

Dormont Park, Dumfries and Galloway

MEARU

Building Performance Evaluation

This project was funded via the Technology Strategy Board Building Performance Evaluation funding stream in conjunction with The Dormont Estate. The Estate completed 8no Passivhaus homes for rent in 2011 and the project remains the largest Passivhaus development in Scotland to date.

The homes have identical design, orientation, and climatic conditions, so one aspect of the study was to study the effects of differing occupancies. Other areas of interest included the use of active renewables, the success of the Passivhaus approach, and the off-site construction methodology chosen.

With space and water heating provided largely by log boiler stoves and solar thermal systems the research has looked into how close (on a rural site, off the mains gas grid) this development achieves zero carbon both in theory and in practice, whilst achieving good comfort conditions for occupants.

The study has three strands of investigation; environmental monitoring to assess comfort conditions internally, physical testing of the fabric and services (thermography, air permeability, MVHR, and insitu U-value measurement), and occupant engagement and feedback via a number of tactics including detailed diaries, the provision of 'Quickstart Guides' and extensive BUS surveys.

This Building Performance Evaluation project is one of many representing part of MEARU's growing body of research and expertise in low energy housing sector.

Project Title: Dormont Park, Dumfries and Galloway. Building Performance Evaluation

Client/ Funding body: Technology Strategy Board

Date : June 2012 -Oct 2014

Project value: £63,049

Team: MEARU- Prof Tim Sharpe, Chris Morgan, Donald Shearer

Project Partner- Dormont Estate

Links

Dormont Estate
<http://www.dormontestate.com>