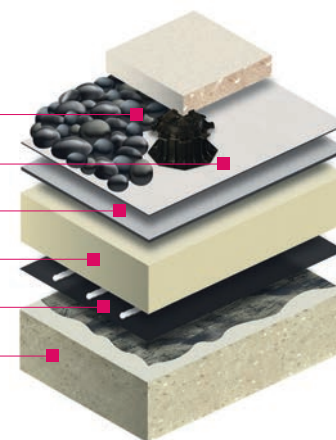
Icopal Protection Fleece

Monarplan G reinforced membrane

Thermazone Roofboard Insulation

Icopal Vapour Control Layer

Structural deck



Icopal Green Roof System

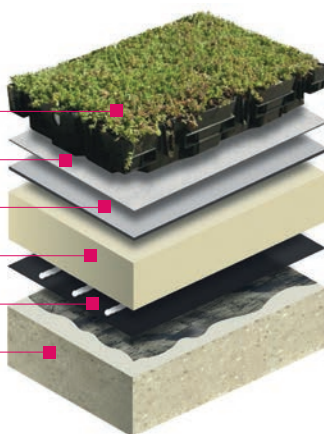
Icopal Protection Fleece

Monarplan G reinforced membrane

Thermazone Roofboard Insulation

Icopal Vapour Control Layer

Structural deck



Green Roof System

The use of an Icopal Green Roof system adds another dimension to a Monarplan PVC roof system. In ballasted or inverted build ups the green roof will act as the ballast to secure the system. Additional ballast may be required around perimeters depending on wind loadings.

Guarantees

As a world leader in the manufacture of waterproofing membranes, we pride ourselves on offering the most comprehensive guarantees available in the flat roof industry, giving further reassurance of our commitment in providing total confidence in our range of high performance waterproofing membranes.

Icopal guarantees incorporate a range of features and benefits tailored to suit the client's specific requirements, including materials, insurance backing, design, consequential damage and approved installation. All guarantees offer up to 20 years as standard, subject to specification.

Several different levels of guarantee coverage are available as per the following list.

- Insured System Plus Guarantee
- Insured Product Plus & Workmanship Guarantee
- Insured Product Plus Guarantee
- Insured Product Guarantee

For further information on different guarantee options, please refer to the Icopal Insured Guarantees Brochure or contact Icopal Technical Services.

Full **System** Solutions

Icopal offers a single source solution for complete roof waterproofing. This means simplifying the specification process whilst ensuring that all aspects of an installation attain the same excellent quality through stringent project monitoring and a guaranteed support mechanism.

Vapour Control Layer

Icopal supplies a range of high performance polyethylene and bituminous vapour control layers for use with its single ply roofing systems.

Icopal heat-activated self-adhesive vapour control layers, are manufactured from SBS-modified bitumen and reinforced with an extra strong glass fibre fleece with a PET aluminium foil.

Micoral SK has a blue SYNTAN® resin upper surface allowing the appropriate insulation board to be adhered using Icopal Insulation Adhesive.

Micoral NB is finished with a polyethylene film, and is suitable for use in mechanically fastened applications only.

These membranes are suitable for direct use on metal, timber and concrete deck types.

Also available are **Total Torch VCL**, and **Micotherm SK**. Please see individual product literature for further information.



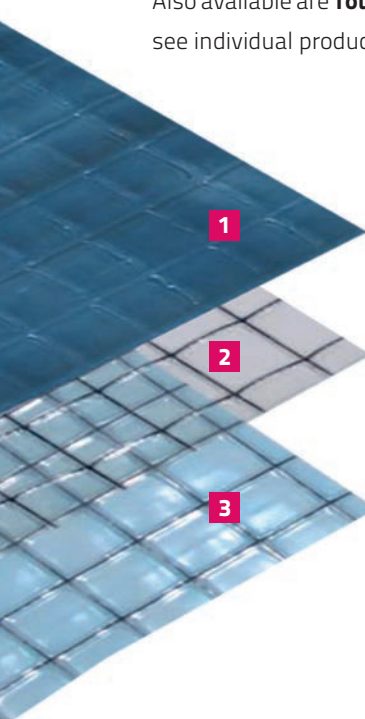
Since these membranes are adhered, they can provide a weatherproof temporary finish to the roof structure prior to the application of the insulation and final waterproofing system.

For mechanically fastened situations, the Monarflex range of reinforced polyethylene vcls, which includes **Reflex 275**, **Monofilament 250**, and **Netofol**, provide a quick and cost effective method of vapour control.

