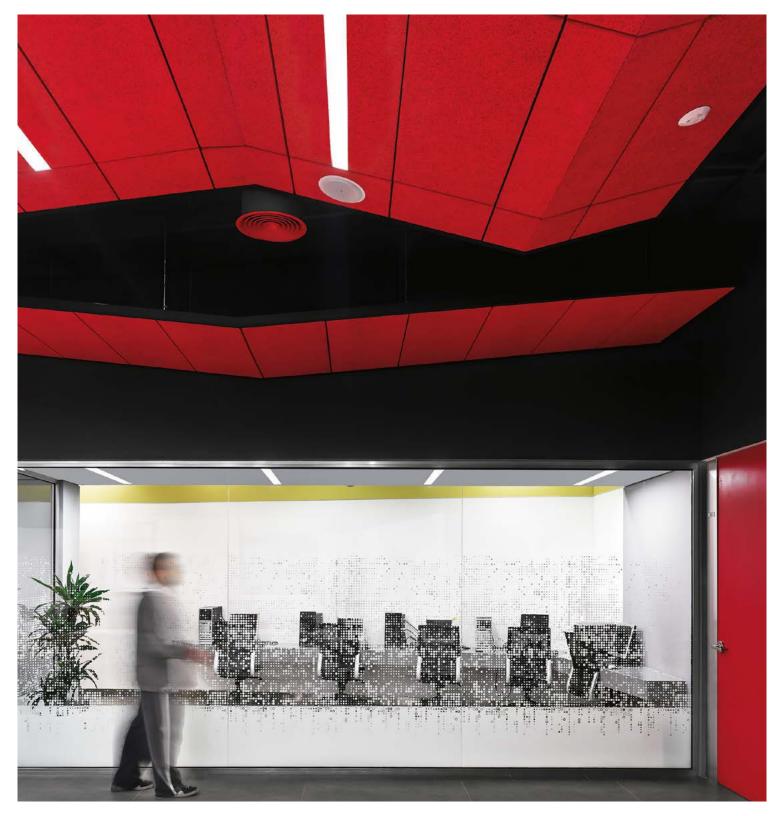
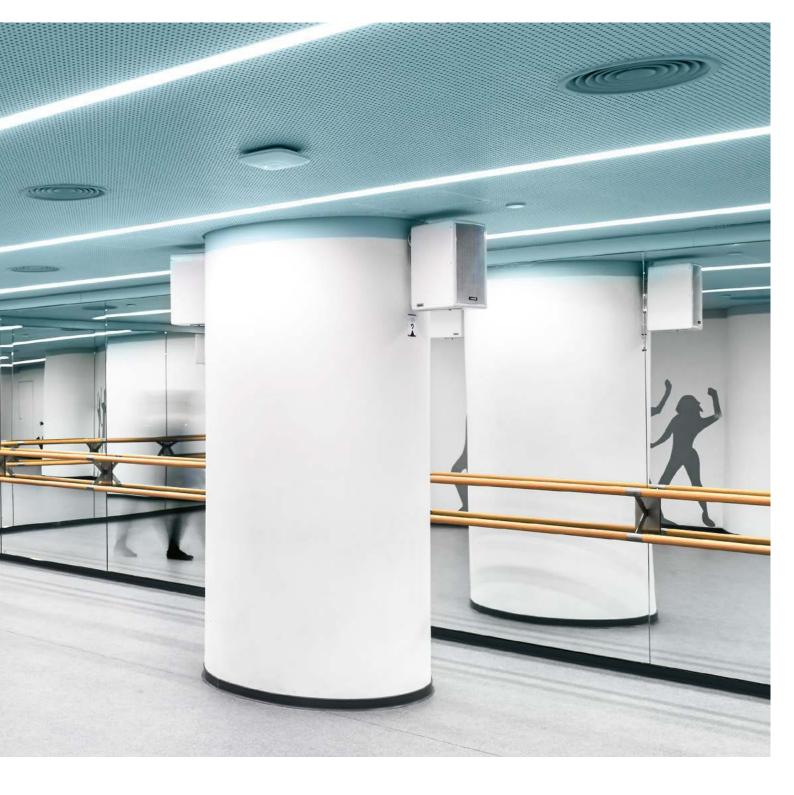


