

Thursday 8 November 2007 at 6pm
International HQ (Refreshments from 5.30pm)

Paul Jaquin
MEng

Study of historic rammed earth structures in Spain and India

Paul visited eight locations in northern Spain and three in northern India where he gained a greater understanding of historic rammed earth. Methods of construction, modes of failure and repair techniques were investigated. Use of rammed earth as a modern building material is increasing, and the study of historic structures can inform development of the technique today. A number of examples which are considered to be of interest to practising engineers are presented. The examples deal with the presence of water in earthen structures, cracking and methods of crack repair, the facing of rammed earth with a less permeable material, and medieval seismic protection measures.

Andrea Charlson
MEng

Recycling and Reuse of Waste with the Construction Industry

Various methods of recycling currently undertaken in the construction and demolition industries are looked at, and concrete is singled out as being a large proportion of construction and demolition waste with few recycling options. It is suggested that a new approach to concrete recycling is required. A recent scheme in Berlin, in which precast concrete panels were reclaimed from a disused building and reused in the construction of a new house, is then introduced. To test the viability of this scheme it was compared to a masonry house as typically built in the UK, in terms of both material costs and CO₂ generated. The study revealed that the Berlin scheme was 59% cheaper than the UK construction method and produced 68% less carbon dioxide.



The Institution of Structural Engineers • International HQ, 11 Upper Belgrave Street, London SW1X 8BH, UK
T +44(0)20 7235 4535 • F +44(0)20 7201 9109 • E eveningmeetings@istructe.org • W istructe.org

The evening meeting is free of charge. There is also a dinner (at least 1 week prior booking required) at the Institution after the meeting. The cost of the dinner is £34 +VAT (£39.95), including three courses and drinks. The dinner provides a good opportunity to meet clients, construction industry colleagues, and people in government, as well as the authors of the paper being presented. Please email your dinner reservation, with your full contact details and the names of any guests, to Sharon Stephenson, Events Manager at events@istructe.org. Late comers will only be admitted to the overflow facility, not the main lecture theatre.