



CASE STUDY: HOUSING  
CODE 4 BUNGALOWS





---

## Sustainability Strategy

The south facing front elevation is prominently glazed, maximising light into the open plan kitchen / living room and allowing passive solar gain in the winter. A projecting roof canopy blocks out the high angle summer sun and prevents excessive overheating, whilst allowing the low angle winter sun to heat up the building. Roof lights and sun-pipes ensure that all areas of the building have good levels of natural light.

The roof profile allows PV panels to be mounted at an angle of optimum efficiency, generating electricity for use within the building and to take advantage of the Feed In Tariff. An air source heat pump provides the heating and hot water demand for each bungalow.

A low-pitched sedum roof improves biodiversity and helps the building blend into the surrounding landscape whilst reducing the excess rainwater run-off. Low flow sanitary fittings and a rainwater harvesting system ensures water is efficiently used.

## Sustainability Overview

- Large glazed panels to front elevation allows passive solar gain, with roof overhang preventing summer overheating
  - Timber Frame Construction
  - Air Source Heat Pump
  - Photovoltaic Panels
  - Mechanical Ventilation with Heat Recovery
  - Sedum roof and native species planting to improve biodiversity
  - Narrow plan form allowing natural cross ventilation and rooflights enabling passive stack ventilation
  - Rainwater Harvesting
-

---

# CASE STUDY: HOUSING

## CODE 4 BUNGALOWS

---

**Name of Building**

Code 4 Bungalows

**Date Completed**

March 2011

**Project Cost**

£200,000

**Building Type**

Housing

**Location**

Shobdon, Herefordshire

**Client**

Marches Housing Association

**Main Contractor**

C.J. Bayliss Ltd

**Environmental Performance**

Code for Sustainable Homes Level 4

**Building Overview**

The housing development at Bar Meadow, Shobdon consists of two wheelchair accessible bungalows for Marches Housing Association. The scheme aims to provide accessible, sustainable and affordable housing in a rural location at the edge of Shobdon Village in Herefordshire.

The bungalows have been designed to sit comfortably with the existing neighbouring bungalows, incorporating the prominent materials of brick, glass and roof tiles into a contemporary, sustainable design.

The concept of the design is to create spacious yet economical and sustainable housing that will provide the residents with an exciting living space. From three elevations the building appears to be a traditional brick bungalow, blending in with the adjacent properties. There are no openings in the east and west elevations which negates any overlooking issues from a public footpath on one side of the bungalows and a public car park on the other. The front elevation to the south gives the building a more contemporary feel, opening up to benefit from passive solar gain and allowing views out over the open rolling Herefordshire fields.

For each bungalow, covered parking provides sheltered access to a top-lit entrance hall from which the two bedrooms, shower room, storage and open plan lounge, kitchen and dining room is accessed. Patios to the front and rear allow outdoor seating areas, with fully accessible front and rear gardens that are planted with native species to complement the surrounding landscape.

