XTRAFLEX SYSTEM

METAL GUTTERS

(WATERPROOFING SYSTEM ONLY)

OUTLINE SPECIFICATION

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This document is a guide to assist in the production of tender documents. It is the responsibility of the client to add and delete clauses as relevant to the contract. Nothing in this proposal or any other literature produced by or on behalf of Polyroof Products Ltd is to be regarded as constituting a contract binding in law between Polyroof Products Ltd and any customer. The only contract which Polyroof will enter into is that contained in the Polyroof guarantee which takes effect only when issued in writing by Polyroof to the customer. Specimen guarantees are available on request.



1 Introduction

The following outline specification is based on application of the XtraFlex System to metal gutters. Please note that this outline specification is based on preliminary discussions only. We welcome the opportunity to discuss your project further to finalise a proposal that is tailored to your exact requirements.

Further useful information in relation to the Xtraflex System is available from the following website links:

- Literature: https://polyroof.co.uk/products/xtraflex-system/
- Guarantees: http://polyroof.co.uk/about/polyroof-guarantees/



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.

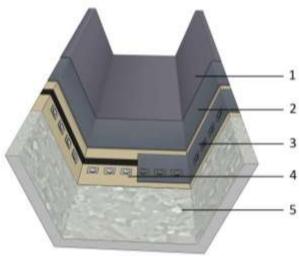
Care should always be taken to establish if the existing gutter construction complies with current building regulations standards.

2.1.1 Existing Construction (Assumed)

1. Metal Gutters

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

2.1.2 Proposed Construction



- XtraFlex 2nd Coat
- XtraFlex 1st Coat and PolyMat 450 reinforcement Local reinforcements to lap joints and bolt heads (please refer to Section 2.3.6. for further details)
- 4. Polyroof Quick Dry 2-Pack Epoxy Primer
- 5. Metal gutter



2.2 Structural Preparation

2.2.1 Falls & Drainage

This specification utilises existing falls and any problems of standing water will remain. However, you may wish to note that standing water is not detrimental to the XtraFlex System.

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

2.2.2 Surface Preparation

The following assumes that the existing gutter construction is structurally sound. Any defective areas should be removed and replaced.

Thoroughly clean down all gutters and water outlets areas to be treated. Remove any dirt and debris, oil and grease, surface lying water, mould growth, moss, etc. Ensure free drainage.

Inspect all surfaces to assess soundness of existing substrates including any existing coatings, repairs and any test areas. This is to verify compatibility for the proposed coating system and to assess the need for priming.

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

Ensure the substrate to be treated is sound and free from defects. Remove any existing loose or poorly adhering materials and repair where appropriate. Repair, replace and reinstate any defective fixtures and fittings (bolts, seals etc.).

All rust, loose and flaking materials are to be removed by wire brush or other means and all debris removed.

Any areas of significant rusting which cannot be removed should be treated with a suitable proprietary rust converter. This should be applied in accordance with the manufacturer's recommendations.

Thoroughly wipe metal surfaces with acetone prior to priming.

To all bright or un-weathered (non-oxidised) galvanized steel surfaces, thoroughly clean and degrease as above then apply by brush Mordant T-Wash at an approximate coverage rate of 15m²/litre and allow to react. A black deposit will indicate surface conversion. After conversion wash with clean water and allow to dry.

NB: For preparation of any other surfaces please contact Polyroof Technical Services for quidance.



2.3 XtraFlex Application

2.3.1 Overview

The XtraFlex waterproofing system consists of reinforced hybrid polymer resin, cold applied on site by hand lay giving a seamless, joint-free construction. The system should be applied in accordance with the current application instructions.

2.3.2 Approved Contractors

XtraFlex should only be applied by contractors in possession of a current approval certificate. The contractor must provide an approved applicator to supervise the 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 0800 801 890. 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 - 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.

2.3.4 Pigment Colour

XtraFlex is pre-pigmented in Light Grey.

2.3.5 Primer Coat

Metal Gutter: Polyroof Quick Dry 2-Pack Epoxy Primer at an approximate coverage rate of 10-15m²/litre. Allow to become touch-dry.

Other Surfaces: For priming of any other surfaces please contact Polyroof Technical Services for guidance.

