

# LIGHTING

ART & SCIENCE FOR INTERNATIONAL DESIGNERS

VOL 30 ISSUE ONE FEBRUARY/MARCH 2010

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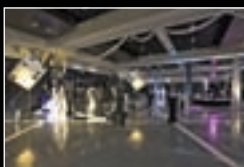
  
LightingScience  
Changing the way the world experiences light.



**Energy Saving &  
Lighting Technologies**

# Energy Saving & Efficient

## LIGHTING TECHNOLOGIES



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## DYNAMIC ILLUMINATION OF CULTURE: LIGHTEMOTION

### Quartier des spectacles

The new architectural lighting of Théâtre Maisonneuve of Place des Arts and the Musée d'art contemporain de Montréal (MAC) was unveiled late last year as part of the overall Lighting Plan of the Quartier des spectacles.

Located in downtown Montreal, the Quartier des spectacles has been the cultural heart of the city for over 100 years. Home to an impressive number of artistic events, this destination is matched only by Broadway in New York City for its concentration of cultural events, but cannot be compared to any other district because of the diverse cultural programming that is found there.

The Lighting Plan, initiated by the team of Ruedi Baur and Jean Beaudoin, is the first phase of the new visual identity of the Quartier des spectacles. The objective is to develop each cultural site within the district as though it is on stage, under the spotlight.

Lightemotion created this vast Lighting Plan of Place des Arts, which also includes Salle Wilfrid-Pelletier and the new Grand Foyer of Place des Arts in 2010.

The challenge in the project was in integrating the lighting of each building in the overall lighting signature of Place des Arts while ensuring that the museum and the theatre have their own visual identity. Lightemotion chose to establish a dialogue between the bottom and top of each building by using dynamic lighting that suggests either movement or stasis.

The stair-like upper volume of Théâtre Maisonneuve of Place des Arts will be wrapped in a fixed and warm light, while the lower volume of the building is covered with bands of white LEDs embedded in concrete walls. These bands produce a dynamic programmable LED belt effect that will showcase the large windows of the building. To complement the new perspective of the theatre, directional lamps create a visual contrast between the top and bottom volumes of the building, giving the illusion that the roof is suspended in air.

In a similar fashion, the base of the MAC will be studded with lights that flood the facades of the museum in blue and white, while in contrast, the copper volume that caps the building is bathed in red amber.

Besides the play of light that will establish a dialogue between the architectural volumes of the building, the designers have added a temporal element on the wall that faces the inner court. An illuminated pendulum will appear in the form of a moving point of light before coming to rest every 15 minutes and spreading over the entire surface of the wall.

Each of these two lighting concepts respects the architecture of the buildings, carefully concealing the light sources that, for the sake of saving energy, are largely LED.



### Lighting detail:

The lighting of the MAC includes 185 LED fixtures using a maximum of 36w each. The base of the building and the colonnade is illuminated by 100 Lumenpluse Lumenbeam RGB fixtures. The top copper volume of the building is illuminated with an array of 85 Colorkinetics ColorBlast 12 Powercore. The lamp life of the LED fixtures is a minimum of 100,000 hours. The entire system is controlled on a DMX controller Martin Maxxyz PC.

The middle section of the Théâtre Maisonneuve of Place des Arts is equipped with 65 x 3 metre linear white LED battens that are integrated in the concrete detail, with the structure not visible to the public. The total consumption for the LED battens is 2kw.

For more information visit: [www.quartierdesspectacles.com](http://www.quartierdesspectacles.com) or [www.lightemotion.ca](http://www.lightemotion.ca)

*Images by Simon Davitt*

### AUCKLAND WAR MEMORIAL MUSEUM



#### **Lightemotion has completed the all-new LED light design for New Zealand's Auckland Museum.**

For this classic illumination, the Museum, along with its governing heritage authority, approved an all-LED environmental design that sets the historic location aglow like a jewel in the night. With roughly 400 LED fixtures, the entire structure is elegantly illuminated like a beacon in the night within one of Auckland's precious green spaces, The Domain, utilising between 50 and 74 watts per unit, totalling only one per cent of the building's annual energy consumption.

Beginning its classical illumination at the structure's base, a golden hue climbs the building's surface in a warm golden tone, intricately leading to the top, where its detailed cornice is finely illuminated, creating a visual effect that is reputed to be one of the most progressive LED installations in New Zealand. The lighting scheme will evolve throughout the course of the evening to three special compositions.

Lightemotion founder, François Roupinian, ensured the project's feasibility in terms of energy consumption.

"Of particular importance was the impact of such an endeavour on the protected heritage property. Because of the Museum and its discerning pedigree, a design that was traditional yet adaptable was necessary," said Roupinian. "In consideration that the location is regularly used for special and private events, the external lighting colour scheme may be programmed to create the ambience for whichever event or special national event may be taking place."

Part of this rejuvenation project was to also include a design for the Museum's Grand Foyer. Here, the open sky lit space is adorned with giant neo-classical columns which have been illuminated, creating an effect which makes their presence stunningly dramatic with an imposing quality that enhances the aesthetic, and brings another dimension to this already rich and diverse building steeped in New Zealand's history.

#### **Lighting detail:**

The Auckland Museum external lighting utilises 400 fixtures, ranging from 36 to 74w and including LED RGB Colorblast 12 Powercore and ColorGraze from Colorkinetics. The lamp life of the LED fixtures is a minimum 100,000 hours. The front illumination and centre colonnade are lit by Martin exterior 200 projectors and In grade fixtures, and use a colour mixing system and metal halide lamp of 150w with lamp life of 12,000 hours. The entire system is controlled on a DMX controller Martin Maxxyz PC.

For more information visit: [www.aucklandmuseum.com](http://www.aucklandmuseum.com) or [www.lightemotion.ca](http://www.lightemotion.ca)

*Images by Simon Davitt*