These membranes are loose-laid with laps sealed with Monobond LT tape, and are secured to the roof deck through the mechanical fastening of the insulation board.

Monarflex multi-layer VCL's are manufactured from virgin polyethylene with built-in reinforcement grids of HDPE making them highly resistant to tears and damage. Some also have a layer of aluminium foil for higher water vapour resistance performance.

For further guidance and product information contact Icopal Technical Services on 0161 865 4444 or visit www.icopal.co.uk

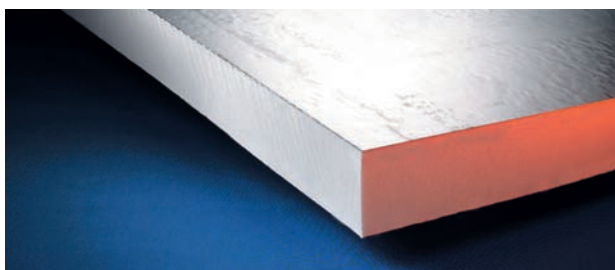


- 1** Reflex 275
- 2** Monofilament 250
- 3** Netofol

Thermal Insulation

The Thermazone range of insulation boards has been specifically designed to complement Icopal's single ply roofing systems. These boards are available as a uniformed flat board, or can be supplied in a tapered board to offer a cost effective solution to providing positive falls, even on the most complicated of projects.

Thermazone rigid PIR thermal insulation boards are CFC/ HCFC free, have a zero Ozone Depletion Potential (ODP), and have a Global Warming Potential (GWP) of less than 5. They have excellent thermal performance, dimensional stability and are resistant to mould and microbial growth.



Thermazone Foilboard is a rigid PIR insulation board and is faced on both sides with a low emissivity composite foil autohesively bonded to the insulation core during manufacture. Thermazone Foilboard is suitable when the board and waterproofing are being mechanically fastened to the structural deck using screws and washer plates.

Thermazone Roofboard is a rigid PIR insulation board and is faced on both sides with a mineralised glass tissue autohesively bonded to the insulation core during manufacture. Thermazone Roofboard is suitable for use when the board is being adhered to a suitably bonded vapour control layer. It is also suitable when the waterproofing is being adhered to the insulation board. This insulation board may also be used in a mechanically fastened situation.

Thermazone Hydrosshield IVR insulation board is for use in inverted roof situations. It is an expanded polystyrene (EPS) board made from a low water absorption polystyrene bead. Thermazone Hydrosshield is to be used in conjunction with the Monarperm water reducing layer. Water seeping between the insulation board causes a cooling affect which must be accounted for within thermal calculations. The use of the Monarperm water reducing layer minimises water

seepage, allowing better U-value performance for a given thickness of insulant.

Mechanical Fasteners

Icopal supply a range of specialist fasteners for securing thermal insulation and Monarplan PVC membranes to a variety of structural roof decks including steel, concrete and timber.



Icopal Tubular Washers eliminate all thermal transmittance associated with metal fasteners, thereby allowing reduced thicknesses of insulation. They are designed with a low-profile washer and narrow tube diameter which aids installation and improves aesthetics.

Icopal Screw Fasteners are manufactured from high grade carbon steel which are case hardened to achieve the properties essential for long term performance and have an organic corrosion resistant finish to meet UEAtc Part 2 requirements.

Thermal insulation boards should be independently mechanically fastened to the structural deck. The number of fixings and the application pattern is dependent upon the size and type of insulation board.

Wind Loadings

Wind loadings should be assessed in accordance with BS 6399-2: 1997 (Loadings for buildings. Code of practice for wind loads) or BS EN 1991-1-4 taking into account the height, width and length of a building, its orientation and its geographical location.

Accessories

Monarplan PVC accessories have been individually designed to ensure total compatibility and ease of application and play a vital role in achieving the total integrity of the Monarplan PVC waterproofing system. Amongst others, accessories include Monarplan Coated Metal sheet for the prefabrication of edge trims and details, a range of Monarplan Outlets, Monarplan Walkway Membrane, and an extruded PVC profile for the simulation of traditional metal and standing seam roofs finishes.

Monarplan **Product Range**

The Monarplan range has been designed to ensure total compatibility and ease of application playing a vital role in achieving the total integrity of the waterproofing system. Membranes and accessories are available in light grey and anthracite as standard. Separate technical data sheets on all products are available upon request.

