

PROTEC PeMA

The fast curing low odour liquid roofing system

by

 polyroof

TECHNICAL DATA SHEET

V1.04



MANUFACTURED
IN THE UK SINCE
1984

TECHNICAL DATASHEET- PROTEC PeMA

INTRODUCTION

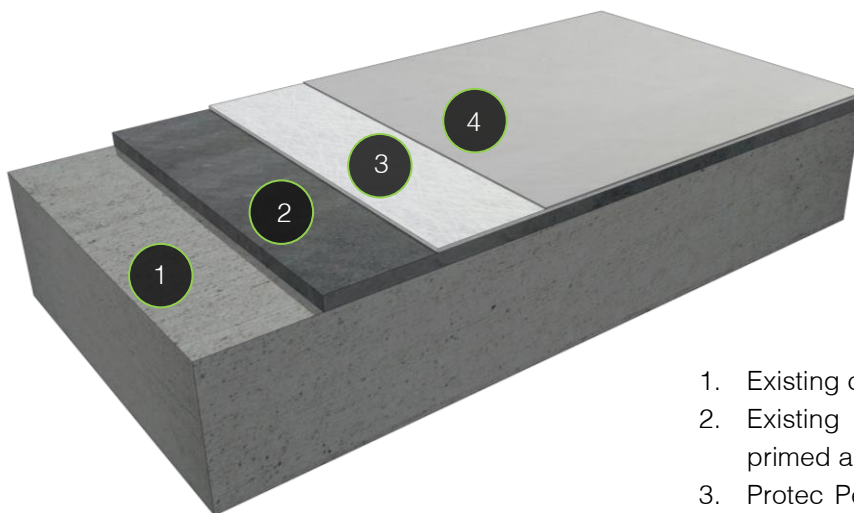
Protec PeMA is a flexible, cold liquid applied, seamless polyester methacrylate waterproofing system which is ideally suited for long term waterproofing of flat roofs. The system has low odour making it the ideal waterproofing system for sensitive areas such as the refurbishment of schools and hospitals. Protec PeMA is available as a 20 or 25 year system.

ADVANTAGES & KEY FEATURES

- Low odour
- Cold applied - no hot works
- Easy to detail
- Can be applied to most existing roof surfaces
- Rapidly resistant to rainfall
- Flexible
- Totally seamless – no joints
- Excellent resistance to ponded water
- 20 or 25 year guarantees

PRODUCT DESCRIPTION

Protec PeMA is a low odour liquid applied reinforced polyester methacrylate liquid roofing system.



1. Existing construction
2. Existing substrate (prepared and primed as required)
3. Protec PeMA Base Coat (with PolyMat 450 reinforcement)
4. Protec PeMA Top Coat (Light Grey)

SPECIFYING THE SYSTEM

Polyroof offer a free specification service. It is strongly recommended that Polyroof Technical Services are contacted to provide specific advice on any project. Where necessary a site survey will be arranged and a bespoke specification will be produced. Please contact us on 0800 801 890 to discuss.

PREPARATION

All surfaces to be coated (including any coatings, repairs or test areas) are to be inspected and made good where required to provide a sound substrate for the new waterproofing system.

All areas must be clean dry and free from contaminants such as dust, oil, grease, organic growth, sand and free from corrosion, laitance etc.

Specific guidance should be sought for any unidentified coatings such as solar reflective paint or any unidentified single ply membranes. Adhesion tests may be required.

Any unsound, loose or flaking material should be removed by mechanical means back to a sound surface.

Areas where the insulation or underlying substrate has collapsed or is defective or decayed, should be cut out, repaired and reinstated on a like-for-like basis to provide a good solid base for the coating system.

For full guidance on preparation of substrates please refer to the Protec PeMA Manual or contact Polyroof Technical Services for advice on 0800 801 890.

EQUIPMENT

Apply using a Medium Pile Roller or Brush

TEMPERATURE

The system may be applied between 2°C and 30°C.

Seasonal adjusters are available for use in low temperature conditions.

PRIMING

The requirement for a primer will be dependent on the substrate. It is recommended Polyroof Technical Services are contacted for advice on 0800 801 890.

