

SUSTAINABILITY WINNER

The Larch House, Ebbw Vale

PROJECT TEAM

Client:
United Welsh Housing Association

Architects:
Bere Architects

Funding:
Welsh Assembly Government

Consultants / Passivhaus Certifiers:
BRE (Wales)

Quantity Surveyor:
E – Griffin Consulting

Services Consultant:

Alan Clarke

Heat Recovery Ventilation Design:

The Green Building Store

Substructure Engineer:

Bob Johnson Structural Engineers

Main Contractor:

Pendragon Design & Build

Passivhaus Windows:

Double Good Windows

Sponsored by:



THE LARCH HOUSE IS THE UK'S FIRST ZERO CARBON (CODE 6), LOW COST, CERTIFIED PASSIVHAUS. IT HAS BEEN BUILT AS A PROTOTYPE FOR SOCIAL HOUSING ON THE BROWNFIELD SITE OF THE FORMER STEELWORKS AT EBBW VALE, A DEPRIVED AREA WITHIN THE SOUTH WALES VALLEYS.

The Larch House is a one-off building incorporating and integrating many design features for the very first time in the UK.

The three bedroom house has been built 1000ft above sea level in an area with its own climatic challenges. In spite of this, most energy needs are met from solar panels, and the heat produced by occupants and appliances. The key to this has been an obsessive attention to air tightness and a heat recovery and ventilation system. Overall, the Larch House generates, through its photo-voltaic cells, as much energy from the sun in summer months as it uses for the whole year.

The Larch House incorporated sustainable features and materials both in the finished product and in the building process such as untreated softwood, wood fibre insulation, Welsh grown thermally modified larch cladding, ecological paints and low energy LED lighting.

Using cutting edge design, technology and techniques the timber frame house is super-efficient, low running cost house which should prove a pleasure to live in: large south facing

triple glazed windows give it an airy feel whilst the highly insulated, closed-panel timber framed, draught free construction ensures energy and heat is used as efficiently as possible.

The Larch House, in many ways, redefines the concept of the Welsh home for the future whilst keeping some sense of the past through the use of natural materials. Clearly, it is a small building to win this category but with the family and home being at the heart of Welsh society, is a worthy recipient.

The Larch House has been performing a significant educational role for building professionals and school children alike and its impact is already starting to change the way people think about the design of future houses as well as the way people will live in the future. The next exciting stage is to see how the house performs when occupied by a real family and significant monitoring of this phase is planned. After that it will become a full time home as part of a wider Housing Association development of Code 6 level housing. United Welsh Housing Association is to be congratulated on this visionary project.



Sustainability Award winner 2011,
The Larch House, Ebbw Vale, Blaenau Gwent

