

Understanding the Environmental Performance of Historic Buildings for Conservation

The environmental conditions in an historic building: humidity, water, heat and light – are among the most significant influences on the conservation of the building fabric and the artefacts within it. Poor environmental conditions can cause masonry and decorative surfaces to crumble, timber to split, fabrics to deteriorate and can lead to mould damage across all materials. Poor environmental conditions also make a building feel uncomfortable and unwelcoming for the visitors and users alike.

Improving the environmental conditions in an historic building can be a key step, not only for its long term conservation but also in the way in which the building can be used, providing it with a sustainable future. Controlling the building environment is the basis of many decarbonisation projects, by improving building performance and reducing its carbon footprint. However, the risks involved in issues such as heating, insulation and ventilation are often underestimated, and the same measures that are intended to improve the building can also result in significant and costly damage.

Built around the recently published Historic England guidance – Understanding the Environmental Performance of Historic Buildings for Conservation, the aim of the day is to review how we understand the building environment, how to identify risks, and to design interventions to provide long term improvements.

The day will be split into two parts. The morning will comprise a combination of technical lectures and reviewing survey equipment, while in the afternoon, there will be a workshop involving practical assessment on site. The aim is to equip attendees with an understanding of the basic issues involved in environmental performance assessment conservation, the elements that can be safely undertaken by general building professionals, and when and how to commission specialist investigations.

Tobit Curteis

Tobit Curteis is the Managing Partner at Tobit Curteis Associates LLP, specialising in the investigation and control of the environment for the conservation of historic buildings, archives and collections, as well as for sustainable development and decarbonisation. He is an accredited member of the Institute of Conservation (ICON ARC), a consultant and research collaborator for Historic England, an Advisor on Wall Paintings for the National Trust, a Fellow of the Society of Antiquaries (FSA), a Fellow of the International Institute for Conservation (FIIC) and sits on the Historic England Conservation Committee (HECC). Tobit works in the UK and internationally, on projects ranging from medieval churches and cathedrals to archaeological sites and 20th century architecture. He regularly lectures and publishes on environmental and conservation issues.

Recent projects include research and development for the conservation and environmental control at St Paul's Cathedral, Westminster Abbey, Blenheim Palace, Glasgow School of Art, The Palace of Westminster, Lindsfarne Castle, Buckingham Palace, York Minster, Durham Cathedral, Canterbury Cathedral, King's College, Cambridge, St Patrick's Cathedral, Dublin, and Cormac's Chapel, Tipperary, in Ireland, and archaeological sites in Malta, Cyprus, Saudi Arabia and Egypt.