

Museum of Childhood gets GROWN-UP LIGHTING

When the V&A's Museum of Childhood decided to jettison its T8 installation, it turned to a colourful LED scheme to make an impression on visitors

The Victoria & Albert Museum of Childhood in East London opened in 1872 as the Bethnal Green Museum. It occupied a prefabricated iron structure from the original V&A buildings in South Kensington, and served principally as a repository for anything the V&A wasn't sure what to do with.

Gradually, however, the site developed a focus on education and youth, and in 1974 became the Museum of Childhood.

Seven years ago, the museum installed a T8 fluorescent lighting system over its central hall, which has high, arched ceilings and a tiled marble floor. But maintaining the lights was a problem, so DHA Design was hired to replace the old fittings with LEDs that would last longer and need less attention.

A flexible future

The new system had to be more flexible than its predecessor and incorporate lighting that could be adjusted for special exhibits or evening events. It also had to have a lower electrical load.

To achieve this, DHA Design used Lumenline Pendant fittings from Lumenpulse linked to a Pharos touch panel controller. The fittings were suspended on new stainless steel cables from the roof structure at a high level. DHA reused the existing suspension system, which is fixed to the iron beams that support the roof.

Lumenpulse manufactured three custom rectangular profile designs with unlit corners. They support the Lumenline Pendant fittings, and Beacon



The Lumenline installation provides uplighting, downlighting and emergency lighting

Muse track spotlights from Concord.

The new installation slashes the amount of energy used for accent lighting. Six of the Lumenline luminaires can also provide emergency lighting.

Peter Fordham, director of DHA, says: 'We were struggling to find a manufacturer that could provide a suspended profile system that combined upward, downward and 3CCT track in the same profile. Lumenpulse achieved all three, and also a fourth, for emergency lighting.'

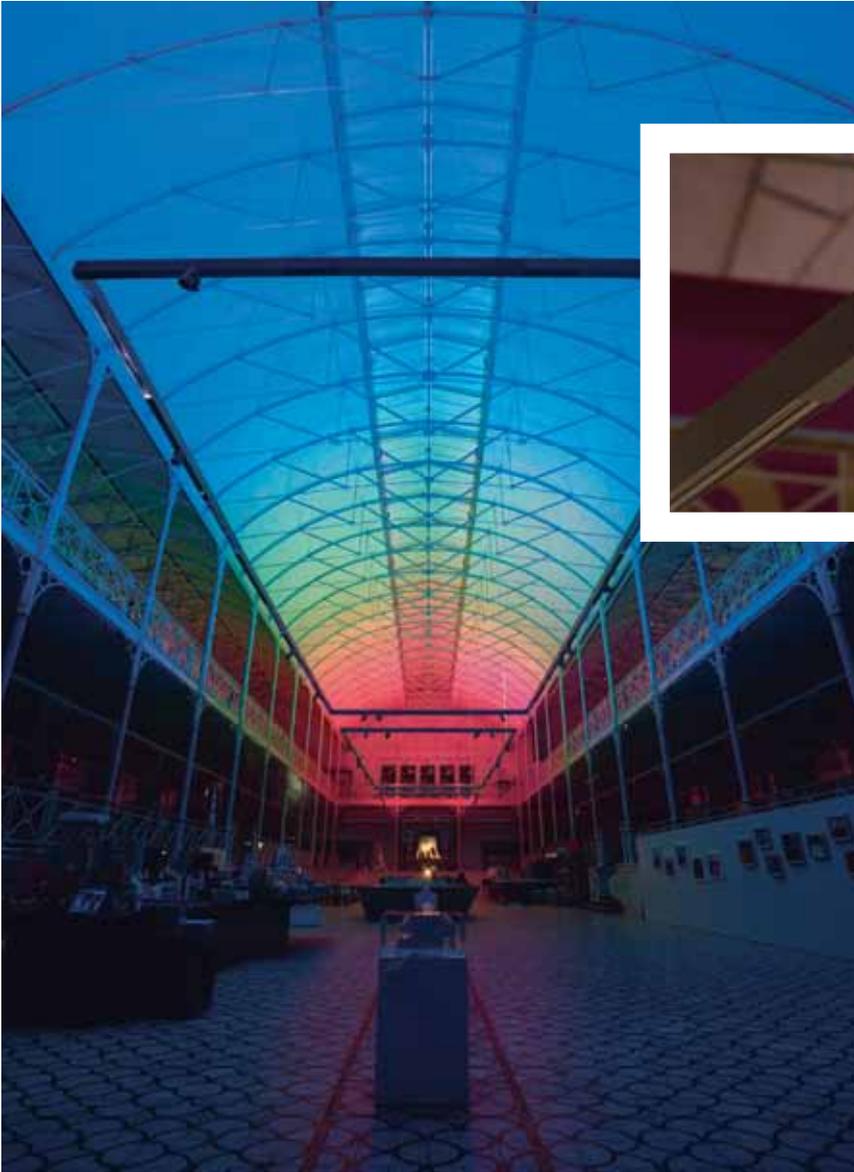
Looking up

As well as providing white light for uniform illumination at floor level, the fittings also illuminate the Victorian ceiling. 'We were keen to introduce an upward lighting component to the ceiling to draw your attention upwards as you entered the museum, ▶

BILL OF MATERIALS



- 6 x Lumenline Pendant Direct (3000K)
- 30 x Lumenline Pendant Direct/Indirect (direct, 3000K; indirect, colour-changing)
- 189 Concord Beacon Muse spotlights
- Pharos touch panel control system



The ceiling lighting can change colour for special effects



and to fully appreciate the elegance of the iron structure above,' says Fordham.

The colour-changing indirect light is set to a static soft pink hue during the day. The top of the curved roof is 8m above the top of the Lumenline fittings and the scheme achieves a uniform wash. Also, the top of the Lumenline is visible from the first floor galleries, so it was important that the source of upward light should be concealed behind diffusers.



After dark, there is a slow, staggered colour-changing show. Because the lighting in each rectangle is individually addressable, the client can control the intensity of the direct and indirect light as desired. A programmed sequence can create a slow colour-change effect that moves across the ceiling.

New lit environment

'Before our lighting design, the environment was very static and very flat; the lighting was either on or off,' says Fordham. 'The previous scheme used bare fluorescent battens that provided a rather harshly lit environment. There was also no upward light to the ceiling, which previously appeared quite gloomy.'

'The current downward light component is less harsh than the original fluorescent scheme, and the overall design is more configurable, which is especially important for corporate events.'

'The environment has been much improved during the daytime and at night, revealing much more of the historic architecture of the building to the visitor,' Fordham says.

'This is particularly true of the upward light component we have introduced into the space. We hope the visitor will be more aware of the new, lit environment than the fittings themselves.'

ENERGY DASHBOARD ●●●●●●

3.5kW

CEILING LIGHTING

Load per square metre down from 6.57W/m² to 6.25W/m²

2.5kW

GROUND FLOOR SPOTLIGHTING

Load per square metre down from 6.75W/m² to 1.76W/m²