

Case study

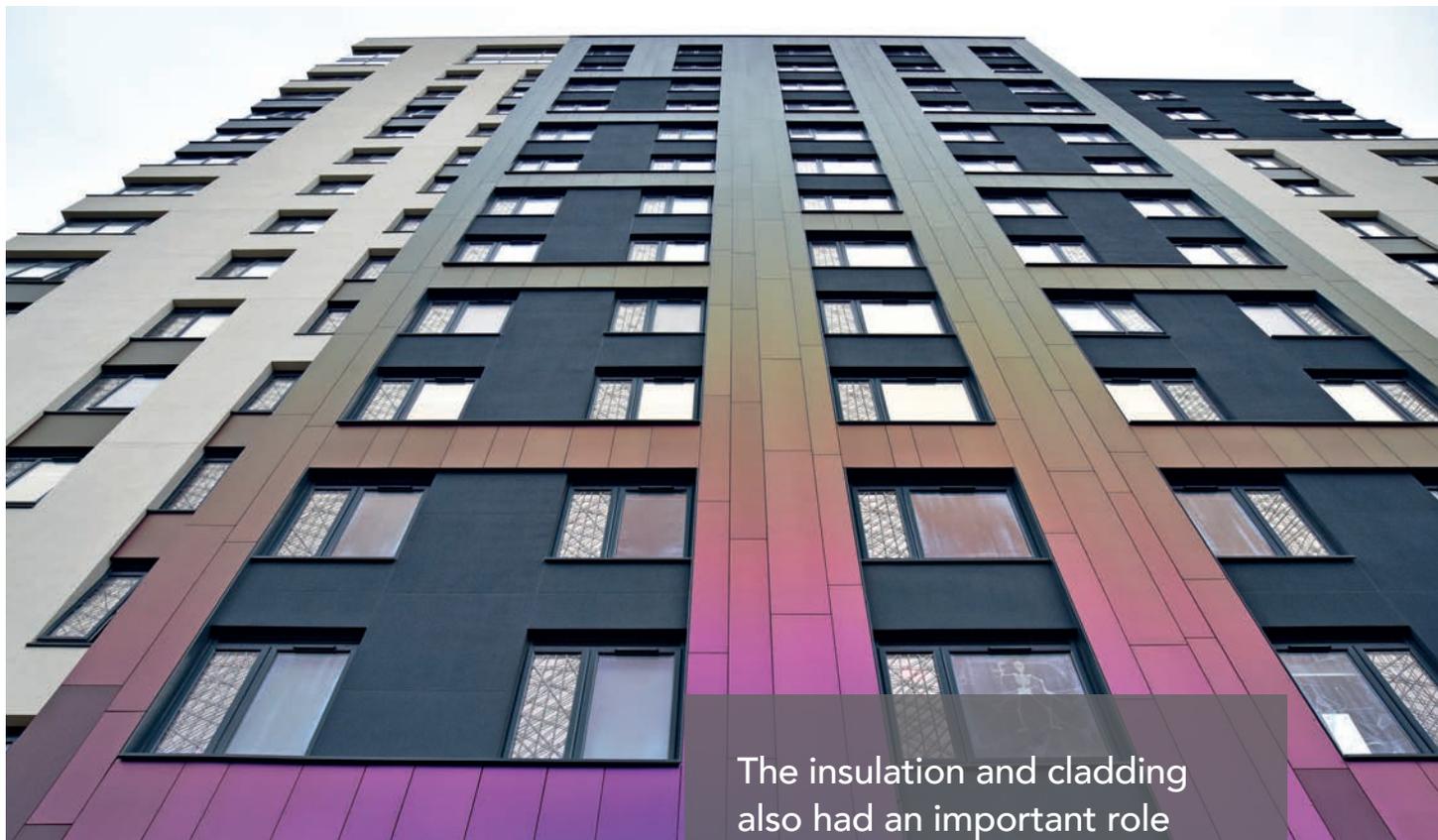
ROCKWOOL® and Rockpanel create vibrant, safe student housing

Skyline, Bournemouth



ROCKWOOL® and Rockpanel® are the winning façade combination behind an attractive, new student housing landmark for developer, Gilltown, on behalf of Bournemouth University.

