

# **ELASTEX SYSTEM**

PRODUCT INFORMATION AND DESIGN GUIDE





# **ELASTEX POLYURETHANE OVERLAY SYSTEM**

# THE POLYROOF ELASTEX SYSTEM

Elastex is a liquid-applied single pack reinforced polyurethane overlay system that is ideal for extending the life of existing gutters, industrial sheeted roofs and existing metal or single-ply flat roofs. The system carries BBA approval with durability ratings of up to 25 years.

The high-performance membrane provides a resilient long lasting barrier to water penetration and is resistant to UV degradation. The toughness and flexibility of the system easily accommodates normal surface movements.

The Elastex system can be applied virtually all year round to practically all roof or gutter surfaces and is effective on complex areas such as valley gutters, extraction units or other detailing work. Because there is generally no stripping involved, Elastex is ideal for projects that require a fast solution with minimum disruption.

Like all Polyroof systems, Elastex is exclusively installed by our national network of Polyroof approved contractors. Elastex is available with flexible guarantees of 10, 15, 20 or 25 years depending on the required system and specification.

# **KEY APPLICATIONS**

Elastex is ideally suited to the following applications:

- **Gutter overlays** (metal and other industrial types)
- Low pitched sheeted roof overlays (Plastisol-coated metal, bare metal or asbestos)
- Flat roof overlays, especially single-ply (PVC, TPO and EPDM) and metal covered roofs (lead, zinc and copper)

Elastex is also suitable for coating other substrates including felt, asphalt, Polyroof approved plywood and concrete. The system can also be used as part of a warm, cold, inverted or green roof design and for new build applications.

# **KEY BENEFITS AND FEATURES**

Capable of outstanding adhesion to virtually all metals and other common roofing substrates

Moisture curing so can be applied in most weather conditions

BBA approval and flexible guarantees of 10 - 25 years for complete peace of mind

Cold liquid-applied, eliminating the risks associated with hot-applied works

Highly flexible and able to accommodate all normal structural expansion movements

Totally seamless membrane without the weak points associated with the lap joints of sheeted roofing systems

NOT THE SYSTEM YOU'RE LOOKING FOR? Polyroof have a range of products suitable for all new-build and refurbishment flat roof applications. If you're not sure which product is most suited to your project, contact our Technical Services Team today on 0800 801 890 or email technical@polyroof.co.uk to discuss your requirements.

# **ABOUT POLYROOF**

Established in 1984, Polyroof Products Limited is an independent manufacturer of liquid-applied roofing systems operating across the UK. Our continued commitment to improving our product range allows us to provide our clients with the very best flat roofing solutions on the market.

At Polyroof, we pride ourselves on being more than just a manufacturer. Our products are supported by a market-leading range of services that draw upon our wealth of experience and knowledge of the flat roofing sector. It is upon this foundation that we have formed many successful long-term partnerships with specifiers across the UK and we continue to grow and expand our business.











# **MARKET LEADING SERVICES**

Polyroof provide a full and completely free project support service to specifiers and clients at every step, from initial consultation to final installation and throughout the lifespan of the roofing system.

We aim to provide all of our clients with a standard of service that matches the quality of our roofing products.

Feedback from clients has shown that the level of service provided by Polyroof is the reason we are specified time and time again.

Our range of services include surveys, bespoke and NBS specifications, thermal calculations and contract monitoring. Contact the technical team to see how we can assist with your roofing project.



#### **INDUSTRIAL GUTTERS**

Elastex is the ideal solution for waterproofing industrial box and valley gutters. Being totally seamless, highly flexible and impervious to standing water, the system provides protection from leaks for decades to come.

Suitable for coating substrates such as galvanised steel, aluminium, cast iron and asbestos, Elastex can be applied with minimal preparation and forms an incredibly strong adhesive bond to the gutter surface.



