



Outline Specification

Roofcoat Plus System
to
Asbestos Sheets & GRP Rooflights
(Waterproofing Only)

Please note that this is an outline specification only and may be subject to further site investigation by Polyroof Products Ltd Technical Department.

1. Introduction

The following guideline specification is based on application of the advanced Roofcoat Plus System to asbestos sheets.



Roofcoat System applied to existing roof

The Roofcoat Plus System, when installed by a Polyroof approved contractor will provide the client with the following important benefits:

- ✓ **Long term maintenance-free waterproofing**
Advanced long-term waterproofing with a finish that can be easily cleaned. No costly repair or maintenance for the next 10 years at least.
- ✓ **Cold applied for maximum safety**
All Polyroof systems are cold applied so there are none of the safety risks associated with the open flames and hot torches used with traditional roll-applied systems.
- ✓ **Rapid installation with minimal disruption**
Since no stripping of the old roof is necessary there is no waste material to dispose of. Roofcoat Plus can, therefore, be installed with minimal fuss, minimal surface preparation and minimal disruption.
- ✓ **Long service life**
When Roofcoat Plus reaches the end of its service life, a further coating of the Roofcoat Plus membrane can be applied to rejuvenate the system and extend the working life for years to come.
- ✓ **Long term guarantee**
10 year guarantee available subject to requirements and substrate condition.

Please note that this guideline specification is based on preliminary discussions only. We welcome the opportunity to discuss this project further to finalise a proposal that's tailored to your exact requirements.

2. Specification Summary

2.1. Overview

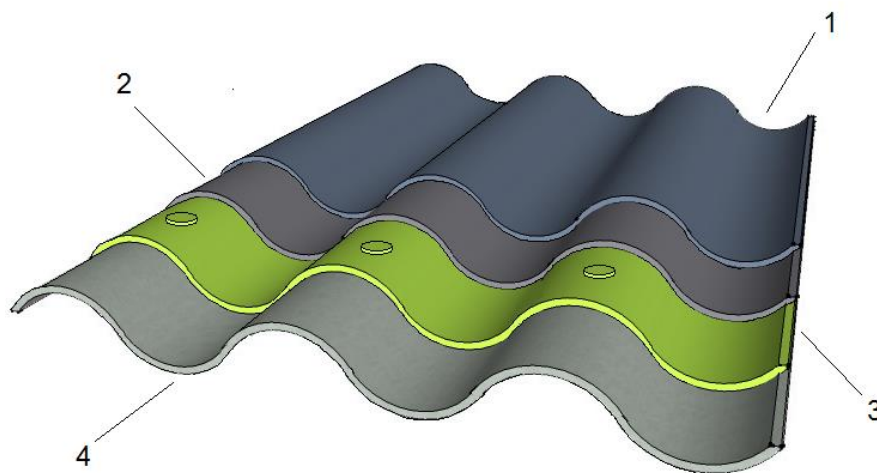
The following outline specification is for a new waterproofing system only. No improvements to thermal performance will be made and any existing condensation problems will remain. Care should always be taken to establish if the existing roof construction complies with current building regulations standards in terms of thermal performance. Options on thermal upgrades are of course available on request.

2.1.1. Existing Construction

1. Asbestos Sheets & GRP Rooflights
2. Steel Frame Support Structure

NB: Please note that the above is indicative only and subject to confirmation.

2.1.2. Proposed Construction



1. Roofcoat Plus HB Smooth flexible finishing resin
2. Roofcoat Plus Fibretex fibre reinforced coating
3. Elastex Embedment Coat and Elastex Taping Mat to lap joints and Elastex Fibretex to bolt heads
4. Existing profiled asbestos sheets prepared and primed

NB: The detail above is applicable to the asbestos sheets only.

Important - No deviation to the proposed construction or substitution of materials will be permitted unless advanced approval is obtained from Polyroof Products Technical Services.



