



## Scale of development

Varies

## Type of development

Private & Social Housing Developments

## Sustainability features

-  Design
-  Energy
-  Water Conservation
-  Health & Wellbeing
-  Materials
-  Maintenance
-  Community

## Features

- ❖ Adaptable design with range of styles
- ❖ Lower build costs than equivalent eco homes
- ❖ Factory built for high air tightness

## Introduction

Cloud Nine are designers of sustainable houses to meet level 4 on the Code for Sustainable Homes. They supply housing solutions across the UK by having an “off-the-shelf” range of designs to suit various projects. By providing a full service they hope to reduce the costs associated with traditional builds.

## Construction and Materials

Cloud Nine build houses from renewable and responsibly sourced timber. The design can be made completely concrete free, reducing the reliance on high embodied energy materials in construction.

Since the homes are factory-made, high levels of air-tightness are achieved through effective and precise manufacture. The claimed air-tightness value of a Cloud Nine build is 1.9. The insulation levels give a U value for walls of 0.15; the required space heating is 3.0kW to maintain a 20 degree temperature at -5 external.

## Clever Design Selection

Since the houses themselves come as “Ikea-like” packages with various add-ons and adaptability, the optimum design can be tailored to a specific site. This means the correct energy generating equipment can be selected and allow the designs to reach CfSH level 5 where the client requires this.

House basic design incorporates air source heat pumps, heat recovery ventilation systems and wood burning stoves.

## Affordability

Through factory building and repeatability in design, the price of the Cloud Nine house designs can be kept down, making them more affordable than many new builds with sustainable features. The expertise of the company also allows design developments as more houses are constructed; learning from any past problems improves the performance of their houses.