

CASE STUDY: Stad yr Ysgol, Llangoed, Anglesey

Name of Project: Stad yr Ysgol

Date Completed: June 2016

Project Cost: £1,378,540

Building Type: General Needs

Location: Llangoed. Anglesey

Partners: Isle of Anglesey Council

Main Contractor: Williams Homes (Bala) Ltd

Architect: WM Design Partnership – Menai Bridge

Environmental Performance: Sustainable Homes Level 3+



Development Overview

Stad yr Ysgol is located within the south-western part of the village of Llangoed. The village of Llangoed itself is positioned 3 miles north of Beaumaris and 7 miles from Menai Bridge and main highway and public transport connections.

Before development started it was used as agricultural land and owned by Isle of Anglesey Council. The housing development is adjacent to an existing Local Authority housing estate and is well located being close to the school and village facilities.

10 new homes have been created; 8 x five person three bed houses and 2 x four person two bed houses. The mix of units has been decided through consultation with Isle of Anglesey Council, local elected members, and local residents.

All of the homes were built to Code for Sustainable Homes Level 3+.

As part of the development a new estate road and access footpath were constructed. The scheme also includes alterations to the existing vehicular access and a new internal access road to adoptable standards.

The main construction contract for the works was Williams Homes (Bala) Ltd and the architect was



Sustainability

The homes have been constructed using a timber frame system with insulated boards covered in waterproof render. The insulation boards are made from over 95% waste softwood and under 5% inert water-proofing additives. They are a genuinely sustainable non-toxic building material. To produce the boards, waste wood fibres are pulped and mixed with water. The pulp is heated to activate the natural lignin they contain in order to glue the fibres together. The pulp is then pressed into boards, dried, and cut to size.

The advanced manufacturing process uses the inherent properties of wood fibres to produce

boards with many excellent technical qualities for thermal and acoustic insulation, thermal storage capacity, vapour permeability and moisture control.

Woodfibre boards reduce the effect of thermal bridging and the interlocking board design easily achieves good wind tightness, so increasing thermal performance. Energy use for heating is significantly reduced leading to lower CO2 emissions and running costs for the residents. Additionally, the relatively high thermal mass of the boards helps to keep the buildings cooler and more comfortable in summer.