Monarplan PVC Waterproofing Membranes

Product	Thickness	Roll Size	Colour
Monarplan GF Fleeceback	1.5mm + fleece	2.12 x 15m	Light Grey & Anthracite
Monarplan G	1.5mm	2.12 x 15m	Light Grey & Anthracite
Monarplan FM 1.2	1.2mm	1.5 x 20m	Light Grey & Anthracite
Monarplan FM 1.5	1.5mm	1.5 x 15m	Light Grey & Anthracite
Monarplan FM 1.8	1.8mm	1.5 x 15m	Light Grey & Anthracite

Monarplan PVC Ancillaries

Product	Thickness	Size	Colour
Membrane Accessories			
Monarplan Reinforced Strip	1.5mm	0.15 x 15m	Light Grey & Anthracite
Monarplan D Unreinforced Flashing	1.5mm	1.4 x 15m	Light Grey & Anthracite
Monarplan W Walkway Membrane	2.0mm	1.06 x 15m	Anthracite
Outlets			
Monarplan Outlets	-	50/70/80/ 100/125/ 150mm Ø	Light Grey
Monarplan Refurbishment Outlets	-	50/70/80/ 100/125/ 150mm Ø	Light Grey
Monarplan Universal Leaf Grate	-	-	Black
Monarplan Parapet Outlet	-	70/100/ 150mm Ø	Light Grey
Monarplan Parapet Leaf Grate	-	-	-
Pipe Boots/Vents/Tube Ducts			
Monarplan Multiple Cable Duct	-	100mm Ø	Light Grey
Monarplan Single Cable Duct	-	24mm Ø	Light Grey
Monarplan Pipe Flashing	-	75 – 125mm Ø	Light Grey & Anthracite

Pre-fabricated Corners			
Monarplan Internal Corners	-	-	Light Grey & Anthracite
Monarplan External Corners	-	-	Light Grey & Anthracite
Coated Metal/Standing Seam/Lightning Conductor Clips			
Monarplan Coated Metal	1.2mm	1 x 2m	Light Grey & Anthracite
Monarplan Standing Seam	25mm	3mm	Light Grey & Anthracite
Monarplan Lightning Conductor Clips	-	3mm & 5mm	Light Grey
Adhesives			
Monarplan Contact Adhesive	-	20kg	Red
Icopal Single Ply Fleeceback Adhesive	-	20kg	Blue



Icopal supply a range of specialist fasteners for securing thermal insulation and Monarplan PVC membranes to a variety of structural roof decks including steel, concrete and timber.

Icopal Tube Washers/Pressure Plates/Fixing Bars/Fasteners

Product	Size
Tube Washers	
Icopal Membrane Tube Washer (45mm Ø)	40/60/80/90/100/120/150/ 180/210mm
Icopal Insulation Tube Washer (75mm Ø)	40/60/80/90/100/120/150/ 180/210mm
Pressure Plates	
Icopal Flat Steel Pressure Plates (timber substrate)	82 x 40mm
Icopal Deep Dish Pressure Plates (mineral wool substrate)	82 x 40mm
Fixing Bars	
Icopal Galvanised Fixing Bar (Peel Stops)	3m x 25mm
Icopal Termination Bar	3m x 25mm
Fasteners	
Icopal 5.8mm Carbon Steel Fasteners (into timber & metal decks)	40/55/65/75/85/95/105/115/ 125/150/175/200mm
Icopal 4.8mm Stainless Steel Fasteners (into metal decks)	60/80/100/120/140mm
Icopal HD 6.1mm Carbon Steel Fasteners (into concrete)	32/50/75/85/100/125/150/ 175/200mm

For further information please consult individual product technical datasheets.

Insulation

Product	Thickness	Size	Application
PIR Insulation			
Thermazone Foilboard (PIR)	30/35/40/50/60/70/80/ 90/100/110/120mm	1200 x 2400mm	Mechanically Fixed
Thermazone Roofboard (PIR)	25/30/40/50/60/70/80/ 90/100/110/120mm	1200 x 2400mm	Mechanically Fixed & Fully Adhered
EPS Insulation			
Thermazone Hydroshield IVR*	120/150/160/170/180/ 205/220/240/260/320mm	1200 x 590mm	Inverted Roofs

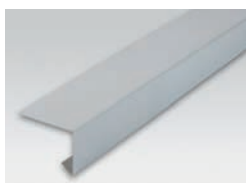
*Thermazone Hydroshield IVR to be used in conjunction with Monarperm water reducing layer.

