

**BAUDER**



FLAT ROOF  
REFURBISHMENT



**PROJECT:** Ethelred Estate, London Borough of Lambeth

# CHALLENGE

➤ The roof on this residential building had exceeded its serviceable life and was experiencing serious water ingress. The client wanted to not only repair the failing roof but to add value to the local community and surrounding environment by retrofitting it with a high quality, aesthetically pleasing green roof system. Insulation upgrades were also necessary to satisfy building regulations, and work hours had to be agreed with local residents to keep disruption to an absolute minimum.



# SOLUTION

➤ Due to the building's exposed location, wind uplift calculations were performed prior to the installation, making sure the new roof could resist the weather conditions it is likely to experience. Bauder's premium extensive green roof system, BTGRS, was specified because it delivers unrivalled reliability, performance and durability, and is suitable for all types of green roof landscaping options. The system build-up included Bauder's 90mm PIR FA-TE insulation for superior thermal performance, ensuring the roof achieved the required 0.25 U-Value.

Despite design and logistical challenges, the new roof system was delivered on time and to budget transforming the housing estate in terms of appearance, performance and functionality. All deliveries were scheduled as not to conflict with vehicles moving in and out of the facility.

*"This project boasts top quality roofing products and workmanship, which is highlighted by the fact that the Bauder green roof is still thriving today, over ten years since it was originally installed."*

**Building Manager, WATMOS**



# PRODUCTS

➤ Plant E is a root resistant bituminous capping sheet with a life expectancy in line with the design life of the roof.

XF301 is a lightweight and easy to maintain sedum blanket that provides instant greening to the roof.

PIR insulation has the best insulation rating of all widely-used flat roof thermal insulation materials.



# BAUDER, RESTORING YOUR FLAT ROOF

Many traditional flat roofs, installed over 25 years ago, are now reaching the end of their serviceable life and need reviving before water ingress disrupts operations. Re-establishing the integrity of your flat roof takes careful consideration, and we understand that you want to ensure your refurbished roof will be correctly specified to meet both the needs of the building and your budget, reliable and trouble-free, long lasting and come with a comprehensive guarantee.

## Making the Right Decision

You make the right decision by coming to Bauder as our diverse portfolio of roofing solutions gives you the reassurance that we will recommend the right waterproofing system for your project.

Our products are fully compatible and give you a single source of supply, and therefore a single point of contact for everything, including the guarantee.

We are totally committed to providing you with value, delivering the best possible service and technical support with superior products at a competitive price.

## People Create the Difference

A good project requires teamwork, and our people give a unified approach to delivering a successful flat roof starting with our receptive service through well-informed advice, reinforced with technical expertise for the correct design and specification, fully supported by our office and warehouse logistics, and maintained on site by our installation specialists.

Bauder is a people business with you at the centre of everything we do; our focus on your needs is what gives us a reputation and track record that is second to none.



# IT'S ALL ABOUT THE SERVICE

Your project is as important to us as it is to you and that is why the survey report you receive will examine all aspects of your roof, consider the problematic areas and propose the right waterproofing solution to meet the needs of the building and that of each roof area.



## Roof Survey Report

Your report is produced once a full inspection of the roof's condition has been completed by your dedicated technical manager and encompasses:

- Analysing the current roof covering and investigating the deck structure.
- Consideration of insulation upgrades to achieve required U-values.
- Consideration of drainage effectiveness and falls.
- Detailing of all roof penetrations and connecting interfaces.
- Implications of any additional weight loading.
- Wind uplift calculations and required fixing methods and restraint.
- Recommending the correct course of action and remedial measures necessary.
- Impartially specifying the right waterproofing system to meet building needs and budget.
- Recommending our best suited approved contractors to install the replacement waterproofing on your project.
- Outlining the guarantee ensuring it meets project expectations.

Following the roof survey, our technical team create your tailor-made roof specification with CAD drawings and technical calculations for the successful Bauder approved contractor to deliver to.



