

STANLEY ROAD FLATS BRADFORD

Social Housing Refurbishment | Stanley Road, Bradford

Client: Accent Group Limited
Approved Installer: Westdale Services
Building Type: Brick Cavity
Project Size: 3 x 3 storey flats (1,500m²)
System: Thin Coat NSC2a External Wall Insulation
Finish: Acrylic & Brick Effect Render

REFURBISHMENT OF TRADITIONAL BRICK CAVITY FLATS USING EXTERNAL WALL INSULATION

Project Background:

Accent Group own over 19,000 properties across the country and are firmly committed to providing residents with excellent homes and top quality services which they have been investing in for over 40 years.

Accent Foundation manages the group's homes in the North East, North West, Yorkshire and the Humber. As part of the group's "Strategic Plan" and vision of "making a difference...improving homes, communities and lives" Accent Foundation began a refurbishment programme at Stanley Road, Bradford, West Yorkshire.

Problems:

Surveys and pull out tests showed that the flats were built with a 102.5mm thick dense brick work inner wall and a 102.5mm thick brick outer wall with a very narrow, unfilled, cavity.

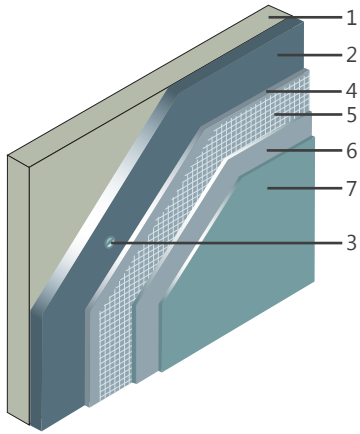
Heat loss through these walls was high and the thermal performance was calculated at a very poor 1.44W/m²K.

This was resulting in high fuel bills for residents who were having to use large amounts of energy to keep their flats warm.

Due to the age of the properties many were also looking tired and in need of external refurbishment to smarten them up.

STRUCTHERM'S EXTERNAL WALL INSULATION SYSTEM PROVIDED THE PROTECTION, THERMAL AND AESTHETIC QUALITIES REQUIRED

Thin Coat System - NSC2a



1. Substrate
2. 90mm Enhanced EPS insulation
3. Fixing
4. Basecoat render 3mm
5. Glass fibre reinforcing mesh
6. Basecoat render 3mm
7. Acrylic 1.5mm topcoat

Client Requirements:

Accent Group wanted a cost effective external refurbishment solution that would:

- Bring the flats up to current Part L Building Regulation standards in relation to thermal efficiency requirements.
- Improve the external appearance of the flats.

Design Solution:

Accent Group appointed Westdale Services Ltd as the specialist installer for this project and specified Structherm's Thin Coat NSC2a External Wall Insulation (EWI). The system consisted of a layer of high performance Enhanced EPS insulation boards 90mm thick designed to meet the current Building Regulation requirements for thermal performance.

The insulation boards were fixed in to the existing brickwork using specially selected fixings to ensure there would be no failure of the system in years to come.

Basecoat render was then applied in two coats. The first layer of high polymer modified basecoat render incorporating lightweight aggregates and reinforcing polyester fibres was applied to a thickness of 3mm followed by glass fibre reinforcing mesh in roll form, embedded into first layer of basecoat render. The second 3mm layer of basecoat render was then applied over the mesh to give a thickness of 6mm.

To complete the system the client chose a high performance through coloured Acrylic 1.5mm topcoat render finish with Macerend brick effect render detail in between and alongside some of the windows to provide a modern and fresh look to the flats.

Results:

- Thermal performance has improved greatly with the U value of the walls dropping from 1.44W/m²K to 0.27W/m²K.
- Energy usage has vastly reduced as each flat now requires less fuel to heat to a comfortable temperature. This has also helped to reduce residents fuel bills.
- The decorative acrylic topcoat render has brightened up the flats that were previously quite dull and drab.



Before refurbishment



After refurbishment



After refurbishment