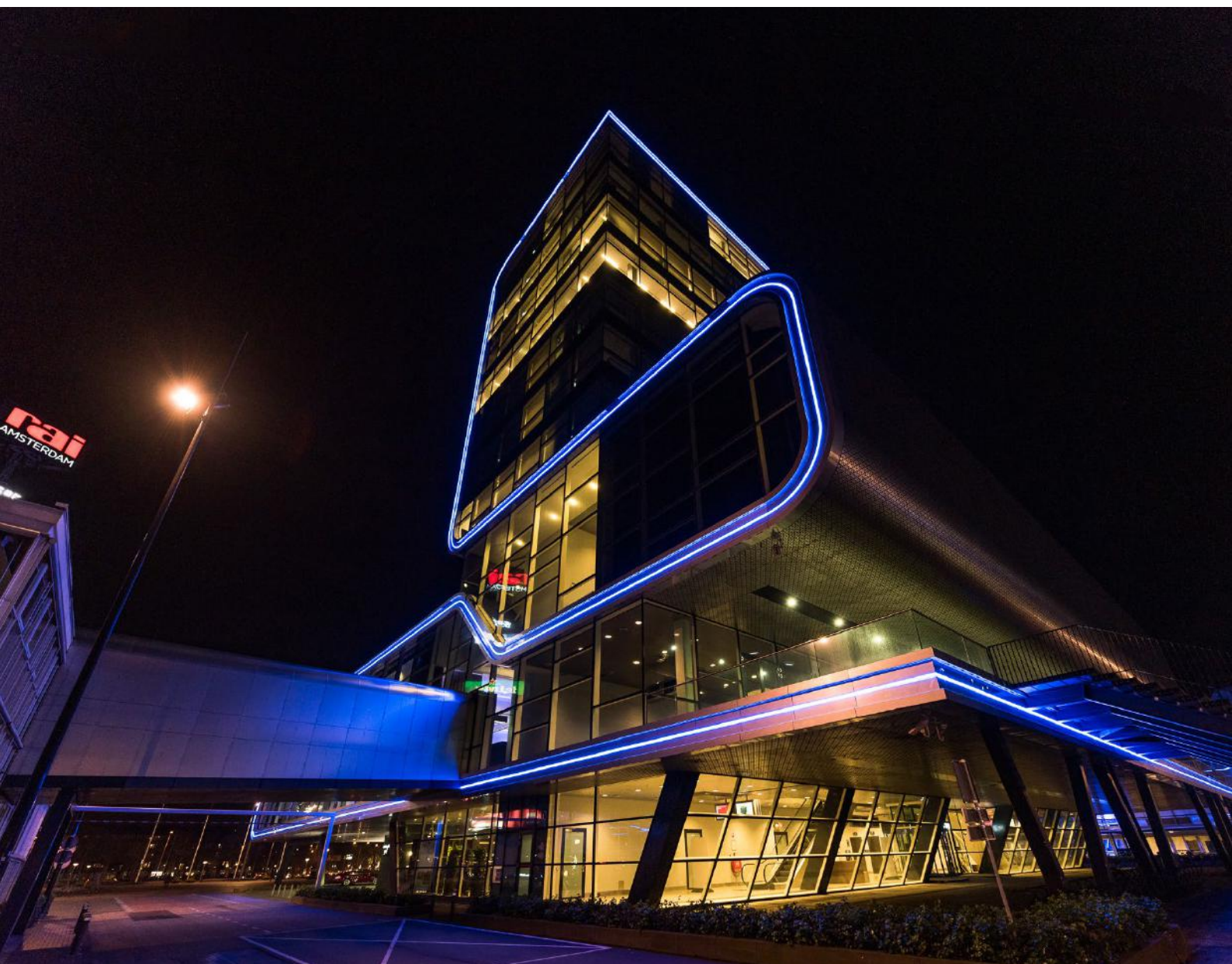


CASE STUDY



CLIENT: RAI Amsterdam

LOCATION: Amsterdam, The Netherlands

PROJECT: LED Contour Illumination



'LED contour lighting makes Elicium a landmark for the city.'

