

Case study

Housing block uses ROCKWOOL® non-combustible insulation for recladding

Dan Court, London





The project

Dan Court is a U-shaped seven storey building containing 138 one-, two-, and three-bedroom apartments in Wembley, London.

Following changes in building regulations, which now state that external wall insulation in buildings 18 metres or above must be non-combustible, Catalyst Housing appointed Higgins Partnerships to undertake the re-clad works and deliver a safe and compliant estate.



The challenge

As Dan Court was a fully occupied housing block, Higgins Partnerships had to design a sympathetic site programme that would minimise disruption to residents. This included phased works to ensure continued access to an expansive outdoor space with central courtyard.

In addition to the operational challenges faced with site management, a full linear route was specified for the re-cladding. Stripping the external wall build-up back to the structural frame system (SFS); aluminium composite cladding, insulation, and cement particle board had to be removed.

To comply with the new building regulations, the replacement insulation had to be rated Euroclass A1 while achieving 0.23 U-value, as per the previous build-up.

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The solution

Meeting the reclad performance requirements, RainScreen Duo Slab® from ROCKWOOL was specified for the insulation.

Made from non-combustible stone wool, RainScreen Duo Slab is A1 rated and specifically developed for use within ventilated cladding systems, as well as sealed systems such as curtain walling. Designed for high-rise buildings and for use in conditions of severe climatic exposure, RainScreen Duo Slab is a dual density insulation board that comprises of a robust outer surface and a resilient inner face. "RainScreen Duo Slab had all the features we were looking for in the new insulation," explains Lee Bright, project manager at Higgins Partnerships. "Most importantly it is non-combustible and its thermal performance will not deteriorate over time."

Working within the constraints of an existing structure, Higgins Partnerships sought technical advice from the ROCKWOOL team when it became apparent that the standard fixing pattern of RainScreen Duo Slab could not be used: "The ROCKWOOL technical team were extremely responsive and supported with calculations to help identify an alternative fixing pattern. They also provided on-site support during installation, which helped us to deliver an efficient, accurate and quality installation."

A total of 2,800m² of RainScreen Duo Slab was installed on the SFS structure, along with brackets and rails to support a new Bailey cladding system with pressed 3mm cassette.



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Lee Bright
Project Manager at Higgins Partnerships





The result

Work on the fully occupied building commenced in September 2019 and finished in July 2021.

Despite a government mandated lockdown causing some disruption during this period, the site was closed for just two weeks while Higgins secured an efficient path to completion. Close coordination with the supply chain as well as careful on-site management included 'just-in-time' deliveries from ROCKWOOL, facilitating a phased installation that completed a building elevation at a time.

The cladding refurbishment at Dan Court was finished to high quality and safety standards with limited disruption to the residents. With regular 'Meet the Contractor' presentations and ongoing resident surgeries, Higgins Partnerships ensured that the residents stayed informed and were given the opportunity to provide feedback on the process. "To deliver a recladding project successfully and on time, it is important to keep the residents involved. In this case we could reassure them that RainScreen Duo Slab, fully certified non-combustible insulation, backed up by a well-established UK manufacturer, was being used to make their homes safe and warm.

"Following the success at Dan Court, RainScreen Duo Slab is our preferred insulation replacement on all reclad projects. The nature of reclad means we encounter different design challenges than on new build projects, and ROCKWOOL has firmly established themselves as a trusted partner who can provide invaluable expertise," concludes Lee Bright.



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