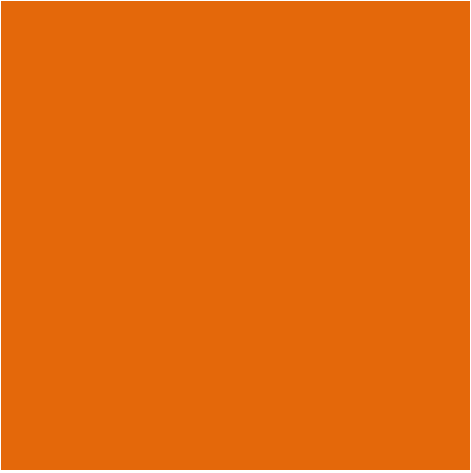


**Pinkie Braes**  
Musselburgh, East Lothian

**Sector:** Social Housing  
Low Rise  
Refurbishment



**Client:**  
East Lothian Council

**Building Type:**  
Wimpey No Fines

**Project Size:**  
Phase 1- 35 Properties 3,062m<sup>2</sup>

**Product:**  
External Wall Insulation  
& Dash Aggregate Finish

## Project Background:

East Lothian Council (ELC) is going through a programme of upgrading its stock of Social Housing helping to bring it up to Scottish Quality Housing Standards. ELC had previously used Structherm systems to externally refurbish Stuart Steel non traditional houses and Cruden Rural steel framed and precast concrete block properties. So when they wanted to externally refurbish a 1940's estate of non-traditional solid wall uninsulated no fines concrete properties they once again chose a Structherm External Wall Insulation system.

## Client Requirements:

ELC wanted a cost effective solution for externally refurbishing the properties which were constructed using Wimpey No Fines concrete, a material with inherently poor thermal performance. ECL decided to specify a Structherm external wall insulation system which would:

- Improve thermal performance and therefore cut fuel bills.
- Reduce CO2 emissions.
- Improve the external appearance of the properties.

## Design Solution:

Structherm's "Heavy Duty" External Wall Insulation (EWI) was chosen as the preferred system. It consisted of a layer of high performance PIR insulation boards 120mm thick as the client was trying to "future proof" thermal performance of these properties and was exceeding the current Building Regulation requirements. These insulation boards were fixed in to the no fines concrete using specially selected fixings to ensure

there would be no failure of the system in years to come. Stainless steel expanded reinforcing mesh was then installed with Structherm UF basecoat render applied over the top to a thickness of 8mm. To complete the system Structherm Dash Receiver was applied in one coat at 8mm thick and then a decorative dash aggregate applied.

## Results:

- Thermal performance has improved greatly with the U value of the walls dropping from 1.66W/m<sup>2</sup>K to 0.19W/m<sup>2</sup>K.
- The carbon footprint has reduced as it now requires less fuel to heat each house to a comfortable temperature.
- The traditional dash aggregate finish has greatly improved the appearance of the properties which previously looked old and tired.



After refurbishment



After refurbishment