Surface	Primer
<p>Bitumen Surfaces</p> <ul style="list-style-type: none"> • Polyroof SA Carrier layer • Polyroof RES Balcony Board • Felt • Asphalt 	<p>No primer required as standard*</p> <p>*Note: Any friable felts, and any areas of volatile bitumen should be primed (Consult Polyroof Technical Services for Advice).</p>
<p>Porous Surfaces</p> <ul style="list-style-type: none"> • Concrete • Polyroof Approved Plywood* • Polyroof Approved OSB3* 	<p>Polyroof Quick Dry 2-Pack Epoxy Primer</p> <p>Coverage Rate – Approx. 10-15m²/litre. Allow a minimum cure time of 2 hours before overcoating and overcoat with 7 days.</p> <p>*Note : Timber Decks - For timber decks such as OSB and Plywood consideration may be given to use of Polyroof SA Carrier layer to eliminate above primer and taping of board joints.</p>
<p>Metal Surfaces (Detailing Only)</p>	<p>Polyroof Quick Dry 2-Pack Epoxy Primer</p> <p>Coverage Rate – Approx. 15m²/litre. Allow a minimum cure time of 2 hours before overcoating and overcoat with 7 days.</p> <p>Alternatively Polyroof Metal Detailing Primer may be considered (Contact Technical Services for further advice).</p>
<p>Polyroof RES Insulation</p>	<p>No Primer Required.</p>

Single-Ply	*Note: Due to the many single-ply membranes available, adhesion tests are required to confirm compatibility. Consult Polyroof Technical Services for further guidance.
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LOCAL REINFORCEMENTS / DETAILING

Protec PeMA may be applied to suitable existing detailing subject to preparation and (where necessary) priming. Alternatively, a range of Pre-formed Polyroof GRP trims may be used.

All detailing should be locally reinforced with Protec PeMA and PolyMat 450 reinforcement prior to application of main system.

LOW TEMPERATURE ADDITIVE (PROTEC PeMA ACCELERATOR)

The Low Temperature Additive should be used in cold conditions to shorten the pot life and curing time whilst also improving flow and mat impregnation.

IMPORTANT: The Low Temperature Additive is not designed as a replacement for the catalyst. After the Low Temperature Additive has been added to the resin you will need to add the catalyst before you use the product.

When to use

- It **MUST** be used if the temperature is below **8°C**.
- It **MUST NOT** be used if the temperature is above **17°C**.

How to mix

- Thoroughly mix 1 tin of Protec PeMA Accelerator into a 10 litre tin of Protec PeMA Resin **before** the catalyst is added.
- It is important to note that the Low Temperature Additive is not a substitute for catalyst which is still required.

CATALYST

Note – The Low Temperature Additive must always be used if the temperature is below 8°C and it must be added to the Protec PeMA Resin **PRIOR** to adding catalyst.

The amount of catalyst added can be varied according to the temperature range. Never use more or less than the minimum and maximum amounts stated under any circumstances.

Catalyst Addition Rate	Cold	Medium	Warm
	Temperature Range	2 – 7°C	8 – 17°C
PeMA Resin Volume (Litres)	Catalyst Pumps	Catalyst Pumps	Catalyst Pumps
10	16	12	8
7.5	12	9	6
5	8	6	4
2.5	4	3	2



Approx. 30ml / pump

How to Mix

Shake the catalyst container, with its original closure in place before decanting. The catalyst should be added using the pump dispenser in accordance with the table above. Ensure that the resin is thoroughly mixed prior to use.

MAIN SYSTEM / COVERAGE RATES

20 Year System

1 st Coat	2 nd Coat
Smooth Surfaces: 1.3-1.5 Litre / m ² (with PolyMat 450)	0.5 Litres / m ²
Rough / De-Chipped Surfaces: 1.5-2.0 Litre / m ² (with PolyMat 450)	

25 Year System

1 st Coat	2 nd Coat
Smooth Surfaces: 1.3-1.5 Litre / m ² (with PolyMat 450)	0.75 Litres / m ² * *Note: Vertical surfaces may require 2 coats to achieve above coverage.
Rough / De-Chipped Surfaces: 1.5-2.0 Litre / m ² (with PolyMat 450)	

Important: All coverage rates are indicative only and it is the contractors' responsibility to ascertain the exact coverage rates on site. Coverage will always vary depending on substrate and the environment. Additional materials over and above this will be required to any areas that require local reinforcements, detailing etc.

CURE TIME

Typically 45mins - 1 hr
(Incorporating low temperature additive and catalyst as required)

CLEANING

All tools should be cleaned with Acetone immediately after use.

PACKAGING & SHELF LIFE

Packaging

Protec PeMA Resin (Base & Top)	10.0 litre tin
Protec PeMA Catalyst	2.0 litre bottle
Protec PeMA Accelerator	0.5 litre tin
Polyroof Quick Dry 2-Pack Epoxy Primer	4.0 litre pack
PolyMat 450	17m ² & 30m ² rolls

Shelf Life

Shelf life 12 Months for Protec PeMA. This is based on unopened containers stored in dry, frost free conditions away from heat.

MSDS

Material Safety Data Sheets available on request.