2.2. Preparation

2.2.1. Falls & Drainage

This specification is for pitched roof areas and assumes that standing water is not present. An alternative system will be required on any roof areas where standing water is present. Please consult Polyroof Products Limited Technical Services for further advice.

No provision to improve drainage has been made within this specification. It has been assumed that current drainage capacity is adequate.

2.2.2. Inspection/Removal

NB: It is the responsibility of the Polyroof approved contractor to identify all defective areas.

The existing build up is to be inspected for defects, made good where required and retained. Any areas that are structurally unsound are to be removed and replaced.

2.2.3. Surface Preparation (Asbestos Sheets)

Note: It is important when working with asbestos that all work fully complies with current HSE Regulations.

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. Wet substrates should be thoroughly dried out before any products are applied.

Thoroughly clean down all areas to be treated to remove all mould, moss, dirt, etc. Avoid forcing water up and between the asbestos cement sheets. Ensure compliance with the HSE guidelines regarding asbestos contaminated water run-off, etc.

Treat any areas of fungal growth or moss with Polykill "W" Anti-Fungal Wash to ensure all spores are destroyed and remove all residues.

Inspect all surfaces to assess soundness of existing substrates including any existing coatings, repairs and any test areas.

Inspect asbestos sheets for damage or cracks. Make good or replace broken or defective profiles as required and in accordance with current HSE guidelines.

Repair, replace and reinstate any defective fixtures and fittings (bolts, seals etc).

Corrosion should be mechanically removed from all metal fixtures including bolts, ensuring that at all times no contact is made with the asbestos cement sheets.

NB: For preparation of any other surfaces please refer to Polyroof Coatings Application Manual issued by Polyroof Products Ltd.



2.2.4. Surface Preparation (GRP Rooflights)

Thoroughly clean down all areas, by suitable mechanical means or the use of a pressure wash, to remove all loose material, dirt, dust, fungal growth and moss.

Remove all unsound remedial repairs.

Inspect and replace broken or damaged sheets.

Cut off any glass fibre strands exposed above the surface of the old rooflight.

Lightly abrade and thoroughly wipe GRP rooflights with Elastex Solvent. Allow to dry.



2.3. Roofcoat Plus Application (Asbestos Sheets)

2.3.1. Overview

The Roofcoat Plus waterproofing system consists of reinforced polyurethane and acrylic resins, cold applied on site by hand lay giving a seamless, joint-free construction. The system should be applied in accordance with the Polyroof Coatings Application Manual issued by Polyroof Products Limited.

2.3.2. Approved Contractors

Roofcoat Plus should only be applied by contractors in possession of a current approval certificate. The contractor must provide an approved applicator to supervise the Roofcoat Plus work and the approved applicator must remain on the site until the works are complete. Confirmation of approval can be sought by calling Polyroof Products Ltd Technical Services on 01352 735135. A final inspection shall be carried out by a Polyroof technician prior to a guarantee being issued.

2.3.3. Weather Considerations

The system should not be applied if the air temperature is outside the range of 3degC - 35degC. The system must not be applied in damp or cold conditions which could cause surface condensation; during frost or if there is a risk of rain.

2.3.4. Pigment Colour

Roofcoat Plus is pre-pigmented in Goosewing Grey. If other colours are required, always consult Polyroof technical services for advice regarding determining suitability for the application.

2.3.5. Primer Coat

Asbestos Sheets – Roofcoat Stabilising Sealer at an approximate coverage rate of 10m²/litre. Allow to cure.
Metal Surfaces – Roofcoat APA Primer at an approximate coverage rate of 10m²/litre. Allow to cure.

2.3.6. Local Reinforcements & Lap Bridging

To all lap joints apply 50mm dis-bondment tape. Apply Elastex Embedment Coat and 100mm Elastex Taping Mat. Apply Elastex Fibretex to all bolt heads. Allow to cure.

2.3.7. Base Coat Application

Apply Roofcoat Plus Fibretex at a maximum coverage rate of 2.0m²/Litre (0.5Litres/m²). Allow to cure.

