



Lauriston Place

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Solar thermal collectors attached to the roof

Solar

What is the solution?

This project was the installation of a series of solar thermal collectors in 2009 on the roof of 10 protected (Category B Listed) blocks of flats, or tenements, in the City of Edinburgh by the owners, Lister Housing Co-Operative. The buildings, dating from 1840, are within the City of Edinburgh World Heritage Site.

Why does the solution work in terms of compatibility with conservation and technical aspects?

The panels were mounted on to the existing traditional slate roof with special fittings. The piping and other service requirements were routed through the roof voids to the central stair. The central stair in each block was used as the route for the hot water down the building and off the landings into each flat. This followed the routes of other services such as gas and electric and water. The stone plinth of the landing had to be core drilled through. Otherwise, there was minimal impacts on the building fabric.

Description of the context:

The shape of the roof in the early 19th C tenement building was an 'M' shape, giving a central valley. The area for the panels was shielded from all sides; there was no impact on the cultural significance of the buildings nor any effect on the World Heritage Site. In addition, the enclosed location allowed safe access for installation and ongoing maintenance of the array.

Pros and cons of the solution:

This installation has proved to be successful in assisting tenants with their domestic hot water heating costs. It has proved simple to maintain and long lasting, now being in its 11th year. However, to maximise benefits residents need to plan their hot water use and understand the system; this depends on their engagement, which varies a lot.

Type of data available (level of information, simulation):

Simulation provided by the suppliers of the panels

Additional information about the solution:

The Client was Lauriston Housing Co-Operative. The project was supported by Edinburgh World Heritage, City of Edinburgh Council, and managed by Changeworks.

Are there any related publications or pictures of the solution?



Installation of the solar thermal units © HES



Lauriston Place main elevation © HES



Lauriston Place solar panels © HES



Electric connection into the house© HES

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Changeworks Document describing the project