LAU – Wadad Said Khoury Student Center





Lebanese American University (LAU), Wadad Said Khoury Student Center, Beirut | LB Interior architecture: Cherine Saroufim Sacy, Beirut | LB Lighting design: IDEPCONSULT, Mounir Saroufim & Partners, Beirut | LB Photos: Robert James Bova Lighting solutions: SLOTLIGHT recessed (common areas, hallways, gym, music room and dance hall), ECOOS recessed (offices), ONDARIA surface mounted (social areas), 2LIGHT recessed (serving areas of the cafeteria)



An elegant and linear design concept

The Lebanese American University is a leading non-religious private higher education institution in Lebanon. It operates under a charter from the Board of Regents of the University of the State of New York and is accredited by the New England Association of Schools and Colleges. The university has more than 8,100 enrolled students. Through generous donations the university was able to refurbish the campus. The Student Centre is the social hub of the university. During breaks and after class, students meet in the centre for various activities, including dancing, gym classes and band practice. The student cafeteria is also located in the centre. No daylight is present, which meant that the new lighting solution had to compensate by creating a pleasant atmosphere for the students and supporting their biological rhythm.

Light for offices and communication

It is the user that is at the heart of contemporary office concepts

Enhancing the sense of wellbeing

No daylight enters the spacious university cafeteria, which is also the social epicentre for students who gather here before and after classes. It was important to create the feeling of natural daylight entering the room to enhance wellbeing and to motivate the students. A bespoke lighting solution with three artificial skylights fits the bill perfectly. Fluorescent lamps behind a diffuse cover provide balanced lighting with a combination of warm and cold colour temperatures. The intelligent lighting control system then adjusts the light intensity and colour according to the time of day. In this way, the lighting solution has been designed with the biological aspects of light in mind. By balancing the sleep hormone melatonin and stabilising the circadian rhythm of the body, higher stimulation levels and increased alertness can be achieved. Natural light has a positive impact on humans. Recreating the feeling of natural daylight has a similar influence on the students, who do not notice the lack of natural light.



In the windowless cafeteria, the lack of daylight is compensated for by a customised lighting solution incorporating three skylights.



Pure and soothing light in uniform lines makes SLOTLIGHT the perfect design feature



In the morning the cafeteria is illuminated with cool 6500 K to activate the students in line with their natural circadian rhythm

During lunchtime the lighting scene changes to a neutral 4200 K







The cafeteria changes to a relaxing 2700 K colour temperature during the course of the afternoon



The iF Design Award winnining ONDARIA gives a special touch to the room

⑳

Creating identity

LAU aimed for a modern architectural design with elegant lines. The solution from Zumtobel was able to support this concept perfectly. SLOTLIGHT was used to provide calming diffuse light in a continuous line, without dark spots that could potentially disturb the students. The gym, dance and music hall required bright and uniform lighting to ensure excellent visibility and to avoid excessive shadows. The straightforward lines provide effective lighting and guidance in the hallways. Creating an attractive lighting solution in harmony with the architecture was a priority for the lighting design team. They also wanted students to identify themselves with the university, as they spend a significant amount of time on the campus.

ONDARIA, mainly used in the social areas, suits the modern style of the university. A discreet indirect component for ceiling illumination underlines the three-dimensional effect of the luminaire and adds a vibrant design element to the room. ECOOS completes the contemporary design in the offices, delivering a relaxed and pleasant lighting effect.



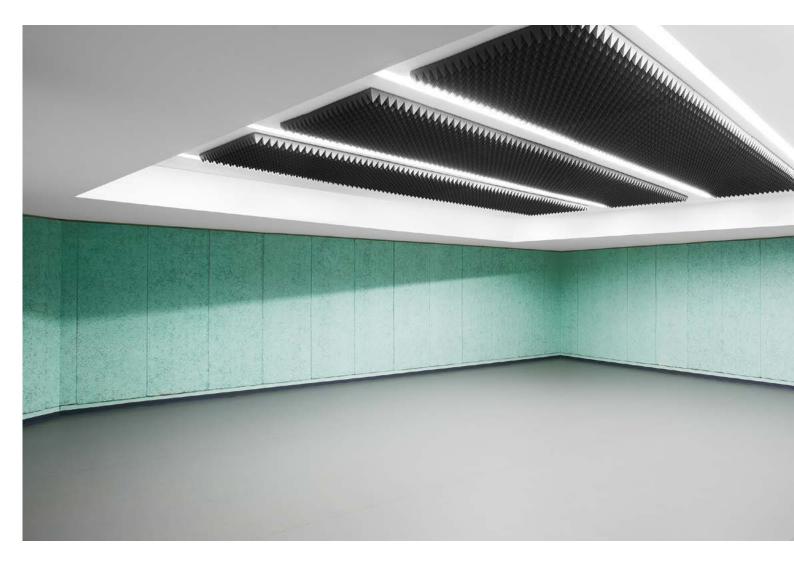
$\textcircled{\label{eq:linear}{\label{eq:linear}}}$

