

CASE STUDY

Spacious Two Storey New Home, Christchurch



This newly built home features radiators and an air-to-water heat pump.

System Description

An air-to-water heat pump heats the water circulating through eight radiators throughout this two storey home.

Requirements

When Christchurch homeowners Jo and Trevor decided on the type of heating they wanted, they knew they wanted the whole house to be warm, with the temperature of each room easily controllable. The combination of the large glass windows, the home's size and the open layout of the ground floor required well thought-out radiator placement to ensure thorough heating throughout the home.

Solution

Because radiators offer a quick response time and their heat output can be controlled individually to

suit each room's purpose and changing usage, they offered an ideal solution to the needs of these homeowners. Five radiators heat the ground floor and three heat the first floor.

The heat comes from a high temperature air-to-water heat pump. Air-to-water heat pumps are more often used to heat underfloor systems than radiator systems because the water running through the radiators need to be at a higher temperature than the water running through underfloor pipes. By using a high temperature heat pump, the DeLonghi AW-HT 0041, the water can reach the temperatures

Contractors and Client

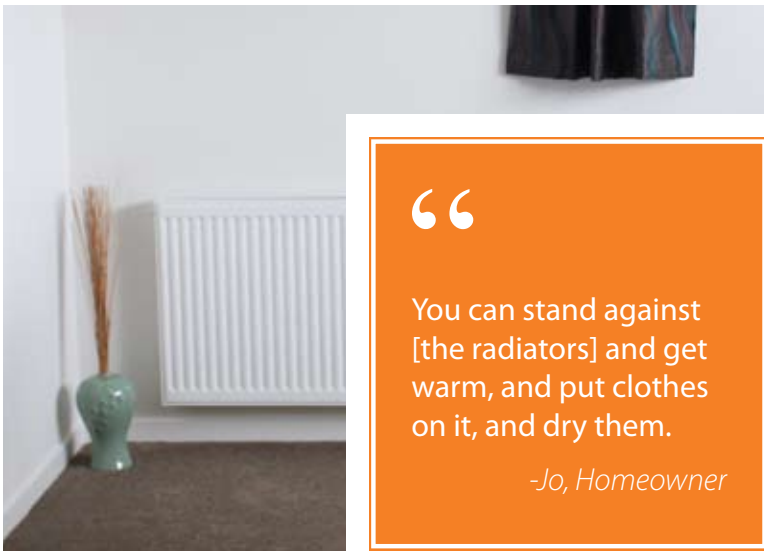
Peter Ray Homes

Products Used

DeLonghi High Temp Heat Pump AW-HT 0041

100L Buffer Tank

8 Radiators



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You can stand against [the radiators] and get warm, and put clothes on it, and dry them.
-Jo, Homeowner



required for a radiator system.

Benefits

In addition to the level of temperature control that radiators offer, the homeowners have also enjoyed the radiator's aesthetics and some of the other perks of using radiators. "We actually quite like the look of it, to be honest. Just the fact that you can stand against it and get warm, and put clothes on it, and dry them," says homeowner Jo.

They have also benefited from the radiant heat's superior effect on health: they have noticed that

they were less sick during the past winter with the radiators than they were the winter before, prior to living with central heating.

The air-to-water heat pump is a low maintenance method of heating the water for the system. Jo notes, "You just turn it on and don't have to do any work for the heating."

