

# Stirley Community Farm Yorkshire Wildlife Trust



## Cre8 Barn

### From derelict barn to eco exemplar education centre

**Yorkshire Wildlife Trust's** Stirley Community Farm has undertaken a pioneering low energy refurbishment to transform a derelict farm building into a flexible, all-purpose educational centre and space. The **Cre8 Barn** (funded by the Veolia Environmental Trust) forms part of the Trust's wider vision to inspire people about their local environment and educate people about Yorkshire's rich wildlife and how to help conserve it – closely linked to a more sustainable way of life.

The project is certified as meeting the exacting **EnerPHit standard** (a variation of the low energy **Passivhaus\*** standard, specifically designed for retrofits). EnerPHit requires high levels of insulation and airtightness and will help the building achieve energy savings of 75-90% compared to the UK average and will require minimal heating.

A super-insulated timber frame structure was built inside the existing stone building, preserving the outward appearance of the barn, whilst equipping it for 21st century levels of energy

efficiency. The timber frame structure has the additional advantage of supporting and shoring up the original stone building.

The building work was undertaken by Huddersfield Passivhaus specialists **Green Building Store** (and its construction division Green Building Company), builders of the award-winning **Denby Dale Passivhaus**, the UK's first Passivhaus built using traditional British cavity wall construction.

The Cre8 barn has been refurbished to create an education centre to provide a warm welcome to the many volunteers and visitors to the farm. It is a space in which the local community can come to learn about healthy eating, how to grow their own food and how best to prepare it, as well as discover more about local conservation issues and projects addressing them. With a communal kitchen, demonstration area and meeting space the barn accommodates both formal and informal education sessions, from school kids to trainees working towards accredited qualifications.

\*see overleaf

For more information, and for free resources on the project, go to:  
[www.greenbuildingstore.co.uk/enerphit](http://www.greenbuildingstore.co.uk/enerphit)



[www.greenbuildingstore.co.uk](http://www.greenbuildingstore.co.uk)  
Tel 01484 461705

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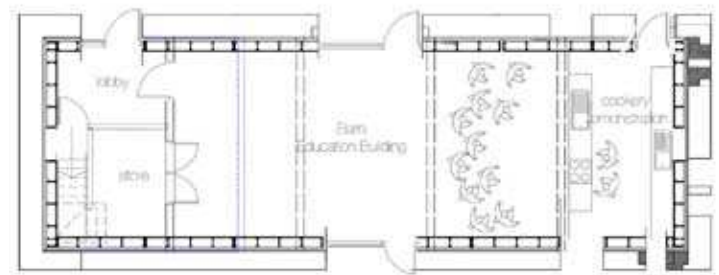
Top left: Barn prior to retrofit

Bottom left: Improving the structural stability of the walls

Below: Gardening Club, Stirley Community Farm



photo: Richard Aspinall



## What is Passivhaus?

Developed in Germany in the 1990s, **Passivhaus** is a quality assured standard and methodology for low energy building, which can help create buildings which use around **90% less energy** than standard UK buildings. Based on well researched and proven building physics, Passivhaus is based on the principle that reducing heat loss to a minimum is the most robust – and cost-effective – way of achieving a low carbon building.

## Key Passivhaus features

- Super insulation
- Stringent levels of airtightness
- Minimal thermal bridging
- Optimisation of passive solar gain
- Mechanical ventilation with heat recovery



[www.ywt.org.uk](http://www.ywt.org.uk)

Green Building Company



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