



## **Webinar recap: STBA & IHBC – Natural Materials in Retrofit: Building Standards, Regulations and Compliance for Traditional Buildings**

On 7th April 2025, the Sustainable Traditional Buildings Alliance (STBA) and the Institute of Historic Building Conservation (IHBC) hosted a joint webinar titled Natural Materials in Retrofit, spotlighting three critical perspectives on integrating natural materials into retrofit practice for traditional buildings. The session drew a broad audience of professionals seeking guidance on navigating regulatory compliance, technical integrity, and material innovation.

### **Professor John Edwards – Natural Materials in Retrofit – Standards, Regulations and Compliance**

Professor Edwards opened the session with a forensic examination of retrofit standards and guidance, including PAS 2035 and BS 7913. Emphasising moisture as the “biggest retrofit risk,” he warned of common pitfalls:

- Vapour impermeable materials – such as foamed plastics – can degrade and trap moisture, leading to long term performance failure.
- Even certified systems may be unsuitable for traditional buildings if they prevent evaporation and drying.
- PAS 2035 requires a risk-based approach, and Professor Edwards cautioned that not all guidance is robust – urging practitioners to seek out independent, qualified assessors and prioritise training grounded in building pathology.

His presentation made clear that fabric improvements must account for heritage significance, moisture dynamics, and actual performance – not just regulatory tick boxes.

<https://stbauk.org/wp-content/uploads/2025/05/pdf-Retrofit-copyright-Edwards-Hart-Ltd-7th-April-2025.pdf>

### **Tony Gwynne – Building Regulations and Traditional Contexts**

Tony Gwynne provided a comprehensive overview of how Building Regulations intersect with retrofit in traditional and listed buildings. As a Registered Class 3 Specialist Building Inspector, his message was both technical and practical:

- The Building Safety Act 2022 introduces a new era of regulatory accountability, with duty holders and inspectors now formally registered and monitored.
- For historic buildings, Approved Documents allow discretion – energy efficiency measures must not compromise character or accelerate fabric decay.
- Vapour-permeable, breathable materials remain the best fit for solid wall construction – but must be properly assessed and certified.

Tony reminded attendees that while new materials can be introduced, they must demonstrate independent third-party testing and suitability for use in traditional contexts.

<https://stbauk.org/wp-content/uploads/2025/05/Tony-Gwynne-IHBC.STBA-RETROFIT-WEBINAR-APRIL-25.pdf>

### **Ruth Marie Mackrodt – From Innovation to Market Viability**

Ruth Marie Mackrodt, founder of Wool Insulation Wales Ltd, shared her company's journey from agricultural by-product to certified retrofit material. Her contribution underscored the wider challenge of bringing biobased innovation into the mainstream:

- UK farmers lose over £30 million annually on wool shearing – yet wool's thermal and acoustic performance makes it ideal for insulation.
- Wool's vapour-permeable and hygroscopic properties allow it to regulate indoor humidity, support healthier internal environments, and reduce the risk of condensation.
- Certification, warranty, and insurance hurdles still block many natural products from widespread use – a systemic issue needing collective industry effort. Ruth's story was one of bridging the gap between circular economy ambition and the technical scrutiny of the construction sector.

<https://stbauk.org/wp-content/uploads/2025/05/STBA-presentation-April-25-RMM.pdf>

### **Conclusion**

The IHBC/STBA webinar reaffirmed the necessity of evidence led, risk aware retrofit practice. Natural materials have a clear role to play when deployed with a sound understanding of building physics, regulatory context, and the realities of implementation. This session made the case not just for better products, but for better-informed practitioners.