

### **Project Details**

This case study focuses on the successful implementation of Britmet's Structural Conversion System, BritFrame, and composite slate tile, Liteslate, installed by ART Contracts LTD in a residential flat roof renovation project near Llangollen. The existing roof had been plagued by ponding and water ingress, necessitating repeated repairs and replacements over 20 years. This case study explores the benefits, challenges, and outcomes of utilizing the Britframe and Liteslate, providing a long-lasting and aesthetically pleasing solution.

Residential flat roofs are susceptible to issues such as ponding water, water ingress and yearly inspections, which can lead to recurrent maintenance and repair requirements. **Product Used:** BritFrame and LiteSlate

Project Size: 1200 sqm

Sector: Residential

Main Contractor: ART Contracts Ltd

sales@britmet.co.uk | 01295 250998 | www.britmet.co.uk | #TheBritmethod

#### RAISING THE STANDARDS IN LIGHTWEIGHT ROOFING

This case study showcases the utilisation of Britmet Lightweight Roofing's Britframe Structural Conversion System and Liteslate to overcome these challenges and deliver a durable, low-maintenance roofing solution.

Britframe is a versatile and innovative solution designed to convert flat roofs into pitched roofs, providing improved water runoff and a new more aesthetically pleasing finish, The reduced risk of ponding water and improved thermal performance. This can be covered using a variety of different roofing materials, and Liteslate, a lightweight synthetic slate roofing slate, was specified due to its excellent weather resistance, durability, and aesthetically appealing finish. Llangollen is part of the UNESCO World Heritage Site along eleven miles of canal from Gledrid to the Horseshoe Falls and required a durable yet authentic roofing solution.

The project involved the renovation of a residential flat roof that had undergone multiple repairs and replacements over 20 years due to ponding and water ingress, and constant maintenance. ART Contracts LTD was tasked with implementing and installing LiteSlate to resolve the recurring issues.

### **Benefits and Challenges**

The Britframe System converted the existing flat roof into a pitched roof, enabling efficient water runoff and preventing ponding, thereby eliminating the risk of water ingress, and reducing the need for yearly inspections and constant maintenance to site, Britmet's Liteslate offered excellent weather resistance and durability, reducing the need for frequent repairs and replacements while offering an attractive finish replicating the appearance of natural slate. Overall offering the advantages of lightweight construction and ease of installation.



Conducting a thorough structural assessment of the existing flat roof to ensure compatibility and feasibility of the Britframe required careful analysis and engineering expertise. Coordinating the installation of the Britframe and Liteslate with existing roof features, such as skylights or ventilation systems, posed challenges in achieving a seamless integration.

sales@britmet.co.uk | 01295 250998 | www.britmet.co.uk | #TheBritmethod

# RAISING THE STANDARDS IN LIGHTWEIGHT ROOFING

### **Project Outcomes**

implementation of Britframe The has effectively addressed the issue of ponding, providing efficient water runoff and preventing water ingress into the residential property. The utilisation of Liteslate offered exceptional durability, weather resistance, and longevity, significantly reducing the need for future repairs and replacements, and thereby providing long-term cost savings. Liteslate also improved the overall aesthetic appeal of the residential property, replicating the natural beauty of slate roofing while offering the advantages of lightweight construction.

### Conclusion

The integration of the Britmet Lightweight Britframe System and Liteslate successfully addressed the challenges the building was facing. The project resulted in improved water enhanced runoff. durability, a more aesthetically pleasing roofing solution, along with a new 60 plus year life expectancy. This case study emphasizes the importance of selecting innovative and reliable roofing systems to overcome recurring roofing issues deliver long-lasting visually and and appealing outcomes.





sales@britmet.co.uk | 01295 250998 | www.britmet.co.uk | #TheBritmethod

# RAISING THE STANDARDS IN LIGHTWEIGHT ROOFING