

PROFESSIONAL **LIGHTING** DESIGN



Magazine for
professional lighting design

main focus

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lighting design

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Light+Building 2010

Art piece art college

Gateway Building, Maryland Institute College of Art, Baltimore/USA.

Text: David Müller

Photos: Paul Burk, Robert Creamer

"The artist's genius is manifest in his choice of clay." This quote from Edgar Allen Poe is also relevant for professional lighting designers. In times when energy saving and sustainability are often in conflict with creating quality spaces for users, the choice of light source is of prime importance. People visiting Baltimore/USA, where Poe spent many years of his life, and looking for his house in the center of town are in for a grand surprise: next to one of the highways there is a conglomeration of glass buildings, some of which appear to be on stilts. Different colours are reflected on their shiny surfaces. After dark a random array of lights shine out from within its translucent shell.

The Gateway Building is located on West Mount Royal Avenue in Baltimore/USA. It houses students' apartments, performance space and a career advising center.



What looks like a giant snail is actually the Gateway Building – a residence hall for students from the Maryland Institute College of Art. A team of architects from RTKL has designed a lively, communicative and open structure for the students, and lighting designer Glenn Shrum has provided the building with a simple but vibrant lighting scheme.

For the last 184 years, the Maryland Institute College of Art, MICA, in Baltimore/USA has enjoyed the reputation of one of the most highly regarded art schools in the United States. A total of 1932 students from 53 different countries attend courses here on Photography, Art History or Video and Film Art. The campus is located to the north of the center of Baltimore, a re-emerging area of the city. Work began on the Gateway in 2006, the goal being to provide high-quality accommodation for the resident students. The 32 million dollar project comprises over 8000 square meters (87,000 square feet) of space for students' apartments, studio spaces, a multi-use performance space and a career advising center. The structure is situated on a busy street, West Mount Royal Avenue, and defines the northern edge of the campus. In that sense it is a highly representative building for the College. "This building is an anchor site for our campus", Fred Lazarus, President of MICA goes as far as to say.

RTKL was commissioned to design the architecture. The architecture firm initiated an in-house competition inviting employees under the age of 30 from any of their nine worldwide offices to submit conceptual building designs. The winners were Grant Armstrong and Christy Wright from RTKL's London office. Their design comprises a ten-story structure with a dominant studio tower on the northern side of the site. The tower wraps around itself like a snail shell, forming a 600 square meter interior courtyard. There are already 217 students living in the Gateway.

When the students approach the Gateway Building after dark, to return home or to meet friends, they have to use a path in a small park. Since people often associate parks with fear or danger of attack because of someone or something lurking behind trees or in the bushes, the client expressly wanted this piece of land leading to the College to be brightly lit. Lighting designer Glenn Shrum had five poles installed with theatrical fixtures mounted on them to put even lighting onto the path. The poles are seven and a half meters high and each is equipped with four wide-beam projectors to cut down the number of disturbing objects in the park. "I used theatrical lighting hardware to reference the creative activity that incurs inside this college building's art studios and experimental theatre," says Glenn Shrum. The projectors are sourced with T6 metal halide lamps with a warm colour temperature of 3000 Kelvin.

In addition, Shrum decided to illuminate the seven Japanese Zelkova trees in the park. The client questioned illuminating these trees because the budget was tight and he did not consider it necessary. However, on the one hand these trees are clearly visible to the public and thus an integral part of the nighttime identity of the College. On the other hand, Shrum explained, a brightly lit path does not necessarily give users a feeling of security



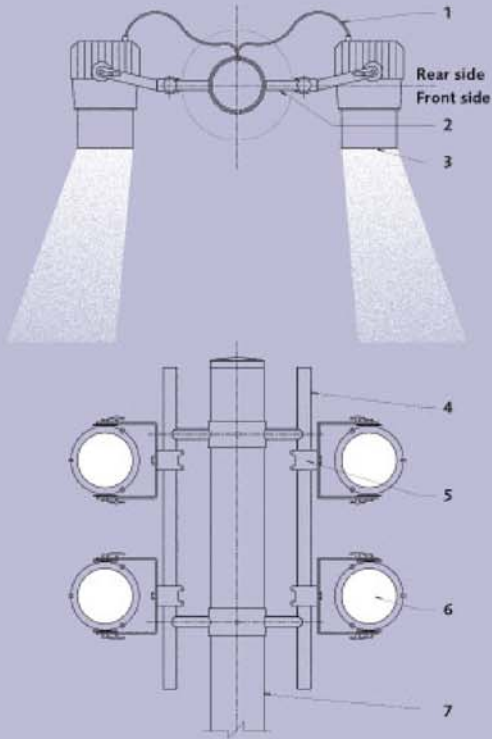
The building facade is fully glazed. Translucent interlayers incorporated into specific sections of glazing create an attractive pattern when viewed from the outside, and generate interesting effects in the corridors during the daytime.

