



## Eden Local Agenda 21 Cumbria Green Build Fortnight 2007

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### Cumbria Green Build Fortnight 2007

#### Clay & Lime Tour, North Cumbria



Eden Architecture  
Environmental Design

Allerdale Borough Council Conservation Officer: Helen Brownlie  
Carlisle City Council Conservation Officer: Peter Messenger  
Eden Architecture, Mike Archer (see separate entry under Mike Archer Eden Architecture)

**Venues:** Tullie House Carlisle & Burgh by Sands

#### **Purpose of the visit during Green Build Fortnight:**

A seminar, held at Tullie House, Carlisle consisted of a talk by Peter Messenger, Carlisle City Council's Conservation Officer. He explained the historic use of clay as a building material, its structural qualities, maintenance priorities and the importance of lime as a complementary material and the distribution of many existing clay properties along the Cumbrian Solway plain.

Mike Archer of Eden Architecture Environmental Design, outlined the work and research he has been doing on clay as a contemporary building material, showing how sustainable it can be as a building material. He showed the designs for a clay house that he has obtained planning permission for, at Penruddock, nr Penrith. Current UK Building Regulations are not well equipped to deal with clay, but modern clay buildings can achieve building regulations and this is an area for further research and training.

The presentations demonstrated that clay is a very durable and strong building material with high thermal mass as well as generally having very low embodied energy as the material is normally available locally and does not require heating or mechanical application in its construction.

The durability of earth buildings was particularly highlighted in the final presentation by Paul Jaquin who is completing a Phd in the conservation of historic rammed earth structures at Durham University, who showed examples of clay buildings that have stood for many centuries in other parts of the world.

The presentations were followed by a visit to a number of historic clay properties in Burgh by Sands, nr Carlisle, including a house which was being repaired and renovated.



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### **Principal Sustainability Product / Services:**

Clay with sand and a binder (such as straw) is a highly sustainable, strong and durable, but largely forgotten building material in the UK.

Eden Architecture is an Environmental Architectural Design Agency which specialises in designing sustainable houses. For further information see separate entry for Mike Archer, Eden Architecture Environmental Design.

### **Contact Details:**

General info: Helen Brownlie, Allerdale Borough Council 01900 702713,  
Helen.Brownlie@allerdale.gov.uk

Historic Clay buildings of North Cumbria: Peter Messenger, Carlisle City Council  
PeterM@carlisle.gov.uk

Contemporary use of clay and its potential & qualities, Mike Archer, Eden Architecture  
Environmental Design. 01931 715425 [www.edenarchitecture.co.uk](http://www.edenarchitecture.co.uk)

### **Other information:**

If you would like assistance with the design, maintenance, restoration or extension of a clay building, contact Mike Archer (see separate entry for Mike Archer)

Mike Archer is interested in forming a Cumbrian Earth Building Association to be formulated on a similar basis to DEBA (the Devon Earth Building Association) consisting of professionals such as designers and structural engineers, local authority officers, builders and owners of local earth buildings (Clay Dabblers). The purpose is to bring together and spread expertise for the benefit of existing and new clay buildings.