# APPRECIATING THE CHALLENGE

Your roof may well be experiencing challenges that a visual appraisal cannot always detect. Technical testing methods can be employed to determine the scope of works required and provide you with graphic evidence of your roof's condition. Armed with this information we can make informed decisions about how to action any defects, and extend the life of your roof. The roof analysis methods we can perform are:

## Core Samples

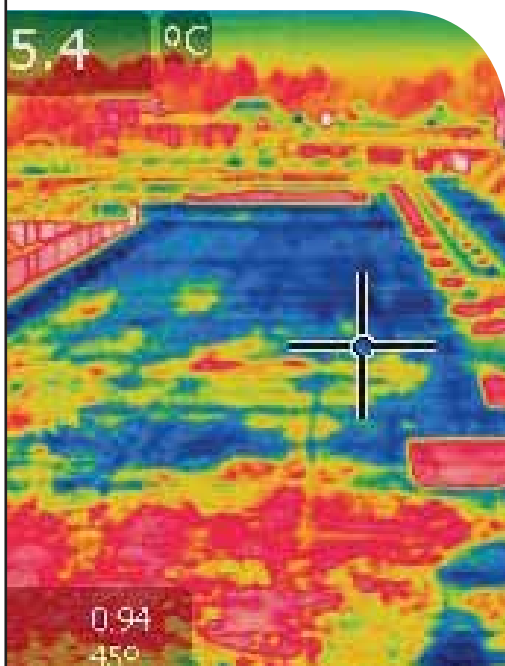
Investigative core samples assess your current roof construction and the condition of the substrate. This sample is taken by your area technical manager in order to determine the course of remedial action and is included as part of our no obligation survey.

## Moisture Mapping

Non-destructive method of testing for trapped water within a flat roof build up. A moisture gauge is used to pinpoint the presence of dampness within the roof structure to depths of 200mm with the results delivered as a topographical map.

## Thermographic Imaging

Non-destructive testing method that identifies defective roof areas currently allowing water ingress, which could remain undetected using standard inspection techniques. Thermographic surveys are conducted using infra-red technology to identify thermal irregularities, with recordings converted into a clear image of the roof's condition.



## Refurbishment Solutions

Once the condition of the existing deck has been determined there are a variety of options available for refurbishing your current waterproofing; completely stripping up the failing system, partially overlaying it or keeping it in situ and overlaying it entirely. All of these refurbishment options have their benefits, and we will advise you as to which one is most suitable and cost-effective based on the results of your survey.

### Complete Strip-Up

**Necessary when:**  
High levels of moisture are present or there is doubt over long-term roof integrity.

Original deck is no longer structurally sound due to water ingress.

### Partial Overlay

**Most suitable when the:**  
Elements of the original build-up can be used without compromising system integrity.

Contained roof areas are failing but are identifiable.

Roof has leaked but not caused structural damage.

### Overlay

**Most suitable when the:**  
Existing top layer is in good condition and compatible with the new system.

Roofing system needs upgrading to meet Building Regulations.

Moisture present is limited and has not affected the roofing system.

Existing cladding can accept profiled insulation.



# TURNKEY SERVICE

You give us your remit either at your office or on site. We will discuss the roofing project and any historical problems with water ingress, your preferred system application, your budget and how the programme of works can be formulated.

## 1 Brief and Consultation



## 6 Sign Off and Guarantee




A full final inspection is completed on the works by our site technician team following rigorous approval criteria before the guarantee is issued. Our guarantee covers all elements of product, design and installation of the Bauder system.

## 5 Installation of the Roofing Solution




Once the Bauder approved contractor has been appointed, a pre-contract meeting will make sure that the project delivery is well coordinated. The works are closely monitored by Bauder site technicians with regular inspections and 'live' time reports to ensure quality and waterproof integrity of the roof.

EX  
EPS  
ALL  
AKES



**2**  
**Roof  
Survey**



We will perform an honest and detailed appraisal of all roof areas to assess the current roof covering, insulation type, deck construction and design considerations. Additional technical roof diagnostics can further locate specific areas of water ingress.