if the trees nearby are left in the shadows. This additional vertical surface lighting was, therefore, crucial. The clients understood, and the trees are now uplit using three 39 Watt PAR 20 metal halide lamps, rendering them an integral part of the overall image of the Gateway Buildings.

The façade of the building did not receive any exterior lighting scheme. The outer walls are completely glazed. The students' apartments are housed on the third floor upwards directly behind the glazed facade, which serves as windows to the student accommodation. Glenn Shrum wanted to exploit this architectural design feature. The students' bedrooms are of different sizes, and are not always occupied. In other words the number of windows where the lights are on are changing all the time. Based on this random pattern, and simultaneously supporting it, Shrum suggested a translucent interlayer be incorporated into the outer sections of glazing and on the courtyard facades at specifically defined intervals. The random pattern is thus accentuated and integrated into the structure as a stylistic means. Incident daylight gives rise to shadow patterns, which add interest to the spaces behind the façade – simple, but effective and aesthetically very pleasing.

For the facade of the Studio Tower, the northernmost section of the Gateway Building, which contain numerous studio spaces, Shrum worked with the project graphic designers to develop an LED installation. Each of the initials that stand for the Maryland Institute College of Art – MICA – spans one story. They are positioned one beneath the other. The LEDs are located inside the studio spaces and protected from damage by metal mesh.

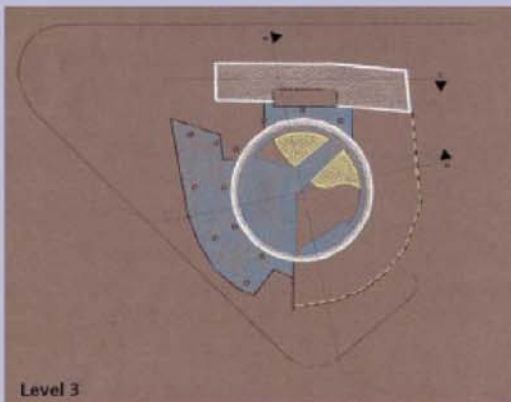
The lighting design in the students' rooms was kept relatively simple, partly for budget reasons. Linear tri-



Legend

- 1 Fixtures hardwired to recessed J-box in pole
- 2 Horizontal supports parallel to adjacent curb
- 3 Glare shield
- 4 Two-inch outer diameter stainless steel tube
- 5 Stainless steel mounting clamp with locking focus
- 6 Metal halide luminaire, light distribution varies
- 7 Eight-inch diameter, seven and a half meter high pole; powdercoated in black

Detail of projectors mounted on a pole.



Schematic lighting design plans.



The main entrance is on the south side of the building. Metal halide wall washers illuminate the dominant white wall (left), which continues into the northern section of the building and is visible from outside through the glazed facade. Twin rows of metal halide downlights are installed on the ceiling and on the underside of the balconies. The lighting for the temporary exhibitions in the lobby is not handled by professional lighting designers.

phosphor lamps with a colour temperature of 3500 Kelvin are the only source of lighting in these spaces. Pity really! These lamps have also been applied in the corridors – in this case they are mounted on the ceiling at regular intervals, and can be clearly seen from the interior courtyard. This solution is definitely not ideal, especially in the rooms where the students spend time in the evening or to relax. But here, too, the decision as to the light source was made as a result of the tight budget. All the fixtures applied are vandalproof.