Designed to achieve BREEAM 'Very Good' standard for energy performance, Skyline is one of the tallest developments in the area and draws on the powerful advantages of stone wool as a versatile, non-combustible insulation and cladding material, capable of providing excellent aesthetic, fire safety and thermal benefits.



The insulation and cladding also had an important role to play in helping Skyline meet the challenging energy performance credentials needed to achieve the BREEAM 'Very Good' standard.



The challenge

Skyline is purpose-built student accommodation, comprising 430 beds in a mixture of cluster flats and studios.

Located on Oxford Road in the heart of busy Lansdowne, the hub of student life for thousands of Bournemouth University's students, this 17 storey building was designed by Newcastle-based, Intersect Architects.

It features a common room and reception area at the ground floor, a sky lounge on floors 16 and 17, and a sky garden on the roof with amazing panoramic views out to sea and inland.

Aesthetically, Intersect sought to create a bold, striking finish for Skyline, reflecting the youth, energy, and vibrancy of its occupants. This exciting design vision would also be a fitting match for the size and scale of this sleek and very prominent building that's also indicative of the potential and aspiration of its inhabitants.

From a technical perspective, and with Skyline exceeding 18m in height, fire safety was, of course, a key priority. The insulation and cladding also had an important role to play in helping Skyline meet the challenging energy performance credentials needed to achieve the BREEAM 'Very Good' standard.

Finally, because of the urban location on a main traffic route into the town centre, Skyline also challenged Intersect to minimise noise intrusion from outside into the building.



