Case Study: Teglværks Bridge

A modern, innovative and integrated approach to handrail lighting

Designed by renowned Danish Architects Hvidt Arkitekten, this attractive bascule bridge spans the south harbour of Copenhagen, Denmark. Somewhat reminiscent of older bridges in the area, it combines classic elements with modern features and state-of-the-art technology - including a lighting system that is both aesthetically pleasing and functional.

Lighting challenges
The bridge is being used by motorists, cyclists and pedestrians - all in separate lanes. This called for an approach to provide effective lighting for all users, without sacrificing efficiency. Furthermore, the bridge, when lifted, is also seen from underneath by boats crossing it, so this added another group of users that needed to be satisfied. Combined with the usual challenges of bridge lighting such as vibration and exposure to wind and weather, it was extremely difficult to find a lighting solution that provides powerful illumination.

The LED iBond solution
Where other LED products are using Printed Circuit Boards, which typically only come in a small variety of lengths and are limited in shape, LED iBond’s patented technology creates customised lighting elements that can be adapted to a wide array of shapes, forms and architectural details. This was particularly useful when illuminating the Teglværks bridge: Standard LED solutions would have compromised the visual comfort of some of the bridges users. However, LED iBond manufactured custom-made elements that adapted to the architectural surroundings. This meant that the amount and spacing of the LEDs could be fine tuned to provide the right level of illumination for drivers, cyclists, and pedestrians. Paired with an advanced optical attachment (including a serigraphed pattern), a unique lighting scenario has been created that provides safety and visual comfort, as well as a stunning night-time identity for this architectural icon.

LED iBond was not only able to solve this lighting challenge better than conventional solutions, but it also offered considerable cost advantages and an extremely quick and easy installation process.
Case Study: Teglværks Bridge

A modern, innovative and integrated approach to handrail lighting

Designer/Architect:
Hvidt Arkitekter

Installation date:
2010

Luminous flux per unit:
45lm/W (incl optics)

Colour temperature:
4000K

Special features:
Optical attachment, Vandal proof

For more Information, please visit
www.ledibond.com