



Eden Local Agenda 21 Cumbria Green Build Fortnight 2007

© Eden Local Agenda 21. All rights reserved.

Cockermouth School Eco Centre

Location

Cockermouth School
Castlegate Drive
Cockermouth
CA13 9HF



Presentation.

During Cumbria Green Build Fortnight 2007, the Eco Centre architect Rod Hughes gave a Podcast presentation of the construction sequence of the building, explaining the materials and design choices. This was combined with a tour of the building which is itself designed to demonstrate a range of different sustainable building strategies and materials.

Principal Sustainability features and an explanation of their qualities:

This is a new build environmental building funded through the DfES Teaching Environments of the Future Programme. It was designed in close collaboration with staff, students and the local community and reflects the priorities identified by these groups as well as the functional needs of the school. Designed around a large teaching space coping with 30-250 students, the building provides a variety of spaces, structure, materials and systems to demonstrate practical sustainable construction. Everything in the building has some environmental virtue whether recycled brickwork, sustainable timber, energy efficient glazing or the recycled carpet.

The building has a 6Kw Wind turbine, 2.5Kw Photovoltaic array. 25Kw ground source heat pump and mechanically assisted passive ventilation.

Recycled rainwater is used for toilets, and intelligent low energy luminaires in all rooms make the maximum use of daylight to minimise energy demand.

A third of the building is a heavyweight structure made from recycled brick, whilst the remaining two thirds is constructed from an engineered timber framing system containing recycled paper insulation. This is clad externally in a variety of materials including Cumbrian oak shingles, high performance timber board, sandstone, and recycled copper water tank. Externally a new pond acts as a learning resource as well as tempering incoming air and acting as a rainwater store.

Cockermouth School Eco Centre: Tel 01900 325940

Eco Centre availability: Available for hire dependant upon school activities.

Architect Rod Hughes of ad.hoc associates

Structural Engineer White Young Green, Cockermouth

M+E Engineer White Young Green, Newcastle

Quantity Surveyor Johnson, Whitehaven

Contractor Roland Hill Parsonby Ltd. *Winner of Northern Region LABC Awards for Construction Excellence for this project*