- 1 SUBSTRATE CLEANED AND PREPARED AS REQUIRED
- 2 ELASTEX PRIMER
- 3 ELASTEX FIBRETEX TO BOLT HEADS
- 4 LOCAL REINFORCEMENTS TO LAP JOINTS
- 5 (ELASTEX EMBEDMENT COAT (FULLY REINFORCED)
- 6 FLASTEX PROTECTION COAT
- OPTIONAL ADDITIONAL PROTECTION COAT (20 YEAR SYSTEM)

# CASE STUDY - AGED GALVANISED STEEL GUTTER REFURBISHMENT

KEY FEATURES: TOTALLY SEAMLESS AND WATERPROOF SOLUTION WITHOUT DISRUPTION TO DAILY OPERATIONS

This large industrial building in Blackburn had been suffering from persistent leaks that were emanating from the failing valley gutter.

The galvanised steel gutter was heavily rusted and was in danger of becoming structurally unsound if left unchecked. Not wanting to undertake costly removal and replacement works, the client turned to Polyroof for an overlay solution.



The rust in the gutters was ground out and then treated with a rust converter. The gutter was primed with metallic primer and local reinforcements to the bolt heads and lap joints were carried out.



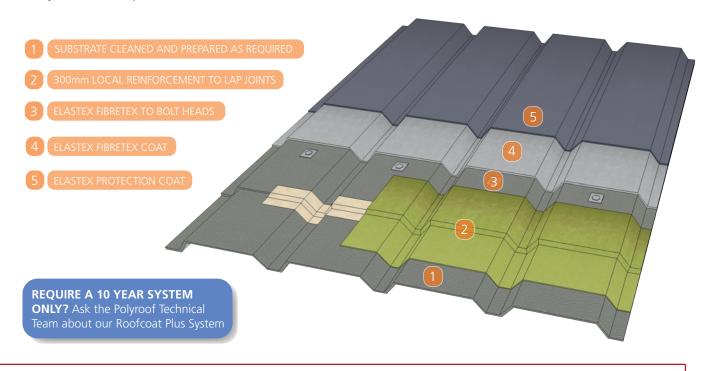
The Elastex 15 Year System was installed to provide a fully seamless waterproofing solution. Daily operations at the company were unaffected by the works, adding further value to the decision to overlay the gutter.



#### **LOW PITCHED SHEETED ROOFS**

Elastex can be applied to low pitched sheeted roofs, such as Plastisol-coated metal and asbestos, to provide a long-lasting waterproofing system that eliminates the need for costly removal and replacement works.

We recommend that you contact Polyroof Technical Services regarding all low pitched sheeted roof refurbishment projects so that we can ensure that the most appropriate specification is put forward for your roof.



### **CASE STUDY - PLASTISOL-COATED METAL SHEETED ROOF OVERLAY**

This large building in St Helier, Jersey, houses numerous business establishments. The main roof consisted of aged Plastisol-coated metal sheeting which was failing to prevent water ingress into the interior of the building. The replacement of the existing roof was cost prohibitive and so the client turned to Polyroof to provide a long-

lasting, cost-effective and fully guaranteed overlay waterproofing solution.

The Elastex system was specified due to its flexibility, durability, and its ability to form a totally seamlessly membrane over the roof, eliminating the weak points associated with the old lap joints.



#### **FLAT ROOFS: SINGLE-PLY OVERLAYS**

(Including PVC, TPO and EPDM)\*

For situations where an existing roof is in a sound condition and adequately insulated but may have a single-ply covering that is aged or failing, it is possible to extend the lifespan of the roof for decades to come through an overlay application with Elastex.





The Elastex System can be applied onto the single-ply coverings to create a durable waterproofing system that is also suitable for occasional foot traffic. Being totally seamless, Elastex has none of the issues that can potentially arise from the lap joints of single-ply membranes.

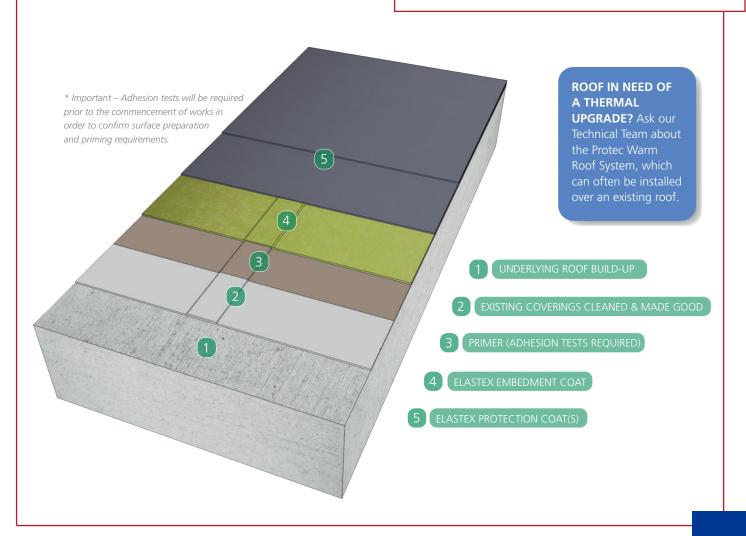
Due to the wide variety of single-ply types and chemistries, we recommend that you contact Polyroof Technical Services so that the most appropriate solution can be put forward for your roofing project.