The Elicium is the impressive heart of RAI Amsterdam Convention Centre and is home to offices, a multifunctional ballroom and a variety of conference and meeting rooms. Opened in September 2009, the building comprises a low-rise section and a high-rise section and stands out because of its blue LED light line, which accentuates the Elicium's silhouette and ensures it is a recognisable feature in its setting.

Following on from work on the rest of RAI, a flexible light line of blue LEDs was installed around the Elicium in 2012/2013, which unfortunately turned out to be unsuited to this use. 'Not only did the lighting's light output fall rapidly, the lifespan was extremely short, reaching only two to four years', says Mohammed Bouzelmat, Technical Property Manager for Electrical Engineering at RAI Amsterdam. 'The LED light line turned out not to be UV-resistant and didn't have a high degree of protection (IP code) against the elements. The upshot of this was frequent faults, which was not only detrimental to the Elicium's image but also caused a very high Total Cost of Ownership (TCO). We all too often found ourselves having to replace the light lines (or parts thereof) with the aid of cherry pickers. In order to combat this, I spent two years looking for a suitable replacement product. I eventually discovered that fuel stations use similar lighting for their awnings. And that's what brought me into contact with Bever Innovations, who suggested integrating the Bever LED contour lighting.'

EVERY PROJECT IS BESPOKE

'Our LED contour lighting was originally developed as accent lighting for fuel station canopies, and it's also extremely well suited to being used as façade lighting', explains Tomas van Ham, Consultant Industrial Lighting at Bever Innovations. 'Our Fuel division sells approximately 20-25 kilometres of contour lighting to fuel stations throughout the world each year. The contour lighting consists of hard, plastic LED tubes measuring 2,400 mm, which can easily be truncated for each 55 mm section. Hence every project is bespoke. What's more, the use of special plugs and mounting clips makes the installation extremely



straightforward.' When connecting multiple tubes, a one-centimetre gap is required to compensate for the façade's and the LED tubes' coefficient of thermal expansion, he explains. 'Nevertheless, because both the tubes and the end caps are translucent, the tubes give the appearance of being a single, continuous light. Our LED contour lighting can withstand temperatures ranging from -30 up to +60°C, is UV-resistant and has an IP66 code (waterproof and dustproof). Combined with its expected lifespan of 80,000 burning hours, this lighting dovetails seamlessly with RAI Amsterdam's wishes.'

SCHEDULE OF REQUIREMENTS

The Elicium used to have an aluminium profile fitted with flexible light lines, says Bouzelmat. 'It needed to be possible for the new LED contour lighting to be integrated into that existing profile. What's more, the lighting also needed to be capable of being bent to certain degrees, in line with the building's contours. We were also looking for a proven, reliable lighting solution that a great deal of time and energy had been put into creating, from a supplier that would not only guarantee its product but also be prepared to contribute as much as possible to our thinking process. Bever Innovations demonstrated itself to be extremely good in these respects. We created a test set-up with the Bever LED contour lighting and compared this to other suppliers' products, after which we awarded the contract for approximately 650 LED contour lights to Bever Innovations.' Van Ham: 'We suggested a blue tube for the test set-up. Architect Benthem Crouwel Architects was extremely taken with the light output, intensity and light colour of this tube, but preferred to have a white tube with blue LEDs on the building's façades. To ensure optimum fulfilment of these requirements, we devised a bespoke solution: a white tube inside which blue LEDs are fitted. In order to achieve the 90° curves, we bent the tubes in a special mould in the factory beforehand. The Bever LED contour lighting was fitted and commissioned last summer.'

As is the case with the rest of the LED contour lighting, the Bever LED contour lighting automatically switches on as soon as dusk falls. 'This is around 5 p.m. in the winter months', says Bouzelmat. 'The lighting is off between 1 a.m. and 6 a.m. as standard, to prevent light pollution in the vicinity. However, the light does come back on between 6 a.m. and 8.30 a.m., when on-street activity is at its peak. Making RAI Amsterdam a standout landmark in Amsterdam-Zuid.'



BEVER INNOVATIONS

Techniekweg 2 | 4301 RT Zierikzee
The Netherlands

Tel +31 111 74 54 00

info@beverinnovations.com

www.beverinnovations.com