



Nottingham

Sector: Social Housing
Low Rise
Refurbishment



Newland property before refurbishment



Newland property after refurbishment



Crosswall property after refurbishment

Client:
Nottingham City Homes Ltd

Building Type:
Crosswall x 28
Newland x 65

Project Size:
93 Houses / 6080m²

Product:
Structural Insulated Cladding
& Render Finish

Project Background:

Nottingham City Homes (NCH) were formed in 2005 to manage 29,000 homes in Nottingham and have invested heavily over the past 6 years to bring many of its properties up to the Decent Homes Standard. Between 2011 and 2015 NCH will be delivering its 'Secure, Warm, Modern' programme which will make sure every home not only meets the Government's Decent Homes Standard but improves on it (Nottingham's Decent Homes Plus Standard).

As part of the programme NCH recently commenced the upgrade of 93 non-traditional built properties to the North and West of Nottingham City Centre. The properties were severely defective, poorly insulated and extremely expensive to heat.

Client Requirements:

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

- Allow residents to remain in their homes during the work
- Create a watertight and thermally efficient building envelope
- Reduce CO₂ emissions and lower residents' fuel consumption

- Improve the external appearance of the houses

Design Solution:

Structherm's unique Structural Insulated Cladding system incorporating 80mm thick Enhanced EPS insulation was specified for the external refurbishment of the properties. To complete the system a Macerend Brick Effect render was applied to the ground floors in Meltham Red with Light Grey mortar. The first floors were then finished using a high performing Acrylic render to significantly improve the appearance of the properties.

Results:

- The Structural Insulated Cladding was installed while residents remained in their homes.
- Thermal performance has improved greatly with the U values dropping as follows:
 - Crosswall Properties 0.45W/m²K to 0.20W/m²K
 - Newland Properties 2.05W/m²K to 0.30W/m²K
- The carbon footprint of each house has reduced by virtue of requiring less fuel to heat them to a comfortable temperature. This will have the positive benefit of reducing fuel consumption for residents.
- The aesthetic appearance of the properties has greatly improved as the refurbishment programme also included new windows, doors, roofs, soffits, fascia boards and guttering.



Newland semi-detached property after refurbishment showing Macerend brick effect render to ground floor and acrylic finish in cream to first floor.