**3**  
**Report,  
Design and  
Specification  
Service**



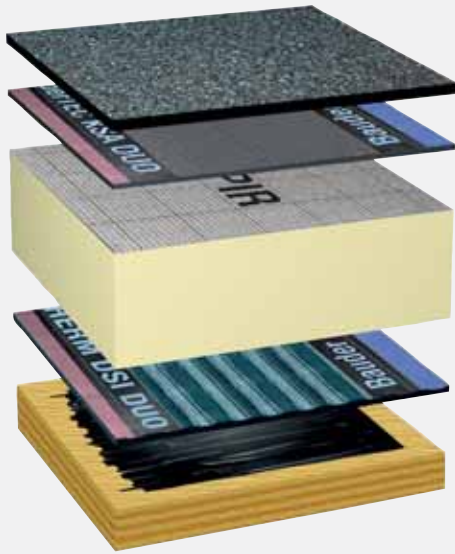
You will receive the detailed survey condition report and the specification package for your project, which answers your brief and meets the needs of the building. Together we can then determine which solution best matches your requirements.

**4**  
**Contractor  
Selection**



The Bauder approved contractors best placed to deliver your new roof will competitively price and tender for your project. Our national network of contractors undergo a rigorous selection process and their installers are trained specifically in the application of our systems, so you are ensured an expert installation.

# ROOFING SOLUTIONS

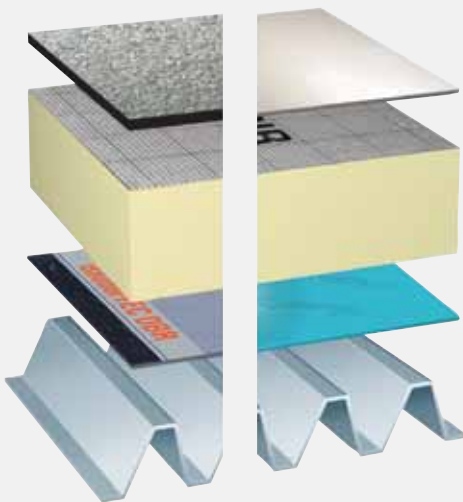


## MULTI LAYER WATERPROOFING

High performance reinforced SBS modified bituminous membrane systems with robust, long life expectancy that can accept levels of maintenance traffic and roof top equipment without additional protection. High thermal performance is achieved when incorporating PIR insulation.

 **Bauder Total Roof System**  
**Bauderflex**

- Long term durability
- Cost effective
- Robust guarantees

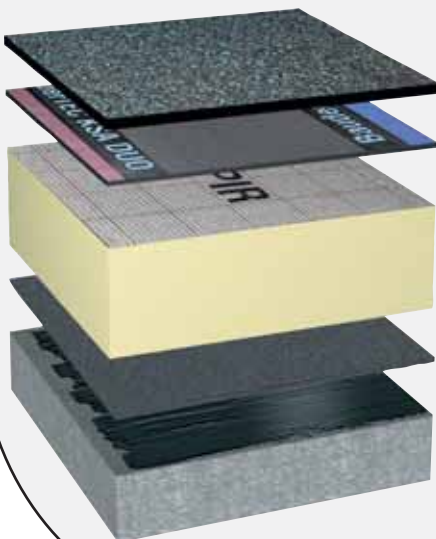


## SINGLE LAYER WATERPROOFING

Flexible systems with the option of selecting a single layer capping sheet comprising a bituminous or single ply synthetic membrane. All membranes are reinforced and fully compatible with our PIR insulation for upgrading thermal properties of a roof.

 **Pro F**  
**THERM Stripes**  
**Thermofol PVC**

- Quick installation
- Lower capital cost
- Resilient systems



## SAFETY DETERMINED WATERPROOFING

Self-adhesive bitumen membrane system with hot air activated lap welding that provides a safety conscious installation making it ideal for when buildings need to remain in use during works.


 **System Airtech**

- Life expectancy in excess of 30 years
- Safety determined installation
- Building remains in constant use

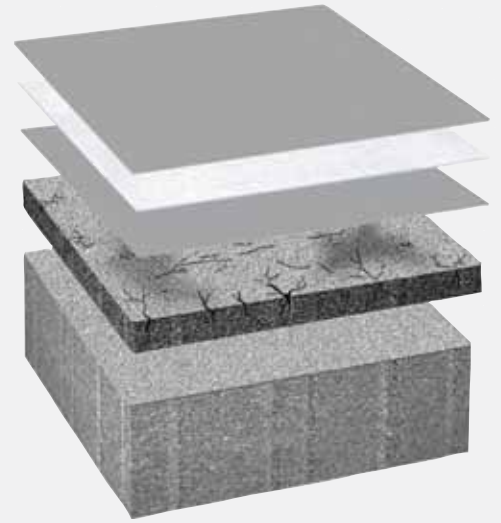


# COLD APPLIED LIQUID SYSTEMS

Using fast curing resin technology to deliver a homogenous roofing solution that is durable and easy to apply. This system lends itself to overlaying a current roof which is reaching the end of its serviceable life.