2.3.6 Local Reinforcements

Lap Joints & Bolt Heads: To all lap joints apply 75mm wide Polyroof Butyl Lap Tape and to all bolt heads apply 50mm x 50mm Polyroof Butyl Bolt Tape. Apply one overall coat of XtraFlex Resin and 300mm wide PolyMat 450 at a minimum coverage rate of 1.3 - 1.5Litres/ m^2 (0.66 - 0.77 m^2 /Litre) to locally reinforce the lap joints and bolt heads. Allow to cure.

Other Details: To any other details requiring local reinforcement apply XtraFlex Resin and 75mm wide PolyMat 450. Allow to cure. NB: Apply 25mm dis-bondment tape to any joints subject to movement prior to application of local reinforcement.

2.3.7 XtraFlex 1st Coat Application

Apply 1^{st} coat of XtraFlex Resin and Polymat 450 at a minimum coverage rate of 1.3 - 1.5Litres/m² (0.66 - 0.77m²/Litre). Allow to cure. NB: Please note that all coverage rates are indicative only and it is the contractors' responsibility to ascertain the exact coverage rates on site.

2.3.8 XtraFlex 2nd Coat Application

Apply 2^{nd} coat of XtraFlex Resin at a minimum coverage rate of 0.5Litres/m² (2.0m²/Litre). 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.



3 Roof details

Please note that a site investigation may be required to identify roof details and determine the required actions to ensure that they are left in a watertight condition. Guidance on detailing can be obtained by contacting Polyroof Technical Services on 0800 801 890.

Detailing Notes:

- Roof termination details should have a minimum 150mm upstand height above the finished surface of the roof and should be terminated into a chase or have a suitable cover flashing or weathering flange. Any details where this cannot be achieved will require periodic inspection and maintenance.
- All outlets are to be inspected to ensure that they are functioning as they should. Any
 unsuitable outlets should be replaced with new. Outlets should be cleaned prepared and
 primed as required and the XtraFlex System is then to be sufficiently dressed into the
 outlets as far as practicable.
- Care should be taken to ensure all roof details are prepared and primed in accordance with current application instructions.



4 Health & Safety

4.1 Personal Protective Equipment (PPE)

Should be worn at all times. Refer to Material Safety Data Sheets for advice.

In addition to PPE, barrier cream and hand cleaner may be used for secondary protection and cleaning of exposed areas of skin.

4.2 Material Safety Data Sheets (MSDS)

It is your responsibility to ensure that all relevant MSDS documents are on site at all times. MSDS documents are provided with your first order; additional copies of these sheets are available on request from Polyroof Technical Services. You can download the current versions from the Polyroof Approved Contractor Zone.

4.3 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.

4.4 VOC / Odour Control

Most products contain volatile components, such as solvents; these components evaporate from the system during and post application. Some of the volatiles within certain products have a strong odour and others such as within our Protec Evolve system have a low odour. Some volatiles require hazard control measures and these are stated on the MSDS sheets. Some hazardous VOCs (Volatile Organic Content) are assigned a 'Workplace Exposure Limit' (WEL): the legal maximum concentration in the air that an individual may be exposed to within a prescribed period of time. Some of these hazardous materials have also been assigned a 'Derived No Effect Level' (DNEL). Historic tests carried out on typical flat roofs indicate that neither the operatives fitting the system nor people within or in the vicinity of the building to which the system is applied, will be exposed to concentrations in excess of the WELs, the actual concentrations will be significantly lower.

It should be borne in mind that, whilst some of these VOCs have a strong odour and can be detected at low concentrations, the fact that they can be smelt does not mean individuals are exposed to hazardous levels.

The contractor carrying out the work is obliged to carry out a risk assessment and ensure sensible precautions are taken, such precautions would include checking the isolation of air intakes to the building and ensuring the avoidance of working within confined spaces: both could otherwise increase the exposure levels beyond those of our testing. It should also be noted that a low odour product such as Protec Evolve has a lower level of malodorous VOC's and this does not eliminate the need for a risk assessment.

To assure the occupants of the building, who may be concerned about an unfamiliar smell, warn them of the likelihood before work commences.

4.5 VOC Measuring

In sensitive areas it is usually possible to monitor the atmosphere for levels of VOC's, 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 WEL or DNEL, is not being



exceeded. In rare circumstances the services of specialist industrial hygiene companies may be required.

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