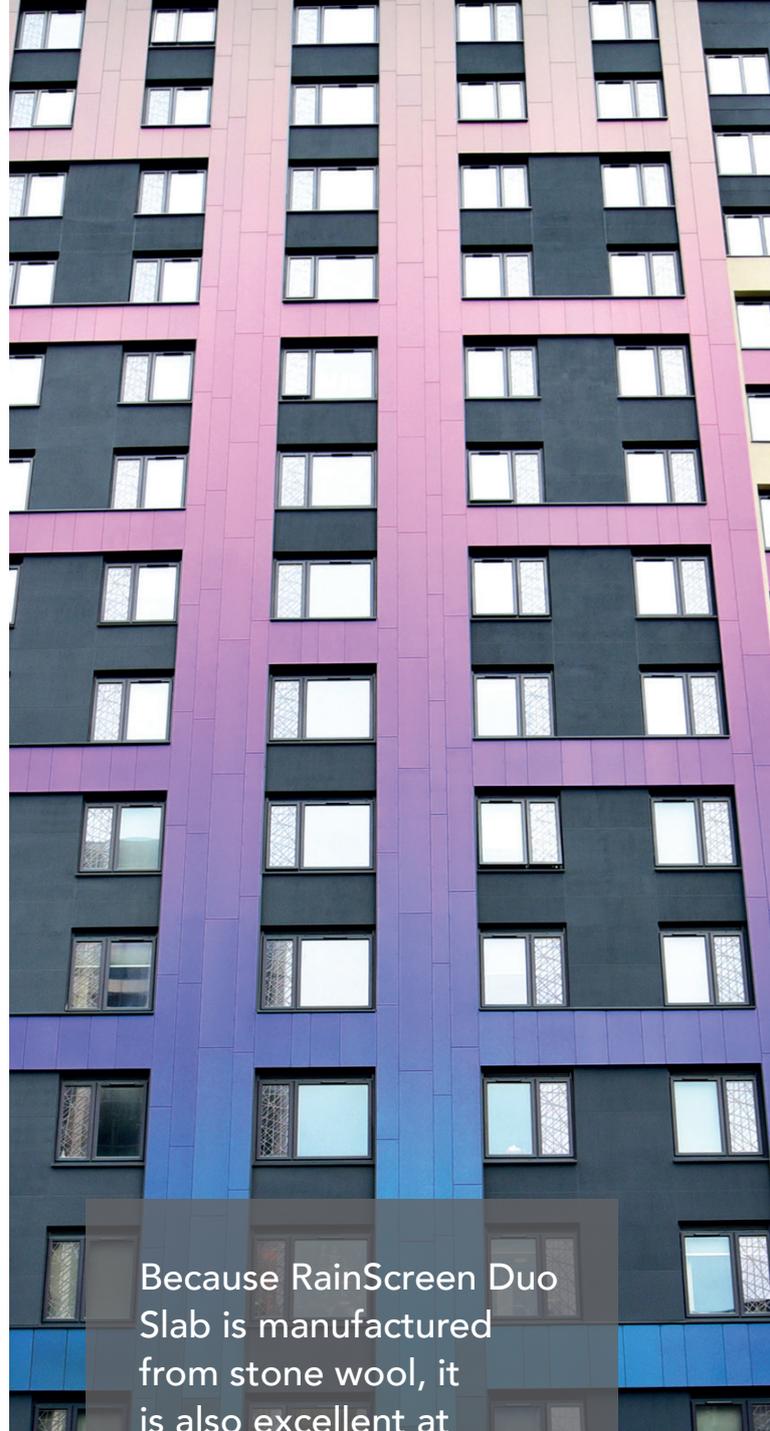
The solution

After attending a joint ROCKWOOL and Rockpanel CPD on “Fire Safety of Buildings above 18m - Designing out risks”, Intersect specified non-combustible Chameleon A2 boards from Rockpanel for the exterior cladding and RainScreen Duo Slab® from ROCKWOOL for the ventilated façade insulation.

The Rockpanel Chameleon boards feature a special crystal effect layer which changes colour within a specified purple, green and blue colour range, depending on natural daylight conditions and the viewing angle as people move around the building. This eye-catching, ever-changing effect delivers on Intersect’s design objectives, bringing the entire building to life. The surface of the Chameleon boards constantly seems to change colour in striking contrast with the mushroom colour of the unclad concrete elevations. Rockpanel had for the very first time also supplied the Chameleon boards in a special Matt finish to help meet Intersect’s aesthetic façade specification.

Rockpanel Chameleon A2 boards have a Euroclass rating of A2-s1,d0, and ROCKWOOL RainScreen Duo Slab achieves a Euroclass rating of A1, meaning both are deemed non-combustible.

Manufactured as a dual density insulation board, RainScreen Duo Slab offers a wind resistant outer surface designed specifically for application to this type of high-rise development. RainScreen Duo Slab requires fewer fixings than other commonly used insulation types, which minimises the risk of thermal bridging and ensures contractors a quick and easy installation. At Skyline, a thickness of 150mm was installed to achieve the specified thermal performance of 0.18 W/m²K. The product was tightly butt-jointed so that adjacent boards effectively knit together, minimising heat loss that would arise from gaps between insulation boards.



Because RainScreen Duo Slab is manufactured from stone wool, it is also excellent at trapping sound waves and minimising vibration, making the insulation an excellent choice for external acoustic insulation.



The result

Skyline has achieved its targeted BREEAM 'Very Good' rating. The use of non-combustible insulation and cladding from ROCKWOOL and Rockpanel also helps the building meet its regulatory fire safety requirements.

"Skyline is a confident, inspirational, and vibrant home for Bournemouth University students," says Andrew Scott of Intersect Architects.

"The Chameleon cladding from Rockpanel is an important and influential component in this effect. We're delighted with its colour-changing performance and longevity that will remain unaffected by changes in temperature or humidity.

Equally, because both the cladding and insulation are made from stone wool, the building and its occupants benefit from a thermally well-insulated, non-combustible solution that helps to keep them warm, comfortable and safe."

Andrew Scott
Intersect Architects



The project was completed in September 2019.

All photographs are courtesy of Intersect Architects Ltd and Gilltown Ltd