

- 1 Entrance Elevation
- 2 Side Flevation
- 3 Veranda

Eco Home

The realisation of a client's dream to live in a modern house which is in harmony with it's historic location and has minimal environmental impact.

WHp was commissioned to master plan the redevelopment of a traditional West Yorkshire mill owners house and extensive grounds. Outline planning and conservation area consent were obtained for the formation of 6 dwellings including 3 conversions and 3 new build units. Having secured the principle of new build development on the site WHp was instructed to develop a design for a modern house in harmony with it's historic location. The client's brief emphasized that Environmental Good Practice should be at the heart of the design and procurement process.

Two strategies were adopted to integrate the building into this mature garden landscape;

The cutting in and earthed sheltering of the lower storey incorporating green roof technology.

A light weight timber clad first floor with a roof profile following the contours of the site.

Materials were selected as a reference to local traditions, for their visual impact and performance as well as environmental credentials.

The environmental strategy for the design was based on the optimisation of the building envelope to achieve maximum insulation values, minimise air infiltration and to take full advantage of passive gains. Environmental technologies were then overlaid onto this thermally efficient shell. These included a wood pellet boiler feeding the underfloor heating system, whole house mechanical ventilation with heat recovery and rainwater harvesting. On site renewable energy generation was discounted due to the site being sheltered and shaded by trees.