# CASE STUDY - FAILED SINGLE-PLY REFURBISHMENT

KEY FEATURES: APPLIED OVER EXISTING COVERING WITH NO DISRUPTION TO RUNNING OF THE HOSPITAL

As part of an extension programme at the RVI Hospital in Newcastle, a new corridor building had been waterproofed with a single-ply system. However, due to installation issues the coverings had failed to prevent water ingress and localised repairs were ineffective. The main contractor tasked with solving the issue contacted a Polyroof approved contractor to provide a long-term solution. The Elastex system was specified and applied direct to the roof, creating a seamless and tough waterproofing membrane that was fully guaranteed for 20 years.





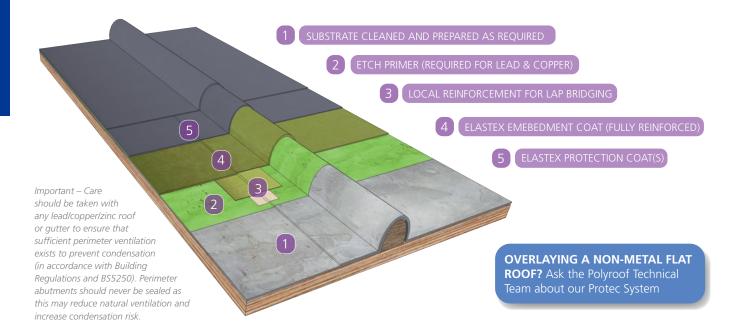
#### **FLAT ROOFS: METAL SHEETS**

(Including lead, copper and zinc)

With its ability to form excellent adhesive bonds with metal substrates, Elastex offers a unique solution for extending the life of existing metal flat roofs.

With its high flexibility, expansion and contraction movements

within the metal are easily accommodated within the system. Lead roll or standing seam details are seamlessly incorporated into the new waterproofing membrane to provide a finish that is sympathetic to the original roof



# **CASE STUDY - ZINC STANDING SEAM OVERLAY**

**KEY FEATURES:** NO STRIPPING INVOLVED, ALLOWING FOR A RAPID REFURBISHMENT THAT RETAINED THE APPEARANCE OF THE ZINC STANDING SEAM SHEETS

The client for this project operates a number of learning centres across the UK. Having specified Polyroof systems to refurbish various roof areas at other sites, they turned to Polyroof to provide a solution to the leaking zinc roof at this picturesque location in Perthshire.

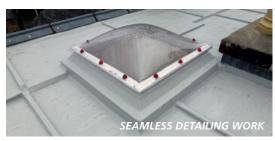
The BBA-approved Elastex system was chosen for the project, which is ideal for coating aged metal substrates.

The system was applied directly to the zinc sheets with minimum preparation and formed a highly flexible, seamless and durable waterproofing membrane that was guaranteed for 20 years.

The client was delighted with the finished works and has subsequently arranged for other flat roof areas to be refurbished by Polyroof.







# **DIRECT OVERLAYS**

Elastex is primarily used for overlaying existing gutters and roofs. It is crucial that the construction is inspected to ensure it is in a structurally sound condition prior to commencing works.

Please note that prior to carrying out refurbishments it should be ensured that the existing construction complies with the relevant regulations, codes and good practice. We recommend that you always consult your Local Building Control Authority to discuss the proposed works to ensure compliance with current regulations.

Options for thermally upgrading a roof or gutter using Polyroof's range of BBA-approved roofing systems are of course available upon request from Polyroof Technical Services.