 **LiquiTEC Roof**  
**LiquiTEC Balcony and Walkway**

- Resistant to unforeseen movement
- Safety conscious
- Low maintenance service costs



# ROOFLIGHTS

Advice and guidance in the selection of suitable rooflights, AOVs and roof glazing. Rationalisation of current lighting scheme is often considered.


 **Modular Rooflights**  
**AOV's**  
**Roof Glazing**

- Fully compatible with all our waterproofing systems
- Certified fire and thermal performance
- Guaranteed for the same duration as the roof system



# OUTLETS AND TRIMS

Our outlets, trims and other accessory items are fully compatible with our waterproofing systems to ensure that all elements of the roof are consistent.

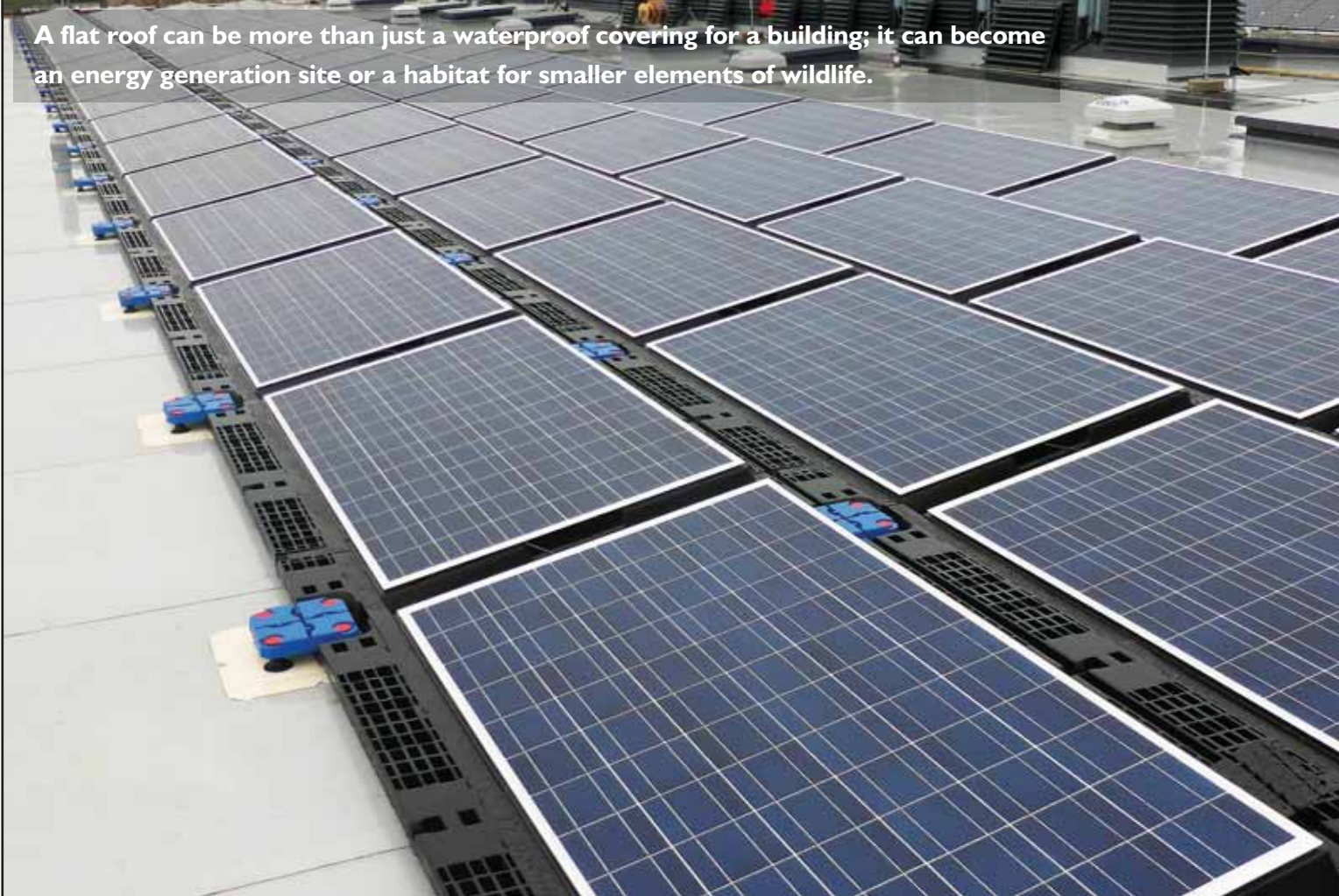
 **Insulated Rainwater Outlets**  
**GRP Trim**

