

zeta

Specialist Lighting

Seven Dials Trust - Covent Garden, London

Zeta Specialist Lighting worked with decorative lantern manufacturer JW-UK, to create a bespoke LED solution for eleven heritage façade mounted street lanterns located in Mercers Walk, Covent Garden, on behalf of The Seven Dials Trust.

The Challenge

The Seven Dials Trust works in partnership with local authorities, landowners, national agencies and local amenity groups to protect and enhance the historic fabric of Seven Dials and to promote and bring about exemplary environmental improvements in the area.

Seven Dials was laid out in the early 1690s by Thomas Neale MP 'The Great Projector' and its layout has remained almost unaltered, with many of the original houses and massive eighteenth century brewery buildings to the south remaining. It has thriving residential and business communities with many interesting shops and restaurants as well as five theatres. The challenge here, and in other conservation areas, is to achieve lighting which enhances the historic fabric, as well as lighting the footways and carriageways.

Mercers Walk is a residential, retail and restaurant destination situated around a newly developed public courtyard in Covent Garden. In line with its objective to reduce energy consumption and carbon emissions and to deliver illumination suitable for conservation areas, the Trust was looking for an LED retro-fit solution to replace the 60W Cosmopolis lamps previously used in its bespoke Covent Garden Lantern™. Designed by Trustee Paul Draper, the lantern, acroteria and bracket arm achieved Historic England's desire for an authentic reproduction of a nineteenth century 'Windsor' lantern.



The Trust's aim to achieve a soft, welcoming, illuminated public realm, which met the needs of all of its users, had presented a particular engineering challenge that had been difficult to resolve to date. Looking to employ lessons from the past and combine the latest technology to deliver a suitable LED heritage lighting solution, it conducted a trial, evaluating the quality of light and colour temperature of multiple LED light sources as well as the appearance of the various solutions within the traditional Victorian 'sugar bowl' diffuser.

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The Solution

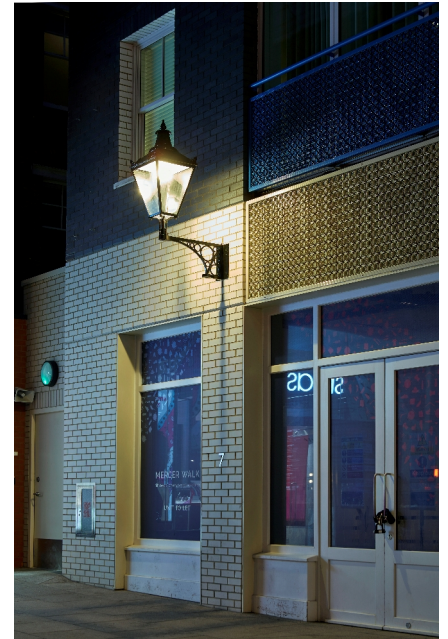
Following the trial, Zeta's SmartScape Heritage retro-fit solution was favoured. With its intelligent design, the integrated light engine can be constructed to fit into a vast range of different heritage lantern shapes and sizes, making it a wholly flexible retro-fit solution for heritage-style public lighting.

In order to accommodate the Trust's requirement to deliver illumination levels in-keeping with the conservation area and optimum light spread when utilising the traditional Victorian 'sugar bowl' diffuser, Zeta developed a bespoke solution. Working closely with JW-UK, who manufactured the lanterns, Zeta adapted its standard SmartScape Heritage template to accommodate the client's requested old style diffuser; incorporating an aluminium cylinder (which also acted as a heat sink) to direct the LED light through the 'sugar bowl' and using a specially selected lens.

Key Benefits

Mercer's Walk now benefits from eleven strategically positioned 'Windsor' style nineteenth century façade mounted lanterns that expertly combine modern LED illumination with a traditional aesthetics. The nineteenth century 'sugar bowls' (historically used to enhance gas lighting) diffuse the light and reduce any glare, while the LEDs provide highly efficient illumination suitable for a historic conservation area, whilst achieving significant cost savings in energy bills.

Set to a maximum of just 40W, the new heritage solution also utilises a DALI controllable driver, providing the ability for the client to dim down the units remotely if required, further optimising the energy savings.



Solution

- Zeta SmartScape Heritage

For more info on the Seven Dials Trust visit www.sevendials.com