

**Structherm | Cladding**  
**Wylam & Railway Street**  
Craghead, County Durham

**Sector:** Private Housing  
Low Rise  
Refurbishment

After refurbishment



Before refurbishment



After refurbishment

**Client:**  
Gentoo Construction /  
Durham County Council

**Building Type:**  
Solid 9" Brickwork

**Project Size:**  
89 Properties / 5340m<sup>2</sup>

**Product:**  
External Wall Insulation  
Multirend Brick Effect Render

## Project Background

County Durham Council (CDC) is responsible for producing and enabling the delivery of Durham's Housing Strategy. The strategy sets out the key priorities for housing across the county and highlights how the council and their partners deliver the ambition of **'creating sustainable places where people want to live, work, visit and invest'**.

Ensuring that communities have the right type of housing, which is of good quality and in the right places helps create vibrant communities. To achieve this CDC work to improve conditions for people in private housing in identified **priority areas**, in addition to helping vulnerable owner-occupiers and private tenants where their homes are in need of adaptation or improvement. The council's private sector housing renewal finance scheme provides financial assistance for these works and is targeted at preventing decline within neighbourhoods in need of support.

## Craghead Housing Intervention Project

One of the identified priority areas is Craghead which lies 1.2 miles south east of Stanley town centre, the village is made up of mainly narrow terraced back-to-back streets with high concentrations of poorly maintained private rented properties. To address the problems of this area the Craghead Housing Intervention Project (CHIP) was set up. Its overall aim, to improve housing conditions and to strengthen the housing market within Craghead. The area includes Wylam Street and Railway Street which comprise of 89 two storey terraced housing with 9" brick construction built around 1890-1900.

## Phases

The first phase of the project, started in 2007, included acquisition and demolition of a small number of failing private sector properties. The second phase of the project started in 2009 and encompassed a range of environmental improvements and public art work. The third phase started in 2010 and included boundary wall treatments. Phase 4 involved refurbishment of the external elements of the properties including roof, window and door replacements, and work to the facade.

## Design Solution

As part of phase 4 the client wanted to upgrade the facades of the properties with an External Wall Insulation (EWI) system to the 9" solid walls and a Render system to the rear single storey 11" cavity wall extensions. The render finishes had to replicate the original brick work and the stone head and cill details.

The Hanson Structherm "High Build" External Wall Insulation and RO5 render systems along with a Multirend Brick Effect Render finish were specified. The "High Build" system consisted of a layer of high performance, 60mm thick, Phenolic insulation boards fixed directly back to the brick walls to which two layers of 3mm basecoat render with polypropylene reinforcing mesh embedded were applied.

## Results

The thermal performance has improved greatly with the U value of the walls dropping from 2.43W/m<sup>2</sup>K to 0.29W/m<sup>2</sup>K. The properties now require less fuel to heat them to a comfortable temperature, which in turn will help to reduce the carbon footprint of the whole area.

The Multirend finish was applied using differently coloured renders for the mortar layer and brick face layer to match the colour of the existing brick work on the houses. Specially formulated deep penetrating acrylic dyes were then applied to each brick to alter their colour to create a multi stock brick effect and make them look even more like the originals. The head and cill details were also created using coloured render.

The refurbishment programme also included new roofs, soffits, fascia boards, guttering, windows and doors, along with the installation of PV solar panels to the roofs. As a result this project is an outstanding example of a Community Regeneration Scheme and what can be achieved when customers, clients, planners, system designers and specialist application companies come together and work towards achieving a mutual goal.

