

# SHEFFIELD HALLAM UNIVERSITY

## ILLUMINATED HANDRAIL LIGHTING FOR NEW CITY CAMPUS BUILDINGS

### BACKGROUND

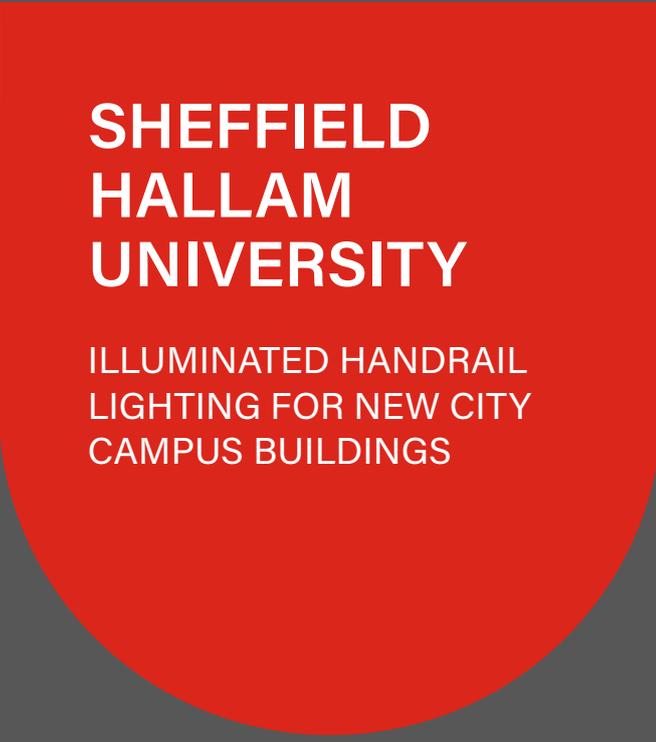
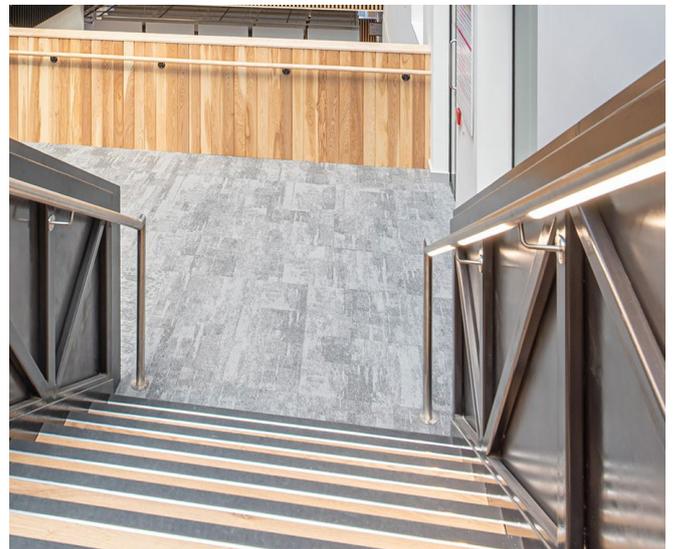
Sheffield Hallam University completed the construction of three major new academic buildings at its City Campus, delivering world-class teaching, learning and research facilities for a range of disciplines. Developed by BAM, the new buildings bring together Sheffield Business School, the Institute of Law and Justice, the Institute of Social Sciences, and architecture programmes within modern, digitally enabled environments designed for contemporary higher education.

Sustainability was a key driver throughout the development. The buildings are fully electric, powered by energy certified as zero carbon, and incorporate features such as heat pumps, solar panels, and new green public spaces, including Hallam Green, which enhances biodiversity and supports sustainable travel across the campus. As part of the internal building services design, all staircases across the three buildings required continuous illuminated handrails, totalling more than 250 metres. The brief called for a solution that would enhance safety and wayfinding, integrate seamlessly with the architectural design, and reduce long-term maintenance and operational impact.

