External Wall Insulation
Case Study

Hanson
HEIDELBERGCEMENT Group

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Dotcliffe Road, Kelbrook
Lancashire

Sector: Social Housing
Low Rise
Refurbishment


Semi-detached property after refurbishment.


Before refurbishment


Random stone effect render

Client:
Housing Pendle

Building Type:
Airey

Project Size:
11 Houses / 763m^2

Products:
- Structherm SEWI System
- Render Finishes

Project Background:

Housing Pendle is a member of the Together Housing Group and provides property management and development opportunities within the Pendle area for 3326 homes. Their focus is on creating places where people want to live and choose to stay - whether that means providing new communities or transforming existing neighbourhoods into vibrant, popular areas to live and prosper.

Housing Pendle is investing £15 million in a five year improvement programme in order to bring every home over and above the Decent Homes Standard. As part of this programme Housing Pendle recently commenced the upgrade of 11 non-traditional Airey properties on Dotcliffe Road, Kelbrook. The properties were severely defective, poorly insulated and extremely expensive to heat.

Client Requirements:

Housing Pendle wanted a cost effective solution for externally refurbishing the houses and one that would:

- Provide structural support and extend the life of the defective properties
- Create a watertight and thermally efficient building envelope
- Reduce CO_2 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 105mm thick Enhanced EPS insulation was specified for the external refurbishment of the properties. To complete the system a random stone effect render was applied to the lower ground floors in Old Yorkshire Stone with Keighley Grey mortar. The first floors were then finished in a Beige dash aggregate onto a York Sand dash receiver 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 0.23W/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 random stone effect render to lower level and dash finish to higher levels.

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