

HEATWEB

CASE STUDY · DOMESTIC

Orchard Cottage, Ware

A HEATBANK for wood, solar and oil

AT A GLANCE

CLIENT
Charles Adams, Orchard Cottage

LOCATION
Ware, Hertfordshire

PROPERTY
500-year-old detached house, formerly a bed and breakfast

HEAT SOURCES
Wood stove with back boiler, solar panels, oil

HEATWEB PRODUCT
Xcel HEATBANK thermal store, 495 litres

HEATWEB SERVICE
Free online system designer

Charles Adams added a wood stove with a back boiler at Orchard Cottage, a 500-year-old house in Ware, then a 495-litre Xcel HEATBANK to store and share its heat. With solar panels and oil, he expects to save 25% to 30% a year against his old oil boiler.

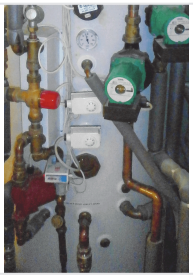
The challenge

Orchard Cottage is a 500-year-old detached house in Ware, Hertfordshire, which used to be a bed and breakfast. Its heating relied on an oil boiler, with ongoing problems over access and cost.

The family first added a wood stove with a back boiler to increase the supply of hot water and cut their oil use. That led to the question of how to store the heat, and to the Xcel HEATBANK.

What we did

- Charles used our free online system designer, which collects the relevant data, allows unlimited designs and works out costs, savings, carbon footprints and boiler and pump sizes.
- The designer selected the products, laid out the system, produced a quotation and listed installers who could do the work.
- Supplied a 495-litre stainless steel Xcel HEATBANK thermal store, installed 10 days after the order.



The HEATBANK connections and pipework at Orchard Cottage.

What we found

- The wood burner, solar panels and oil feed the store through a plate heat exchanger system.
- It gives high flow mains-pressure hot water and heats the radiators and underfloor heating.
- Its core connection links in to supply all of the house's water and heating needs.



The HEATBANK in its cupboard at Orchard Cottage.

495 l
capacity of the stainless steel HEATBANK cylinder

25–30%
expected yearly saving against the old oil boiler

10
days from order to installation

The outcome

- Charles estimates savings of 25% to 30% a year on typical oil bills of around £4,000.
- The system makes three times as much hot water per minute as a wall-hung gas boiler, with a 25-year warranty.
- In Charles's words, the installers did a very good and clean job.

> "As well as the way it links to the wood burner, we love the instant hot water, the flexibility in the summer and the compact footprint."
>
> **Charles Adams, Orchard Cottage, Ware**

About Heatweb. Heatweb Solutions is a UK provider of engineering support for heat networks and commercial HVAC: monitoring, fault diagnostics, technical compliance, optimisation, commissioning and maintenance.

Talk to an engineer

The full case study: www.heatweb.co.uk/blog/case-study/reaping-the-rewards-of-renewable-energy/

0345 241 1441
enquiries@heatweb.co.uk
www.heatweb.co.uk