

Nomination for NEW DWELLING / CONVERSION Building Awards 2008



Barn Conversion

Address : **Orchard Farm,
Boverton,
Vale of Glamorgan.**

Applicant / Contractor : **Mr & Mrs Ball**

Agent : **Mr Richard Crockett, Artisan, Barry.**



Orchard Barn is reputed to be from 300 to 350 years old. Originally the building had a thatched roof, but this was replaced with Welsh slates during a Victorian makeover about a century ago. At this time, the roof line was raised in order to increase the pitch; and the first floor beams raised accordingly, which gave greater height at ground floor level. The original exterior walls are two feet thick, constructed with local limestone in traditional double skin fashion with random rubble infill.

Although the barn had probably been built as a granary/grainstore, it had been used as a milking cowshed from over a hundred years ago to within living memory. In more recent times, it had been used as a horse/pony stable, and also for storage.

After Planning Permission and Building Regulation Approval was obtained, the restoration was commenced in 2005, and took two years to complete. Firstly the interior was gutted, and the roof renewed. The majority of the slates were found to be in good condition and were re-used. The remainder were replaced with matching reclaimed Welsh slates. The interior walls were replastered with traditional lime plaster - two scratch coats, one coat of lime finish,

and finished with two coats of a clay based paint. The exterior walls were made good, and repointed where necessary with a matching lime mortar, coated with a lime slurry, and treated to six coats of limewash with a natural pigment colour added (Ynys Mon).

The concrete cowshed floor was removed, and a ground floor slab introduced based on 150mm of LECA, 150mm of limecrete, topped with 60mm of limescreed. Underfloor heating pipes were set in the limescreed, the energy source being geothermal heat from beneath the garden at the rear. The flooring was finally finished with large travertine tiles in a traditional pattern.

All ceiling areas between the original beams, and all interior partitions, were boarded with Heraklith wood fibre boards infilled with lambswool insulation. These boards were skimmed with lime plaster, and finished with clay based paints. The whole building, being constructed and finished within lime technology, is now breathable; which was exactly the intention of the barn's original builders. Hence, there is no dampness to be found anywhere in the building.

The traditional style douglas fir doors and windows, and the oak staircase, were handcrafted locally. All labour and materials were sourced in Wales, even the ground source heat pumps for the central heating and hot water systems. From traditional skills by craftsmen to the latest environmentally friendly technologies, they can all be found here in Wales.



Before Photograph



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