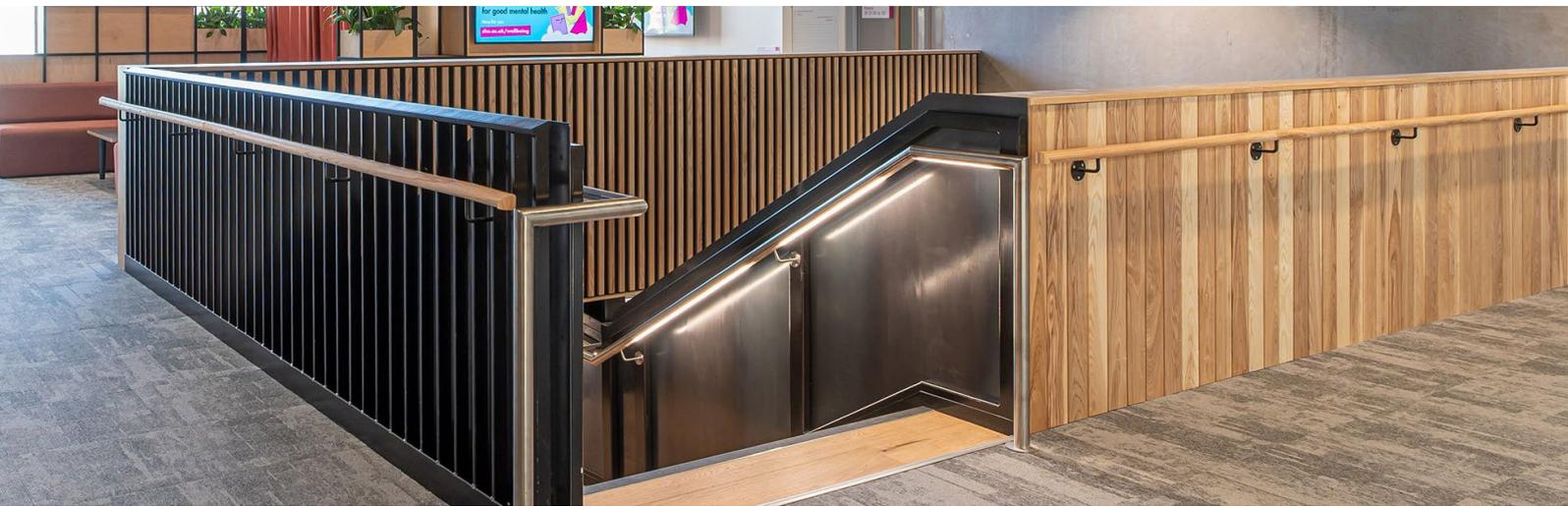


The client sought a **handrail** lighting solution that would provide a continuous, uniform line of light along staircases, improving visibility and user safety without the need for traditional wall- or ceiling-mounted luminaires. Emergency lighting was also required, with a preference for keeping all lighting at low level to simplify maintenance and minimise disruption in busy university buildings.

Integration with the wider lighting control strategy was essential. Thorlux Lighting specified SmartScan controls throughout the buildings, and the illuminated handrail solution needed to align with this approach while meeting all relevant safety and performance requirements.



DARK SKIES  ECOLOGY  APPLICATION IMPROVEMENT  NEW INSTALL  RETROFIT



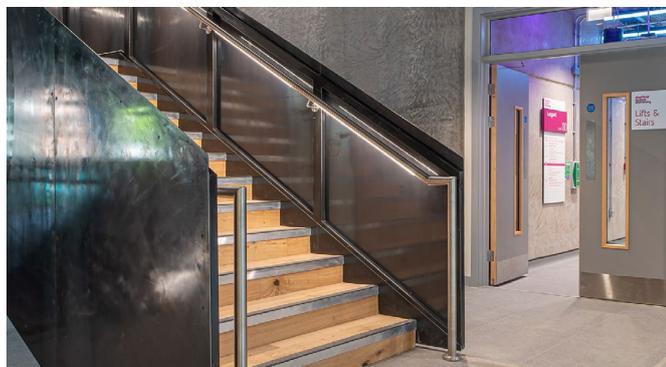
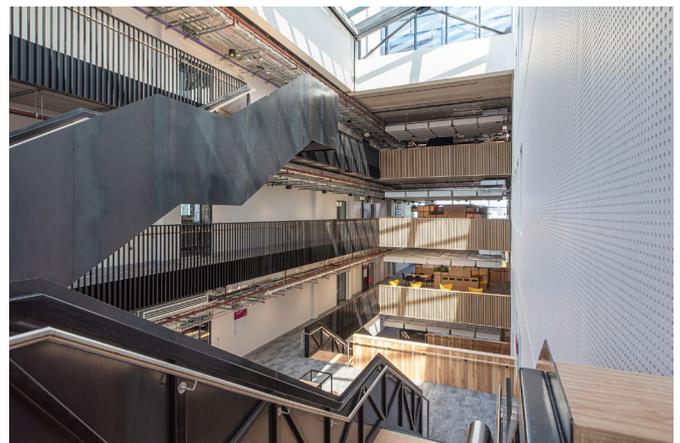
## SOLUTION

TRT Lighting collaborated with Thorlux Lighting to provide a bespoke illuminated handrail solution, integrated with SmartScan driver enclosures, to illuminate staircases across all three buildings.

Our handrail solution was selected to meet the architectural requirement for a continuous line of light, with back-to-back interconnected LED modules delivering consistent illumination along the full length of the handrail.

The handrail system was designed to integrate cleanly with the steel balustrade, maintaining visual simplicity while delivering robust performance suitable for a high-traffic public environment. All modules are mechanically secured using vandal-resistant fixings, with impact-resistant polycarbonate lenses providing durability and longevity.

The solution also supports resilience and safety through parallel electrical connection, ensuring that if one module fails, the remaining system continues to operate without interruption.



## OUTCOME

The illuminated handrail installation supports Sheffield Hallam University's wider objectives for safety, sustainability and future-ready building design. By integrating general and emergency lighting into the handrail itself, the solution reduces visual clutter, simplifies maintenance access, and aligns with the University's low-energy, low-carbon strategy.

Across more than 250 metres of handrail lighting, the scheme delivers consistent illumination, appropriate for intensive daily use in an educational environment.

The project demonstrates how integrated lighting design can enhance architectural intent while delivering practical benefits for facilities teams, supporting maintenance planning, and promoting long-term operational efficiency.