

## Architectural lighting



precision, as there's no room for touch-ups. Accuracy was key!

The striking concrete stair also posed several significant further design challenges for the team when combined with the requirement for a completely

### IN NUMBERS

**41,200sq m**

Size of the new London College of Fashion in east London

**107%**

Project's biodiversity net gain, including 39% reduction in CO2 emissions against the original brief and 19% reduction in embodied carbon over its 60-year lifecycle.

**430m**

Length of the custom timber LED handrail

retrospectively wireable system.

The solution, dependent on close coordination between all parties, required custom stainless-steel bracket back-boxes to be cast within the concrete stairs, linking driver locations with the handrail power requirements out on the stair.

### PROJECT COLLABORATION

The design imperative – in creating a single, thin homogenous line of light to the underside of the helical handrail – over such large distances was a key challenge, with the longest helical rail measuring more than 40m.

At the same time, it was important to be simultaneously reducing the handrail and bracket structure so as to create the minimalist design, which

added further complexity.

Although this is something common to all handrail projects that include long LED runs and minimal driver locations, on this installation all of these imperatives were amplified because of the larger scale and helical forms within the project.

Finally, as touched on above, for a project of this scope, it was vital for The Light Lab project manager Graeme Laurie to work in close conjunction with both the architect and lighting designer across all aspects of design and installation, to ensure a smooth process and successful delivery.

'The process was truly collaborative and allowed us to realise our vision for the project without compromising the original design,' agrees Bruno Marcelino, associate at Allies and Morrison.

'It's always very satisfying to see a completed project that closely resembles the original reference visuals but even more so on a project with this level of ambition, scope and finish,' agrees Graeme in conclusion.

### PROJECT CREDITS

**Clients:** University of Arts London, London College of Fashion

**Structure:** Buro Happold

**Services:** Buro Happold

**Façade:** Buro Happold

**Landscape:** LDA Design

**Acoustics:** Buro Happold

**Cost:** Gardiner & Theobald

**Project management:** Mace

**Lighting:** Buro Happold

**Bespoke lighting manufacture and installation:** The Light Lab



**Ellen Murphy** is marketing manager at The Light Lab

### NEED TO KNOW

- A 430m custom timber LED handrail has been installed within the new London College of Fashion's helical stairway.
- Challenges included its sheer length, and the fact it needed to incorporate helical, curved and straight sections.
- A further challenge was the fact the whole stairway is exposed concrete, meaning precision customised fixing solutions had to be devised.