

Mill Green Brewery, CO10 5PX

Mill Green Brewery is situated behind the traditional White Horse Inn at Edwardstone on the footprint of a derelict stable. The object from the start was to build a new business that was going to have minimal environmental impact including the building itself and the production process, raw material sourcing and distribution. The building needed space for raw material storage, office, brewing, bottling and casking and an insulated conditioning room.



Sustainability Features:

- The original concrete floor was incorporated in the new foundations and no concrete was used in the entire building, only lime. The structure was wood rather than steel. All wall bricks were reused and new floor bricks came from local brick maker with onsite clay. No hard conventional plaster or plasterboard was used, only lime plaster on waste woodchip board and bare clay board. The building is clad in wooden weather boarding.
- All insulation is lambs wool.
- All lighting low energy.
- Solar panels 25 sq m on the roof generating an average daily absorbed energy in the summer of 80kwh, costing around £8,000.
- Wood boiler with 210lt furnace, rated at 50 kW. Cost £20k.
- Waste materials from the brewing process are used as follows; brewers grains to local Red Poll cattle, hops are used as compost/mulch, waste beer will hopefully be used for vinegar production.

Key features

- Solar Hot Water Heating
- Wind Turbine
- Natural Materials
- Biomass Boiler
- Insulation and Glazing
- Waste and Recycling

Overview

Age, Type: post 2000, Business

Cost of measures: £200,000



The Design Process

The design was for a Suffolk Barn type building to fit into a rural environment. Our objective was to cause minimum environmental damage in the building of and running of our business. Planning did cause some problems but for technical reasons not related to construction or renewable use.

Awards

Mill Green Brewery has won a national SIBA Gold Award for its environmental achievements. Also Best Business Building, Creating the Greenest County Awards 2010

Green Lifestyle

We are at the beginning of a long learning process to hopefully be able to brew by using only our own renewable energy. The carbon footprint of our raw materials supply is now being addressed.

Evaluation

The project has so far been very successful but now that we have developed a really good range of traditional ales, the emphasis will be on increasing production and squeezing the maximum out of our renewable energy supply, including conserving and recycling heat. If we were to start again I would not have the brick floor, it looks good but cleaning is difficult. With more money we could have had a pressurised steam heating system for boiling the wort saving a large amount of energy.

Professional Contacts

- Carbon Trust provided advice
www.carbontrust.com
Telephone: +44 (0)20 7832 4803
- Guy Herbert- ethical builder
<http://www.gfconstruction.co.uk>
Telephone: 01787 377884
- Ecoexcel for renewables
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If you have any specific questions about this case study, these can be directed to the building owner via the website

www.greensuffolk.org/sqbn