



Boston Mayflower



Space-saving heating boost for Boston bungalow

A compact semi-detached bungalow in rural Lincolnshire boasts the first installation of a space-saving heating and hot water solution from Daikin UK.

The 50m² bungalow, in the village of Leverton, near Boston, was scheduled to have its inefficient solid fuel boiler replaced with a regular Daikin Altherma low temperature heat pump installation when the new alternative became available.

Keen to explore new possibilities in renewable heating, in line with their affordable warmth strategy social landlord Boston Mayflower welcomed the opportunity.

The installation consists of a standard 6kW Daikin Altherma LT Split outdoor unit – but it is connected indoors to a floor-standing integrated hydrobox and 180-litre stainless steel hot water cylinder.

The hydrobox contains a heat exchanger which transfers energy from the refrigerant circuit to the wet circuit serving the bungalow's new radiators and the primary coil in the DHW cylinder. The hydrobox also has all the necessary hydraulic components such as circulating pump, expansion vessel and back-up heater.

The Leverton installation is designed with a flow temperature of 45°C, with the back-up heater increasing the DHW temperature to 60°C when needed – as well as providing a boost for space heating if ambient temperatures are significantly low.

Aaron Petts of Aaron Services, Boston, says: "The integrated unit has been installed at the rear of the bungalow in the former coal shed which now doubles as the airing cupboard. The cylinder in the old airing cupboard was redundant, so it's been removed and the space has been turned into additional storage."

Year of installation

› 2016

Project requirements

- ☒ LT Split
- ☐ LT Mono
- ☐ HT Split
- ☐ Hybrid
- ☐ Combustion
- ☐ Smart Controls
- ☐ Solar Thermal
- ☐ UFH
- ☐ Heat Pump Convactor

Installed systems

- › Low Temperature Split 6kW outdoor unit
- › Floor standing integrated hydrobox
- › 180 litre hot water cylinder

Boston Mayflower project manager Tony Glover says the two-bedroom bungalow dates from 1937. With various improvements over the years it has acquired a new roof, solar photovoltaic panels and – long with the recent heating upgrade – an increase in loft insulation to 300mm.

The housing association has about 4,800 properties in Boston and outlying areas.

Tony Glover says “We are currently switching about 28 properties a year to renewables – particularly in outlying off-gas areas like Leverton where oil and solid fuel are no longer affordable options.

“Properties are selected for upgrading according to the age and condition rating of their existing heating systems. The Leverton bungalow, for example, had a back-boiler that had reached the end of its economic life – while heating technology and public expectations have advanced tremendously.



Tony Glover says:

“Introducing developments such as renewable heating means that we, as social landlords, can keep our properties acceptably up to date and in good condition. It also means we can offer tenants a healthy and comfortable environment with affordable energy bills.”

Daikin UK says the new integrated unit is designed for quick and efficient installation and servicing. All water and refrigerant connections are at the top of the 1,732mm unit, helping to reduce the installation footprint to 0.45m². All components are accessible from the front.

The integrated unit was extensively trialed in Europe for more than three years before its UK debut.

Kit List

Code	Description	No of units
ERLQ006CV3	6kW Daikin Altherma LT outdoor unit	1
EHVH08SU18CB6W	Integrated hydrobox and DHW cylinder	1



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