

Test Pattern:

An Eco-Smart Lighting Design in Burbank

As with many urban development projects in southern California, the new Marriott Residence Inn in Burbank required a public art component. But these days, public good means more than just aesthetic adornments in public spaces. It means designing with an "earth-aware" sensitivity that reduces the environmental impact of these installations.

For the Marriott Residence Inn project, developer R.D. Olson, designer Peter Fink of Form Associates, and lighting systems integrator and supplier Entertainment Lighting Services combined to create an installation that met both requirements, turning to eco-friendly and economically beneficial LED lighting for the solution.

The resulting light-art design has turned the new hotel into a signature building at the gateway to the Burbank's Media Center commercial zone, which includes NBC Studios, Warner Brothers Studios, Sony/Columbia Pictures, and Walt Disney Studios.

Form Associates was awarded the commission following a definition and selection process overseen by Beatrix Barker of Barker & Associates Public Art Advisory. Form also recently completed a lighting art project for the new Trio multiuse development in Pasadena, California, again in collaboration with ELS, where eco-smart LED lighting is employed to dramatic effect.

Inspired by the color test strips that broadcasters used to calibrate the transmission of color in the early days of television, Fink created a traffic-stopping look for the new hotel. The programmable, color-changing, and color-mixing LED fixtures are applied around the building's exterior. "Burbank is associated with the advent of color broadcasting," the designer says. "In the early days of television, test cards with color strips were used to calibrate the color of the broadcast. So I thought, why not emulate the color test pattern in the design of the Marriott Residence Inn?" To do so, he specified LED lighting fixtures from Philips



Solid State Lighting.

At the development, vertical fingers of LED light surround the exterior of the structure, converging at the corner of the building where horizontal color bars, in stacked formation, punctuate the intersection. To reduce their environmental footprint, the tall vertical lights are pointed downward, to avoid polluting the night sky.

"Typically, light applied to the exterior of a building will flatten it," Fink says. "But in this installation, the LED lighting creates a luminescent box, giving depth to the structure and announcing, 'Marriott here."

Entertainment Lighting Services supplied and installed the Philips LED lighting fixtures and Pharos Lighting Playback Controller from ETC.

John Mitchell, ELS' director of sales and installation systems, notes, "The choice of LEDs was brilliant, on many levels. Programmable LEDs offer infinite color and sequencing possibilities, thanks to their RGB color-mixing and color-changing feature, so Peter's visionary design could be reproduced exactly as he created it. Additionally, LEDs are indoorand outdoor-rated, so they can be placed just about anywhere. Furthermore, because they are so highly efficient in converting energy to light, they consume very little power. LEDs are hugely cost-efficient over the long term."

The core of the installation is the Pharos Lighting Playback Controller. "Pharos' LPC offers many advanced lighting management features and overall performance advantages," says Mitchell.

"The controller is extremely robust and reliable—a 10 out of 10. There are no moving parts, no buttons to push. It's the ultimate plug-and-play device."

With its timeline-based lighting control and versatile triggering options, the Pharos provides the Marriott Burbank facility with the ability to create special seasonal and event-related looks—changing colors to suit Christmas, Fourth of July, or Valentine's Day, for example. In addition, its internal astronomical clock synchronizes start/stop times with changing daylight hours throughout the year, for further operational cost savings. Accessible via a Web interface, the PLC features remote diagnostics and content changes for easy updating.

The entire Marriott installation is powered using just five 20A circuits. Rated at 50,000-100,000 hours, the Philips Solid State fixtures will last upwards of seven years, thus greatly reducing the toxic waste that conventional lamps would create. Traditional color-changing lighting techniques would have been at least two times more expensive to purchase, power, replace, and maintain, Mitchell estimates.

"The LED fixtures are so efficient and long-lasting, that there is little-to-no maintenance required. There is no service contract with this project—it doesn't need one. As an added plus, we can even reprogram the lighting sequence via a Web connection to the Pharos PLC control unit to freshen the look of the presentation, if the need arises," Mitchell adds.