Vapour Control Layer

Product	Thickness	Size	Application
Reinforced Polyethylene			
Netofol	0.2mm	2 x 50m	Loose-laid & Mechanically Fixed
Monofilament 250	0.25mm	2 x 50m	Loose-laid & Mechanically Fixed
Reflex 275	0.3mm	2 x 25m	Loose-laid & Mechanically Fixed
Reinforced Bitumen Membranes			
Micoral SK	1.5mm	1 x 15m	Heat-activated/Self Adhesive
Micoral NB	0.25mm	1.08 x 50m	Heat-activated/Self Adhesive
Total Torch	3.5mm	1 x 7.5m	Torch-applied
Vapourbar	1.8mm	1 x 20m	Bonding Bitumen (Pour & Roll)

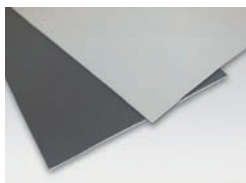
System Ancillaries

Monarplan ancillaries have been individually designed to ensure total compatibility and ease of application and play a vital role in achieving the total integrity of the overall Monarplan waterproofing system. All membranes and ancillaries are available in light grey and anthracite as standard. Separate technical data sheets on all products are available upon request.



Monarplan Coated Metal

Monarplan Coated Metal is a 0.6mm hot dipped galvanised steel sheet coated with a layer of 0.6mm non-reinforced PVC film for an overall thickness of 1.2mm. The sheet is cut into appropriate widths and used to fabricate metal drip edges or other roof perimeter edging profiles. The coated metal can also be used to provide mechanical restraint at any changes in level, abutments or roof area perimeters.



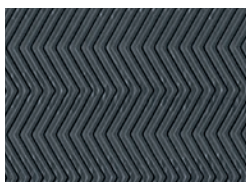
Monarplan Reinforced Strip

Monarplan Reinforced Strip is used to achieve a watertight detail where end laps of the Monarplan PVC GF Fleeceback membrane are butt jointed. It is also used in conjunction with coated metal drips and upstands.



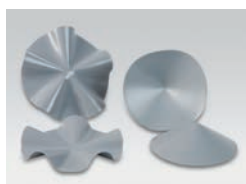
Monarplan D Unreinforced Flashing

The Monarplan D unreinforced flashing is intended to be used in the formation of internal/external corners, field fabricated pipe flashings, sealant pockets and scuppers, when the use of pre-moulded accessories are not feasible.



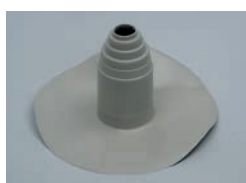
Monarplan W Walkway Membrane

Monarplan Walkway Membrane is a weather resistant PVC membrane which is anthracite in colour and incorporates an embossed, non-slip, interlocking herringbone tread pattern.



Monarplan Prefabricated Corners

Prefabricated corners aid speed of installation on site, and are used to reinforce internal and external corners with no stretching or cutting required.

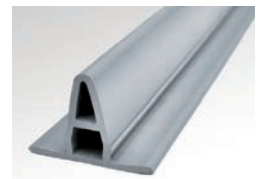


Monarplan Pipe Flashing

Monarplan Pipe Flashing are moulded preformed PVC pipe flashings designed to suit a range of pipe diameters, achieving a watertight seal.

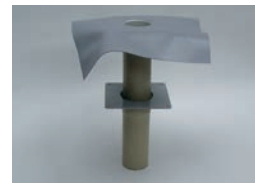
Monarplan Standing Seam Profiles

Monarplan Standing Seam Profiles provide the specifier a cost effective way to replicate the aesthetic appearance of traditional metal standing seam roofs.



Monarplan Outlets

Monarplan Outlets are manufactured from rigid PVC incorporating a Monarplan flange for easy welding to the roof membrane. Connection is made with the plumbing using a rubber gasket. Supplied in both standard and parapet form, the Monarplan Outlet range is completed with leaf guards where required.



Monarplan Universal Leaf Grate

Monarplan Universal Leaf Grate is a rigid plastic leaf grate with screw adjustable expanding clamps. It is suitable for use with the range of Monarplan Outlets and Monarplan Refurbishment Outlets.



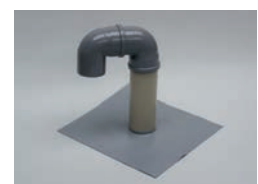
Monarplan Lightning Conductor Pads

Monarplan Lightning Conductor Pads comprise a lightning conductor cable clip mechanically attached to a circular PVC membrane disc which is then welded to the main Monarplan PVC roof membrane. The clips are available to suit either a bare copper, or a PVC-coated, conductor strip. Standard membrane colour available is light grey.



Monarplan Cable & Tube Ducts

Monarplan Multiple Cable Duct consist of a PVC pipe providing a rigid upstand, capped with two PVC pipe elbows. The integral PVC membrane flange can be welded to the underlying membrane to maintain the waterproofing detail.



