

BGA and EGGS Joint Meeting

Wednesday 11th February 2015 at 6pm

Institution of Civil Engineers, One Great George Street,
Westminster, London SW1P 3AA

'Rammed earth: a beautiful and sustainable construction material?'

Prof Peter Walker

University of Bath

Summary:

Along with many other ancient and traditional forms of construction rammed earth has attracted a lot of interest in recent years from architects and engineers seeking alternative and lower carbon building solutions to replace conventional materials. In its simplest form rammed earth, which is found throughout the World, is comprised of locally sourced sub-soil compacted in successive layers between temporary formwork, much like in-situ concrete, to form solid walls. Modern applications often seek to maximise the aesthetic qualities of rammed earth construction as well as its credentials as a lower impact form of construction. Rammed earth's hygrothermal - moisture buffering - qualities offers beneficial health and well-being for building occupants. However, to meet the various requirements of modern construction has required adaptations from traditional practice, with recent innovations and research focusing on providing enhanced thermal insulation, durability, stabilisation and increasing productivity. In his presentation Pete will outline the current development of rammed earth in recent years drawing on experience of various case study projects and recent research work from around the world.

Biography:

Pete Walker is currently Head of the Department of Architecture & Civil Engineering at the University of Bath. He is also BRE Trust Chair of Innovative Construction Materials and Director of the BRE Centre for Innovative Construction at Bath. A chartered Civil Engineer Pete's personal research interests covers modern applications of natural construction materials, including earthen construction and bio-based materials. A former Director of Earth Building UK, Pete has co-written 'Rammed Earth: design and construction guidelines' and various other works on rammed earth and other natural construction materials and techniques.



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