

Lighting design



I feel very lucky. 'Sophisticated', 'exciting' and 'elegantly stunning' are just some of the comments I receive for my work on a regular basis.

I'm based in New Zealand and when I was approached by the Christchurch Casino to relight the outside top part of its building, I was both excited and immediately knew it was going to be a challenge.

Christchurch is still slowly recovering from the devastating earthquake of 2011. The brief to light the Christchurch Casino was therefore in part about attracting people back to the central city, enhancing and

giving a vibrancy back to Victoria and Peterborough Streets.

It could also be seen in the context of the wider 'Enlightening Christchurch' campaign, which is working to bring the city back to life with light, promoting lighting as an essential regeneration tool and, very simply, putting Christchurch back on the world stage where it belongs.

I am also a member of the International Dark-Sky Association and so it was also important for me to come up with a scheme that was sympathetic in terms of light pollution and exterior illumination.

THEATRE AND MUSICALS

Yet, as someone who has a strong background in lighting theatre and musicals, I also saw this project as an opportunity to bring some of the magic of the theatre back to my home town.

The result is, I'd argue, a wonderful example of how you can integrate lighting while keeping the architectural integrity of a building intact; you cannot see any of the light fittings, yet the scheme delivers a sophisticated 'symphony' of colour and movement.

The use of the correct colours in theatre

is essential in conveying the message and the emotion to the audience. So, I was able to mix specific colours to excite and attract people, while at the same time having respect for the architecture.

One of my passions when it comes to lighting and architecture is seeing the effect, not the fittings. To that end, I was able to construct a false pelmet all around the building. The building had four black lines of granite negative detail accentuating the building's elegance.

The top line was a perfect place to hide the fittings concealed by day and by night. This false pelmet was specifically designed not only to hide the fittings, but also act as a light reflector.

The design of the pelmet needed to appear as the original granite line. There were several factors that also needed to be taken into account when designing it: wind, rain, snow, heat expansion, weight and secured fixings.

UPWARDS ILLUMINATION WITH LIMITED LIGHT SPILL

I also wanted to achieve three key lighting effects:

- The creation of a perfect line of light without interruption that appears as a stand-alone fitting
- A silhouette effect on the individual embossed playing card concrete characters
- Achieving an uninterrupted line of light at the pelmet.

I achieved these effects by using 10deg fittings that projected light 1.8m away, and then bouncing light off the bullnose capping.

The 'magic' was then achieved by the individual detailed focusing of 185 fittings. The accuracy of this allowed us to create a sophisticated elegant appearance, illuminating the building upwards with limited light spill.

The system is DMX-programmed with a two-minute light moving colour 'feast' of lighting.

The fact it can be changed for an event or function was also a real bonus for the client. The colour pallet was incredibly challenging to achieve but extremely exciting to create, given the different composition of the grey concrete panels.

The colours created were unique and specific to the casino. I happily spent hours plotting to create these colours! For me, it's not just about putting colour on buildings, it's how you use the colour, as we do in the theatre. The time taken to understand what the project requires and how colour can affect the outcome is all in the time taken in creating and plotting the scenes.



I have been immensely pleased and proud that the design has since won several awards, including being recognised by, and winning, an award from the Royal Astronomical Society of New Zealand for a lighting scheme that was both efficient and effective while being sustainable and protecting of the night environment.

The scheme has also been recognised by the Illumination Engineering Society of Australia and New Zealand and won the Lighting Council New Zealand Lighting Award at the prestigious biennial Master Electricians Excellence Awards.

Inevitably, of course, the last word needs to go to the client. For me, this from Christchurch Casino chief executive Brett Anderson pretty much sums why this scheme has been so important and has had such an impact.

'I was blown away,' he said. 'If I stand on the street corner now, the lighting has changed the building at night. It has revitalized a 23-year-old building that had got a bit lost in the dark space left after the earthquakes.'

Kevin Cawley is a lighting designer based in Christchurch, New Zealand