Monarplan Single Cable Duct consist of a continuous 24mm diameter PVC pipe providing a rigid upstand to accommodate thin cables. The integral PVC membrane flange can be welded to the underlying membrane to maintain the waterproofing detail.





Icopal Single Ply Fleeceback Adhesive

Icopal Single Ply Fleeceback Adhesive is a high strength, single component moisture curing polyurethane adhesive that has been formulated for bonding fleece-backed Single Ply roofing membranes to various substrates including suitable roof insulation panels, such as Thermazone Roofboard. The cured adhesive film has very good resistance to heat and hydrolysis, and is blue/green in appearance.



Monarplan Contact Adhesive

Monarplan Contact Adhesive is a high strength solvent based contact adhesive that allows the bonding of Monarplan non-fleeceback reinforced membranes to various porous and non-porous substrates. The adhesive provides instant contact adhesion and is particularly useful at details such as upstands and abutments.



Icopal Galvanised Fixing Bar (peel stop)

Icopal Galvanised Fixing Bar is a 3m galvanised steel bar with pre-drilled holes at specified centres to facilitate the mechanical restraint of Monarplan membranes at the base of upstands or angle changes. It should be fastened to the more stable substrate, ie fixed vertically to the structural deck or horizontally to masonry or concrete upstands.



Icopal Termination Bar

Icopal Termination Bar is designed for securing and sealing membrane terminations at upstands in accordance with current Icopal specifications. The 3m long bar incorporates pre-drilled holes at 150mm centres.



Icopal Screw Fasteners, Tubular Washers & Pressure Plates

Icopal Screw Fasteners are manufactured from high grade carbon steel which are case hardened to achieve the properties essential for long term performance and have an organic corrosion resistant finish to meet UEAtc Part 2 requirements. The fasteners are also available in austenitic stainless steel offering exceptional corrosion resistance for extended warranty projects.

Icopal Tubular Washers are precision moulded from high grade polypropylene and extensively tested to ensure resistance to the extreme temperatures and mechanical stresses encountered within the roofing system. They are blue in colour and are available with two washer diameters: A 45mm diameter for fixing membranes and a 75mm diameter for fixing rigid insulation boards.

Icopal Pressure Plates are manufactured from high quality corrosion-resistant stainless steel. Icopal Pressure Plates are for use where tube washers cannot be utilised or where the membrane is being fastened when insulation is not present, eg cold roof situations.

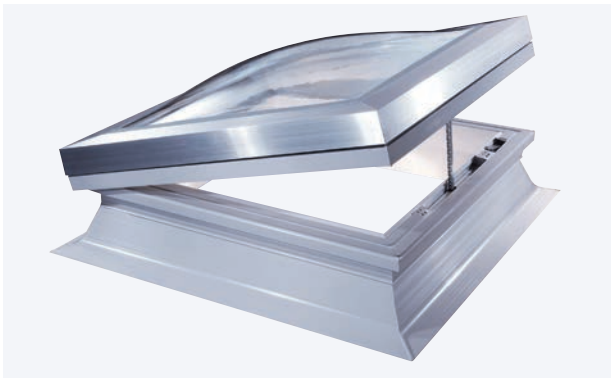
Complimentary Products

Icopal's approach to providing a fully guaranteed and integrated waterproofing solution is to include a range of specifically designed complimentary products eliminating the need for split responsibility or unknown quality.

Dalite Rooflights and Hatches

It is now accepted that natural light in buildings helps create better quality environments for people, improving their concentration and general feeling of well-being, leading to better productivity.

Specifying and installing a Dalite Rooflight helps ensure optimum and uniform natural light in rooms, guaranteeing both health and economic benefits.



Roofgard Paving Support System

Roofgard Paving Support System provides a versatile and cost effective means of creating a fully supported and stable raised paved area, terrace, walkway or balcony. They are suitable for use with concrete paving tiles, or Icopal Terradek timber decking tile.



Icopal Roof Plant and Equipment Support

Provides a cost effective way of supporting rooftop equipment and services without penetrating the waterproofing. The system is lightweight and adaptable avoiding unnecessary costly detailing.

Icopal Roof Safety Systems

Icopal provides a range a Roof Safety Systems including guard rail and fall restraint systems.

There is a duty of care placed upon employers outlined in the Working at Height Regulations 2005 to provide safe methods of access and protection for personnel accessing roofs. Icopal can advise and design fall protection and roof safety systems with guaranteed waterproofing as part of the overall roof specification.





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