People enter the Gateway Building at the main entrance on the south side and at ground floor level. The first thing that catches your eye are the massive concrete columns, which occur as a primary structural element throughout the building. "In my opinion, the columns do not necessarily enhance the architecture, which is why I decided not to light them, but purposefully to leave them unlit," lighting designer Glenn Shrum explains. Both facade elements and doors are glazed in this section. The visitor's eye is drawn towards elements in the interior rather than to the concrete pillars. Inside the lobby, directly opposite the entrance there is a solid white wall which continues into the northern section of the building. Given the glazed facade, this white wall is clearly visible from outside, which gave Shrum the idea of designing lighting for it to place it in context with the building itself. Metal halide wall washers mounted on the ceiling put uniform light over the wall and give it a dominant presence within the space.

Standing in the lobby, the rounded, continuous swirl of the building becomes truly evident – both when looking up towards the ceiling as well as by following the structure of the balconies that rest on the dominant stone pillars. The lighting design concept was to follow the forms dictated by the architectural concept. Twin rows of metal halide downlights are installed on the cei-

ling and on the underside of the balconies and provide "ambient luminescence", as opposed to the "focal glow" generated by the lighting design for the white wall. Again, the concept is clean and simple, but highly effective and aesthetic at the same time – typical core stylistic features of the Gateway Building.

Exhibitions are staged regularly in the lobby. The lighting for the changing exhibitions of paintings or art objects is not handled by professional lighting designers, however. The fact that these lighting solutions are not always beneficial for the overall concept or for the galleries is unfortunate, especially since the authors of the works are the artists of the future.

There are two elevators and a flight of stairs that take residents and visitors from the lobby to the different floors. On the first and second floors where, as is the case for the student housing areas, primarily ceiling-mounted fluorescent battens are applied, there is a café and an advising center. The 600 square meter interior courtyard can be accessed from the third floor. This space contains two landscaped sections with bamboo trees and a small stage for drama performances or concerts. There are chairs and tables set up for students to take a rest from their studies, or to watch a stage performance. From here it is possible to gain insight into the corridors and living quarters through the glazed facade, which underlines the open nature of the structure.

The bamboo trees are illuminated by metal halide uplights equipped with green gels. The rest of the landscaped area has been left unlit. The interior courtyard has a balcony, from where you can enjoy a magnificent view of the park next to the College. A regular layout of metal halide fixtures are mounted on the underside of the passageway above, which practically encircles the entire courtyard. These downlights also support the geometry of the structure, discreetly but effectively. At fourth floor



The 600 square meter interior courtyard is accessed from the third floor. This space contains two landscaped sections and a small stage for drama performances or concerts. The bamboo trees are illuminated by uplights with green gels. Downlights are mounted on the underside of the passageway. Long metal rods are fixed to the facade. These can be used to mount luminaires for performances or to illuminate the courtyard space. The regular layout of fluorescent battens in the corridors are clearly visible through the glazed facades.

level, there are five thirteen-meter long metal rods fixed to the facade. If required, these can be used to mount luminaires to illuminate the courtyard space.

Budget restrictions often lead to reductions in quality on architectural projects. It is unfortunately not out of the ordinary for the costs for the lighting to be cut first, and for users and clients to end up with poorly designed schemes and poor quality products. Glenn Shrum made a virtue of necessity: economical, and yet cleverly applied light sources and good quality, efficient luminaires applied inside the building and in the grounds of the College do not make the architectural lighting designed for the Gateway Building the most exciting in the world, but in a sober and simple way the concept succeeds in presenting the young architects' structure to its best advantage. It does this in a highly functional but creative way. The dedication and conviction that Shrum displayed to educate the client into understanding what is important to enhance the architecture, and incorporating the lighting in the students' quarters which was visible from the outside – and might have become a potential problem – into an integral and attractive design feature demonstrate the true significance of this project. The art college becomes an art piece – without even trying.

Project team:

Client: Maryland Institute College of Art

Architects: RTKL Associates

Landscape architects: Higgins-Lazarus Landscape Architecture

Lighting design: Glenn Shrum/Flux Studio

Products applied:

Theatrical projectors on poles: 39/70 watt T6 metal halide, Altman

Uplights on the trees: 39 watt PAR 20 metal halide lamps, Winona

Vandal resistant battens:

28 watt T5 fluorescent, Paramount Industries

Lobby wall washers: 70 watt T6 metal halide, Elliptipar

Surface mounted downlights in courtyard:

39 watt T6 metal halide 3000K, Erco

Bar mounted fixtures at courtyard:

39 watt T6 metal halide 3000K, Altman

