

External Wall Insulation Project

Prestwick Toll Flats

South Ayrshire



Introduction

This project formed part of the Home Energy Efficiency Programmes for Scotland: Area Based Schemes (HEEPS:ABS) 2016-17 managed by South Ayrshire Council and delivered by their managing agent the Energy Agency.

Contractor, SERS Ltd, was appointed through a procurement process to install a suitable External Wall Insulation (EWI) system on 12 council owned and 28 privately owned flats as part of a mixed tenure project.

House Type and Insulation Solution

The properties identified in the project area were flats and maisonettes situated in 5 storey blocks and of standard cavity construction with no existing wall insulation leading to poor thermal performance of the building. Due to the exposure and building height, cavity wall insulation has previously been deemed as unsuitable for these blocks.

The chosen contractor SERS Energy Solutions Ltd was appointed on a Design and Build Contract working alongside system designer SPS Envirowall to propose a suitable EWI System to improve the insulation of the flats.

The best option selected was a 90mm Graphite Expanded Polystyrene Insulation System which included insulation boards fixed to the exterior of the building. The building was then finished with render and a decorative dry dash.

SERS carried out a thorough check on structural integrity and concluded that the system was compatible with the existing substrate and that no structural repairs were required other than ad hoc lintel repairs.

The installation period for the project was 20 weeks with each block taking an average of 8 weeks to complete.



Fig 1. Insulation boards being fixed to all levels of flats.



Fig 2. Scrim Coat prior to dry dash finish

Funding

The final quotation for this work following negotiations and adjustments was £6,708.00 ex VAT per property.

In line with the grant conditions of HEEPS:ABS, a grant of £6,328.00 was applied to each flat. The contractor also secured ECO funding of £380 per property.

The owners did not have to pay any contribution as the installation was fully covered by the available grants. South Ayrshire Council paid for the cost of the improvements to the Council-owned properties.

Project Outcomes

Prior to installation, the energy efficiency rating used on Energy Performance Certificates (EPCs) rated these properties at 64 (band D) on a scale of 0 (poor) to 100 (good). After installation, the energy efficiency rating increased to 73 (band C).

Social housing properties in Scotland are required to meet minimum standards as part of the Energy Efficiency Standard for Social Housing (ESSH). The 12 Council-owned properties in this project failed to meet these standards prior to installation of the EWI system. On completion, all properties met the required ESSH standards.

The feedback received for the project was very positive with 100% positive feedback for both the managing agent and contractor.



Fig 3. Dry Dash completion

Case Studies from Insulation Programme

Mrs S

Mrs S decided to go ahead with the insulation works on the basis that the house was in a poor condition and the general exterior needed improvements.

Since the installation she has also noticed that the property now heats up more quickly and retains the heat better meaning that she can now use her heating for fewer hours per day. This has resulted in a decrease in her gas bills with a saving of between £10 and £30 per month.

In addition, Mrs S reported a decrease in window condensation as well as noticeable noise reduction.

Mr and Mrs P

Mr & Mrs P chose to insulate their home in order to improve their comfort levels and the appearance of the property.

They have found that the property now heats up more quickly and has a more even distribution of heat.

They also described the appearance as having *“improved a lot”* with the general neighbourhood looking cleaner, brighter and friendlier.

“It’s had a good impact....it makes the street look great. Everybody’s happy and it makes you want to do stuff to the building to keep it nice”

Miss F, South Ayrshire

“It’s warmer in winter and it’s cooler in summer...”

Mrs M, South Ayrshire

“It’s more relaxed. I feel more relaxed at night...Rather than coming in at night and having to wear a big jumper or a cardigan I can sit about like this and I feel quite comfortable...I don’t need to go wrap up at night”

Mr M, South Ayrshire

“The noise reduction is amazing”

Ms H, South Ayrshire