

## Riverbourne Community Farm, Laverstock, Salisbury

**Straw bale classroom, and composting toilets with a grass roof.**



### Key features

- Straw bale building with lime render
- Composting toilet
- Grass roof
- Community farm
- Farm shop and cafe



### The Story

[Riverbourne Community Farm](#) started in 2010, with 60 acres of land on the edge of the River Bourne. Its vision was to establish a sustainable working farm for the benefit of local people, and in harmony with nature. Today, there are chickens, goats, donkeys, bees and rare breed pigs on the farm as well as sheep and cattle grazed in co-operation with local farmers. BTEC students work there during the week and the farm is open to visitors Monday to Saturday. One of the first priorities was to provide eco-friendly buildings for students and visitors. This led to the construction first of the composting toilet, and later the straw bale classroom. As Ben Parker, the Community Farm founder and chairman commented “Working in Partnership with Natural England we needed an ecologically sensitive, aesthetically pleasing design that we could afford to build and run. Straw bale was the obvious solution.”

### The strawbale classroom

**Design and materials:** The classroom is made entirely of straw without a timber frame, with a concrete base and cedar roof shingles. It was designed and built by David Boyden from local firm, [Equinox Services](#), and officially opened in January 2012. It took 5 months to build, and volunteers were able to help, for example in plugging any gaps with extra straw. The straw is protected with breathable lime render.





**Insulation:** The straw bales provide excellent insulation; just one electric heater is enough on even the coldest days.

**Windows and doors:** Reclaimed from landfill.



## The composting toilet

**Design and materials:** The toilet is built on tyres, and is timber clad with a grass roof. There is a large tank below the toilets. When it is full, it is exchanged for an empty one and the waste is left to rot down further, and can then be used on non-food plants. The waterless urinals have a self-cleaning surface and are cleaned with a special cleaner. There is no smell at any stage. Compost toilets save vast quantities of water.

For example, a family with a water flush toilet would use 100,000 litres of water a year for flushing.

## Energy and carbon saving

As well as being easy and cheap to heat, nearly 5 tonnes of carbon, absorbed by the straw, have been locked up in the straw bale building. For both builds there was minimal construction waste.



## More information

[http://www.equinoxservices.co.uk/media/articles/straw\\_bale\\_solution.pdf](http://www.equinoxservices.co.uk/media/articles/straw_bale_solution.pdf)