- Integrated compatible products
- Single source guarantee
- Maintain aesthetics and integrity of the roof



# TRANSFORMING YOUR ROOF WITH FUNCTIONAL UPGRADES

A flat roof can be more than just a waterproof covering for a building; it can become an energy generation site or a habitat for smaller elements of wildlife.



## Renewable Energy

Retrofitting photovoltaic panels creates a solar roof that produces electricity for the building's use, and brings all the benefits of low maintenance renewable energy generation to your project.

The BauderSOLAR solution is the lightest crystalline panel system available, only weighing 13kg/m<sup>2</sup>, and is easily and quickly installed on the newly completed bitumen membrane or single ply roof. The solar array carries a single point guarantee that matches the duration of the waterproofing system.

What sets this system apart from others is the unique membrane-to-membrane welding installation method which means that the waterproofing won't be drilled or penetrated with fixings and is therefore a risk-free mounting system, safeguarding the integrity of the roof.

## Environmental Green Roofs

Enhancing the environmental benefits of a roof with a lightweight vegetation solution gives ecological and aesthetic value as well as providing a protective layer over the waterproofing to extend its life expectancy. A green roof also has excellent acoustic qualities, reducing disruptive noise entering the building.

The Bauder extensive green roof systems are designed to support low maintenance, self-sustaining plants and the various options for substrate and drainage/reservoir board depths give different levels of rainwater attenuation and water storage to support a wide range of plant species.





# BAUDER QUALITY GUARANTEED

## Installations

You can be assured that whatever refurbishment work is performed on your building's roof it will be of the absolute highest quality, as we only allow fully trained and certified Bauder approved contractors to install our roofing systems.

Once your roofing works commence, our team of site technicians will inspect the workmanship at key stages to ensure that the standards required to meet our guarantee are fulfilled, as well as providing you with easy to understand reports on how the works are progressing.

## Guarantees

Your roof refurbishment works will be backed up by what we can confidently claim to be the most comprehensive guarantee range in today's roofing industry, giving you total reassurance with regards to the future performance of your building's roof.

Unlike others in the market, the Bauder guarantee covers product, design and workmanship on the specified system. Our guarantee provides you with complete satisfaction and will be bespoke to your project and its requirements.

We issue our guarantees unreservedly as part of our service because we monitor quality every step of the way from manufacture to installation.

- Products supplied by Bauder (exclusions exist).
- Workmanship and installation of Bauder products by our Approved Contractors.
- Design, advice, formula and specification where Bauder products are concerned.
- Financial loss from building damage due to faulty manufacture or installation of Bauder products.
- Consequential damage through Bauder waterproofing system failure due to faulty manufacture or installation of Bauder products.





*“Bauder delivered a waterproofing solution that met our exact expectations. Beyond this they supplied us with expert technical support, helping us overcome all design challenges encountered. Our new roof system is of the absolute highest quality and backed up by a comprehensive guarantee.”*



Allington Court



Baynard House



Horton Court, Kensington

*“We were delighted with the technical assistance we received from Bauder, who provided a roofing solution that meet our specific waterproofing and green roof requirements. All design and logistical issues were dealt with efficiently, transforming our historical building in terms of appearance, performance and functionality.”*

## **BAUDER**

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