#### **SUBSTRATES**

Elastex can be applied to a wide range of substrates including lead, copper, zinc / galvanised steel, Plastisol-coated metal, asbestos and single-ply. Elastex can also be applied to felt, asphalt, plywood, concrete and other common roof substrates. The level of preparation and priming requirements will vary depending on substrate type and condition. Adhesion tests will be required for single-ply overlay applications.

Outline specifications for common substrates including standard preparation paragraphs can be downloaded from our website at www.polyroof.co.uk/downloads

# **FALLS & DRAINAGE**

Minimum falls recommended by the relevant British Standards for a flat roof is 1 in 80. Advice should be sought from the relevant authorities with regards to gutter applications. Please note that standing water is not detrimental to the Elastex system in any way.

Advice on roof drainage is given in Code of Practice BS 6367. The majority of standard rainwater outlets can be incorporated into Elastex installations.

# **DETAILING GUIDANCE**

Being liquid-applied, the system can be seamlessy dressed onto details such as upstands, protrusions, and stanchions. British Standard guidelines advise that a minimum upstand threshold of 150mm is provided for a waterproofing system on all details.

# **ACCREDITATIONS**

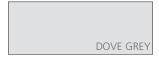
Elastex has been independently tested to the very highest standards and has British Board of Agrément approval, Certificate No. 09/4676.

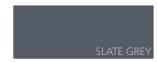
#### **DURABILITY**

Minimum BBA durability ratings of up to 25 years depending on the system specified.

#### **AVAILABLE COLOURS**

The Elastex system is available as standard in Dove Grey or Slate Grey.





The above colours are approximations only. Other colours are available on request subject to minimum quantities.

#### **PROPERTIES IN RELATION TO FIRE**

Full independent tests have shown that the system achieves EXT F.AA in accordance with BS 476 Part 3.

# **WEATHERTIGHTNESS**

Test data confirms that the system will adequately resist the passage of moisture to the inside of the building and so meet the requirements of the National Building Regulations.

#### **RESISTANCE TO WIND UPLIFT**

Elastex is a fully bonded system. Resistance to wind uplift is adequate to meet the effects of wind suction likely to occur in practice.

#### **MANUFACTURER'S GUARANTEES**

10 to 25 year manufacturer's guarantees are available subject to specification. For more information please contact Polyroof Technical Services.



VIEW THE ELASTEX BBA
CERTIFICATE FOR MORE
INFORMATION. Download it
from www.polyroof.co.uk or
call us on 0800 801 890

#### **TECHNICAL ASSISTANCE**

Polyroof Products offer comprehensive technical support for specifiers, contractors and clients. Our technical services department are on hand to offer product advice and answer any questions throughout all stages of your project from inception to completion.

We will review any drawings and offer detailed guidance regarding specifications including recommendations to ensure compliance with all current regulations. We offer a free bespoke specification service and can carry out site surveys to ensure that the most appropriate specification is put forward for your project.

Telephone: 0800 801890 Fax: 01352 736363

Email: technical@polyroof.co.uk

#### **LITERATURE AND SAMPLES**

Polyroof Products produce a comprehensive range of literature and product samples for specifiers, contractors and clients. Individual brochures and product samples are available on request for all of our products and are available either in paper copy or electronic format.

A complete specifiers manual is also available which contains a complete set of literature along with product samples. Contact us today for a copy or visit our website www.polyroof.co.uk where you can download individual brochures and NBS specifications

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#### Disclaimer

Polyroof Products reserve the right to amend product specifications without prior notice. The information provided in this literature is given in good faith. Recommendations for use should be verified to ensure compliance with all current building regulations and standards. Please check that your current copy of literature is the latest version by contacting the marketing department or visiting www.polyroof.co.uk/downloads.

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# BBA APPROVAL MEDICITION TESTING CENTRUMICATION CENTRUMICATION ELASTEX SYSTEM













# **CUSTOMER SERVICE**



On completion of your project customer services are on hand should you need aftercare advice or should you have any queries relating to your installation, guarantees or warranties.

Telephone: 01352 735135 Fax: 01352 735182

Email: customer.service@polyroof.co.uk

# **GENERAL ENQUIRIES**

For all other enquiries contact Polyroof Products on the number below.

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