2.3.8. Top Coat Application

Apply Roofcoat Plus HB Smooth at a maximum coverage rate of 4.0 - 5.0m²/Litre (0.2 - 0.25Litres/m²). Allow to cure.

2.3.9. Inspection

On completion of each coat check for pinholes / misses and rectify accordingly.



2.3.10. Protection of Finished Membrane

In the event of other trades working on or adjacent to the roof area, the client must make adequate provision to prevent damage to the roofing system, by other trades. Site specifics should be discussed with the Approved Contractor.



2.4. Transglaze Application (GRP Rooflights)

2.4.1. Overview

The Transglaze waterproofing system consists of reinforced polyurethane resin, cold applied on site by hand lay giving a seamless, joint-free construction. The system should be applied in accordance with the Polyroof Coatings Application Manual issued by Polyroof Products Limited.

2.4.2. Approved Contractors

Transglaze should only be applied by contractors in possession of a current approval certificate. The contractor must provide an approved applicator to supervise the Transglaze work and the approved applicator must remain on the site until the works are complete. Confirmation of approval can be sought by calling Polyroof Products Ltd Technical Services on 01352 735135. A final inspection shall be carried out by a Polyroof technician prior to a guarantee being issued.

2.4.3. Weather Considerations

The system should not be applied if the air temperature is outside the range of 3degC - 30degC. The system must not be applied in damp or cold conditions which could cause surface condensation; during frost or if there is a risk of rain.

2.4.4. Primer Coat

GRP Rooflights – No overall primer required to these surfaces.

2.4.5. Local Reinforcements & Lap Bridging

To all joints between the GRP rooflights and the main sheets apply 50mm dis-bondment tape. Masking tape is then to be applied at approximately 125mm either side of the joints to provide a neat edge. To all lap joints apply Elastex Fibretex at a minimum coverage rate of 1.0m²/Litre (1.0Litre/m²). Remove masking tapes immediately after product application. Allow to cure.

2.4.6. Transglaze Embedment Coat

To all glazed and Elastex Fibretexed surfaces apply 1st coat of Transglaze and Elastex Mat at a minimum coverage rate of 2.0 - 3.0m²/Litre (0.33 - 0.5Litres/m²). Allow to cure.

2.4.7. Transglaze Top Coat

Apply 2nd coat of Transglaze at a minimum coverage rate of 3.0 - 4.0m²/Litre (0.25 - 0.33Litres/m²). Allow to cure.

NB: Ensure that the Roofcoat Plus System is applied to all Elastex Fibretexed surfaces during the application onto the sheeted roof area.

2.4.8. Inspection

On completion of each coat check for pinholes / misses and rectify accordingly.



2.4.9. Protection of Finished Membrane

In the event of other trades working on or adjacent to the roof area, the client must make adequate provision to prevent damage to the roofing system, by other trades. Site specifics should be discussed with the Approved Contractor.



2.5. General Detailing Notes

Care should be taken to ensure accessories such as skylights and vents are prepared and primed in accordance with the Polyroof Coatings Application Manual.

If detailing to accessories is not covered in the Polyroof Coatings Application Manual advice should be sought in writing from the Polyroof Technical department.

Collars are to be formed at all protrusions. Although good adhesion can be obtained on the majority of surfaces a mechanical joint under a collar or lip should be created.

The system should be dressed sufficiently into all outlets.

Ensure good even application of materials, paying particular attention to profile angles, edges, bolt heads and protrusions.

Certain vibrant coloured finishes may require an extra coat to ensure satisfactory opacity.



4. Health & Safety

4.1. Risk Assessments / Method Statements

It is the responsibility of the contractor to ensure that adequate risk assessments (including COSHH assessments), and method statements are carried out prior to commencement of works.

4.2. Materials Safety Data Sheets

It is the contractor's responsibility to ensure that all relevant material safety data sheets are on site at all times. Additional copies of these sheets are available on request from Polyroof Products Ltd.

4.3. Solvent Control

Many solvents are subject to Workplace Exposure Limits (WEL) set by environmental legislation. This is the maximum level of solvent in the air usually measured in parts per million to which any individual should be exposed over an 8 hour period.

