



## Heating upgrade brings big cost savings for tenants

Housing association tenants in a North Kent cluster are reporting significant energy cost savings following an upgrade of their heating systems to a more efficient. lower carbon alternative.

Heating technology has taken massive strides since gas combi boilers were installed at Priory Place, Faversham. When the boilers were due for replacement after 15 years, landlord Amicus Horizon looked for a solution more appropriate to today's economic and environmental requirements.

After a trial in a similar property elsewhere in its portfolio, Amicus Horizon selected the award-winning Daikin Altherma Hybrid Heat Pump for Priory Place. The system combines a heat pump and a gas combi boiler to provide heating and hot water in the most efficient – and most economical – manner at any given moment.

Priory Place is a group of 24 compact 54m2 threebedroom houses. There are three terraces, each of four houses, and six pairs of semi-detached units. All houses utilise loft space for the third bedroom – with dormer or end-gable windows, depending on position.

Steve Burt, Project Surveyor at Amicus Horizon, says the association is keen, whenever possible, to install new technologies that bring better efficiencies and an improved quality of living for tenants. Eleven of the 19 houses managed by Amicus Horizon at Priory Place were selected for the first round of conversions to Daikin Altherma Hybrid technology.

He says: "There was a mixed reaction from tenants, but people were soon reporting welcome energy cost savings."

Typical of the satisfied tenants was a mother of three who had moved into Priory Place shortly before the Daikin Altherma Hybrid project began – and quickly found problems with the existing heating system.

She says: "I was soon on the phone to complain about the huge cost of gas with the old boiler. It was costing me about £40 a week – and the temperature was very difficult to control.

#### Year of installation

> 2015

# Project requirements

LT Split

l LT	Mono

HT Split

#### Smart Controls

## Solar Thermal

## UFH

Heat Pump
Convector

### Installed systems

Hybrid heat pump 5KW "Since we've had the new system, my gas cost is down to about £10 a fortnight. My electricity cost has gone up from about £5 a week to £10. Overall, I'm better off by more than £100 a month – and we have a comfortable, steady temperature indoors all the time."

The Priory Place Daikin Altherma Hybrid systems were installed by Sittingbourne-based Swale Heating, Amicus Horizon's regular gas heating and hot water engineers.

Despite having to draft in an F-gas certified engineer to complete the installations, Swale Heating Director Debbie Vincent says: "The systems were not complicated to install or to understand. We had excellent feedback from the tenants. The systems are extremely efficient."

The Hybrid's 5kW heat pump is the primary source for space heating in these properties, delivering water at up to 55oC to serve radiators throughout each house. The heat pump can reach a coefficient of performance of up to 5.04 (at water temperature 35°C, delta-T of 5K and outdoor temperature of 7°C) – which accounts for the running cost savings the system generates.

The combi boiler can deliver up to 27kW (heating) to support the heat pump when ambient temperatures are low and heating demand peaks. The amount of support provided is determined by the system's control technology, which automatically selects the most economical solution, based on the user's energy tariffs.

The boiler is rated for a maximum 33kW for hot water, which it can deliver at a temperature of up to 65oC.

The Daikin Altherma Hybrid is perfect for retrofit applications – including properties where electric storage heaters are to be replaced. The Hybrid can also be used with LPG in properties that are off the gas network.



