

Case Study

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Steni Panels Help Complete Council Facelift

The leading cladding manufacturer provides composite panels for Lanarkshire Council's latest refurbishment project for a residential tower block.

Five colours of Steni panels are over-cladding two tower blocks that are the latest additions to North Lanarkshire Council's impressive stock of refurbished multi-storey properties.

The Steni Nature sheets, which are a fibreglass reinforced polymer composite panel with a surface of crushed natural stone, were specified by the council's project architect for four primary reasons. - Their robustness, proven performance, weather resistance and lack of maintenance, said Ian Gillespie.

The 5,000m² of Steni panels are being installed by main contractor Lovell Partnerships on Airbles and Whamond towers in the central area of Motherwell. Both 17-storey towers feature a bold colour scheme incorporating five Nature colours – Sienna, Ivory, Sea Green, Salmon Pink and Brick Red.



As well as the five colours used in Motherwell, Steni's lightweight Nature panels are available in another 19 colours and five grades of stone sourced from varying areas of Europe. The panels are Class O fire resistant as well as resistant to weather, rot and aggressive environments.



Ian Gillespie said of the design team's objectives: - The main priorities were to eliminate water ingress, improve the thermal efficiency of the blocks, and enhance the physical appearance of the external envelope.

The original prefabricated concrete panel constructions, while structurally sound and considered perfectly adequate when originally erected, did not meet today's thermal requirements. Current Part L Building Regulations drastically reduce the thermal conductivity of wall constructions so improving their thermal performance was a major focus of the project for the council. And since most of the residents were happy in their homes and the cost of demolition and reconstruction was prohibitive, the decision to refurbish – and more specifically, overclad - was not a difficult one.

The £3.5 million contract works that are due for completion early in 2010 include rainscreen overcladding to external walls from the first floor upwards, pitched roofs over the existing flat ones and replacement of all windows with double-glazed PVCu ones.

- The main element of the refurbishment is undoubtedly the rainscreen overcladding system which incorporates the Steni cladding panels. This system incorporates mineral fibre insulation to upgrade the thermal performance of the external walls to current standards, said Ian Gillespie.

To achieve the thermal efficiency requirements demanded by the specification, the Steni panels are installed on an extruded aluminium sub-frame which is fixed to the original outer skin of the building. The cavity created is then filled with mineral wool insulation between 125mm and 200mm in thickness depending on the level of insulation required.

For further information, visit www.steni.co.uk.

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