

External Wall Insulation

Case Study

St Helens, Merseyside

Sector: Social Housing
Low Rise
Refurbishment

Semi-detached property
after refurbishment.



Before refurbishment

Property after refurbishment



Client:
Helena Partnerships

Building Type:
Airey

Project Size:
37 Houses / 4,200m²

Products:

- Struchterm SEWI System
- Render Finishes

Project Background:

Helena Partnerships was launched in July 2008. It was formerly known as Helena Housing, a well-respected social landlord with 13,000 homes across St Helens. As part of their improvement programme Helena Partnerships recently commenced the upgrade of 37 non-traditional Airey properties in various locations throughout St Helens. The properties were severely defective, poorly insulated and extremely expensive to heat.

Client Requirements:

Helena Partnerships wanted a cost effective solution for externally refurbishing the houses and one that would:

- Provide structural support and extend the life of these defective properties
- Create a watertight and thermally efficient building envelope
- Reduce CO₂ emissions and lower residents' fuel bills
- Improve the external appearance of the houses

Design Solution:

Structherm's unique Structural External Wall Insulation (SEWI) system incorporating 80mm thick Enhanced EPS insulation was specified for the external refurbishment of the properties. To complete the system a Multirend brick effect render was applied to the ground floors and used for detailing on gables, under windows and as quoins. The first floors were then finished in a cream coloured high performance texture coating to significantly improve the appearance of the properties.

Results:

- SEWI has provided essential structural support and provides a minimum design life of 30 years.
- Thermal performance has improved greatly with the U value dropping from 1.56W/m²K to 0.29W/m²K.
- The carbon footprint has reduced as it now requires less fuel to heat each home to a comfortable temperature.
- The aesthetic appearance of the properties has greatly improved as the refurbishment programme also included new windows, doors, roofs, soffits, fascia boards and guttering.



Semi-detached properties after refurbishment showing Multirend brick effect render to ground floors and detailing and dash finish to first floors.