

DTE case study

CUERDEN VALLEY PARK

Project

Cuerden Valley Park

Location

Preston, Lancashire

Client

Cuerden Valley Park Trust

Product

31 Trussed Rafters

Donaldson Timber Engineering was recently involved in the construction of a new visitor centre at Cuerden Valley Park in Preston, Lancashire.

The community building, located within the beautiful surroundings of the country park, is an exemplar of sustainable building and required its suppliers to propose the most green and eco-friendly options available. As a project close to his heart, Mick Hart, design technician at DTE's Warrington branch, offered some of his time to design the roof trusses for the building and DTE supplied the 31 trussed rafters.

This unique project included an unusual sloped roof, which called for Mick to design inverted trusses to form an ornate ceiling detail, using the smallest amount of timber possible to make it sustainable. Sloping ceilings are more commonly used as a feature rather than a practical design, so the dimensions of the trusses had to be exact to ensure the ceiling looked seamless.

The rest of the building utilises straw-bale construction for the walls, with lime render and clay plaster; while car tyres were used for the foundation rather than concrete footings, as an eco-friendly alternative.

Commenting on the project, Mick Hart said: "This was a really interesting project for me because the contemporary design of the building is so unusual. It has soft, rolling lines rather than hard edges so it fits seamlessly into the forest and rolling hills of the park, and the timber and glass features create a light and airy appearance. The inverted trusses we designed were particularly unique. In 20 years I've only designed six or seven, but we're really pleased with how it has turned out.

"Because of its status as a country park, it was so important for the building project to be environmentally friendly. The construction industry is largely moving towards sustainable building, but this was one of the 'greenest' projects I've worked on. It was a fun challenge to design this way and I can't wait to see the finished product on one of my weekend walks!"

More information about the park and the new visitor centre can be found at www.cuerdenvalleypark.org.uk.

