



# Case Study - Solar Water Heating Taff Housing Association

**SML partner company, Filsol Solar Limited, were approached by Taff Housing Association to design, supply and install solar water heating systems in 23 new houses which were part of a mixed housing development on a former hospital site in Cardiff.**

## Project Overview

Filsol Solar worked in partnership with the developer Redrow to install individual solar water heating systems on 23 new houses. Taff Housing Association opted for solar water heating solutions to reduce the overall carbon emissions of the properties as well as offer cheaper heating bills to their tenants. Solar water heating also offered a low maintenance solution over the lifetime of the systems. Filsol Solar worked closely with the main contractors to ensure a trouble-free installation without disruption to the overall build plan. Filsol roof-integrated collectors were used to provide either 4m<sup>2</sup> or 6m<sup>2</sup> of solar collector area per house, dependent on the size of the dwelling. Similarly, the hot water cylinders installed were sized to suit the estimated needs of each house.

## Project Costs and Benefits

The installed cost of the solar water heating systems was approximately £2,800 per house. Through including solar water heating in the house specification, Taff Housing Association

were able to significantly reduce the carbon emissions associated with new houses, saving an estimated 0.6 tonnes of CO<sub>2</sub> per year. Each system will typically reduce household energy consumption by 1,500 to 2,000kWh per year, saving tenants approximately £60 per annum on current fuel prices (a saving that can be expected to rise year on year as fossil fuel prices increase).



## Installation Overview

Client:	Taff Housing Association
Project:	Pitched roof installation on 23 new build with individual hot water storage
System:	2/3 x Filsol in-roof panels with 200-300 litres of hot water storage per house
Cost:	Approx £2,800 per house (excl VAT) before grants