

ROWAN FIELDS - WESTON-SUPER-MARE

Roof design solutions bringing build costs down for Persimmon Homes

Project: Rowan Fields, Weston Super Mare

Company: Pasquill

Sector: Residential

Technology: Roofing Systems

Overview:

Pasquill's roof design solutions are bringing build costs down for Persimmon Homes at one of the developer's sites at Weston-Super-Mare. 'Rowan Fields' is the location of a scheme of new-build apartments, which forms a phase of a range of property styles at the site. The development consists of a three storey building incorporating complex multiple roofs for which Pasquill has manufactured and supplied roof trusses, spandrel panels and ancillary timbers.

Project Type/Application:

The building's roof design features a 'gull wing' area sitting over a series of balconies. Supporting steelwork had been part of the original design elevations but Pasquill's technical design team came up with a solution that designed out the steelwork, thereby creating a self-supporting roof structure, and lowering the overall roof cost. Further time and money was saved for the developer by using top chord support details in the gull wing area in order to remove the need for expensive angled metalwork.

In total, Pasquill manufactured and supplied 260 trusses for the project, including 47 different configurations. At the gull wing area, which covers approximately 14m x 8m, almost every one of the roof trusses used is unique. Much of the rest of the roof's complex configuration required specialist roof truss manufacturing capabilities. For example, at each end of the scheme asymmetric 'north light' trusses (trusses featuring a vertical face) were needed to accommodate a roof section where its ridge extends out from the rest of the building.

In addition to roof trusses, Pasquill also manufactured and supplied 69 spandrel panels in 47 configurations for the development. Near the middle section of the roof Pasquill's spandrel panels were used to provide support and a firebreak for a stairwell. At the balcony area of the building the spandrel panels were particularly large. In fact one measured 4.5m in height, and therefore had to be supplied in two parts. The building's entire 720m² roof, including spandrel panels, was fully erected in just 5 days from delivery.

Outcome/Results/Success Factor:

Commenting on the project, Persimmon Homes' Materials Buyer, David Cummings, said: "Pasquill's team has helped to keep build costs down for the roof of this development of 15 two-bedroom apartments. With the building's roof moving through three directional shifts along its length, and presenting several challenges, it was invaluable to have Pasquill's designers take our original elevations and come up with solutions for us. It was particularly helpful to be able to see the company's suggested designs in the 3D easy to view configuration that the company's new, cutting edge software facilitates."