Tests carried out on site have indicated that neither the operatives fitting our systems, nor people in the building below should experience solvent levels within 10% of the WEL. The contractor carrying out the work is obliged to carry out a risk assessment to ensure sensible precautions are taken such as the isolation of air intakes to the building and the avoidance of working within confined spaces which could increase the exposure levels beyond those of our testing.

It should be born in mind that solvent odour is very strong. It takes only a few parts per million within the air to detect the odour. To assure occupants of the building who may be concerned about an unfamiliar smell we advise the pro-active measures of advising that there is a likelihood of the odour being present.

4.4. Solvent Measuring

In sensitive areas it is usually possible to monitor the atmosphere for levels of solvents, and potentially hazardous fumes by using specialist testing equipment. With most products portable site testing equipment may be used that will give an immediate indication of the concentration of specific solvents in the atmosphere. This can show that the appropriate Workplace Exposure Limit is not being exceeded. In rare circumstances the services of specialist industrial hygiene companies may be required.

The contractors risk and COSHH assessments should identify if there is a need for atmospheric monitoring.



5. Polyroof Products Limited Company Profile

Introduction

Polyroof Products Ltd is one of the country's leading producers of cold liquid-applied roofing systems. Some ten million square metres of Polyroof have been laid since the company was first established in 1984. Polyroof is a well known and well respected name in the flat roofing industry with over 100 local authorities now specifying our systems, together with major housing associations, developers, airports, breweries and other industrial and commercial organisations throughout the country. Likewise in the domestic market, Polyroof has brought peace of mind to many thousands of homes by providing a permanent solution to persistently leaking roofs.

Quality Control

Polyroof Products Ltd operates comprehensive and rigorous quality control procedures in accordance with ISO 9001:2008. The scope of this approval includes the design and installation of roofing systems, the provision of technical support, as well as the appointment and monitoring of installers. Not only is the manufacture of Polyroof liquid applied roofing systems and accessories quality approved, but so too is the procurement, storage and supply of all related materials and consumables.

Certification and Guarantees

Polyroof Products Ltd offer a range of guarantees according to the clients requirements. Flexible guarantees of 10-25 years are available, subject to specification when applied by approved contractors. The Polyroof 185 system, which is exclusively installed onto a new, exterior-grade plywood deck, also carries an independent insurance backed 20-year guarantee. All our core flat roofing products: Polyroof 185, Protec and Elastex, have received the British Board of Agrément (BBA) Certificate, an official and independent assurance of reliability; which indicates minimum durability ratings of 20-30 years for our systems. Furthermore our Protec system is also Factory Mutual (FM) and Underwriters Laboratory (UL) approved.

Approved Contractors

To maintain the highest standards of quality, it is essential that Polyroof products are applied correctly. You will, therefore, find that Polyroof systems are only supplied and installed by contractors who are fully trained and licensed by the company, to ensure consistent installation quality and service. Contractor's performance is regularly monitored and random installation inspections are carried out to maintain our highest standards. Training not only includes the theory of how the systems should be laid, but also involves on site work with Polyroof technical staff working alongside contractors - or potential contractors - on a roof installation. Not every contractor who approaches us will meet our tough assessment criteria.

Polyroof Technical Support

We provide a high level of on-going technical support before, during and after every contract. Our technical team will, when required, carry out surveys and produce detailed roof specifications, drawings and proposals. A freephone technical helpline ensures that contractor's questions as well as enquiries from architects and specifiers are dealt with quickly and efficiently.

Environment

Polyroof Products Limited is committed to fulfilling its environmental responsibilities and minimising any impact that our products or processes may have on the environment. All Polyroof resins are manufactured in accordance with either ISO 14001 or with the Coatings Core Programme of the International Paint and Printing Inks Council. Further details on our environmental policy can be found in our 'Health, Safety & Environment' brochure, which is available on request and can be downloaded from www.polyroof.co.uk