Reducing costs

The old lighting solution used T26 lamps. The complete solution was changed to T16 as part of the refurbishment of the LAU, helping significantly reduce energy consumption. The lighting management system enables users to control individual luminaires and to define and select a series of different lighting scenes. LED lighting technology also plays a key role in lowering energy consumption and therefore maximising potential cost savings.

Light for offices and communication

Users at the heart of contemporary office environments



Light and architecture harmonise with each other at the Wadad Said Khoury Student Center of LAU University. SLOTLIGHT light lines incorporating Tetris technology and a separate white painted sheet steel reflector ensure pleasantly uniform light distribution. This superior lighting quality enhances the students' motivation and helps them remain focused on their work even during long hours of training. Sophisticated design increases the satisfaction of teachers and students, thus strengthening their bond with the school.



Enhancing the sense of wellbeing

A successful lighting solution creates visual conditions that make people feel at ease. It should motivate them and help them concentrate on what they need to do. Parameters such as uniform illumination of task areas, bright walls and ceilings plus a pleasant atmosphere can have a direct impact on the physical and mental wellbeing of individuals.



Creating identity Lighting scenes that can be adjusted to meet user preferences by means of variable colour temperature and light intensity help increase employee satisfaction and create identity. High-quality product design and architectural lighting design also play a significant role.



Reducing costs Energy efficiency, long service life and lighting management systems enable lighting solutions to play a key role in reducing overall operating costs. The reputation and importance of a company or building will also benefit from a sustainable approach.



"One of the most challenging spaces we designed was the main cafeteria. Always crowded and buzzing with students at all hours of the day, the design of the cafeteria was developed in a way to create three artificial skylights that mimic daylight in both temperature and intensity, giving occupants a notion of time and weather. The shape of the skylights as well as the wooden fins act as sound breakers. Zumtobel's input and expertise with regards to the skylights was crucial to the success of the project."

Cherine Saroufim Sacy, M. Interior Architecture, MFA. Lighting Design

What was your design vision for LAU?

We were looking to create a space where students and staff could interact in a welcoming and relaxed atmosphere. Dynamism was a big part of the design – both interior and lighting – as the building is a student center buzzing with people throughout the day. We decided to use linear fixtures to produce a dynamic and vibrant feeling.

As a lighting designer, what were the most crucial points during the design stage and how did that apply to LAU?

To completely blend the lighting into the interior design, without diverting attention away from the architecture. It was also important to ensure that we had the right lighting levels and light distribution for the task areas, whilst maintaining the architectural character of the project.

What gave you confidence to work with Zumtobel?

Well, one of the main reasons was the presence and response time to questions - and by that I mean e-mail and physical presence. It gives you confidence when you know that you will always get an immediate response, even if things become tricky. The reputation of Zumtobel for working with the best technology was also a factor. You know that they provide reliable quality. Another pleasant surprise was the budget. We had an agreement about the budget and this was respected by both parties. I am glad that there was no sudden 50% increase.

What was the most challenging aspect and how did you overcome this?

Definitely the cafeteria – ensuring that it was well lit and welcoming, despite the absence of daylight. We began with 3D models of the skylights before creating small technical models for mock-ups. We are actually still developing some lighting scenes and scenarios. It will take some time to pin down the final concept.

What was important for the client in terms of lighting design?

It was the first time that the client had worked with an architect who has an in-house lighting designer. They were pleasantly surprised that it was possible to install such sophisticated products and still to remain within the budget. This was mainly due to the lighting design approach. We used the light as it was required, without over-lighting the spaces or adding "decorative" lighting where it was not really needed.

You recently won the illumination award for the project. How do you feel about that?

I am very excited about that award. It recognises that the job of a lighting designer, in coordination with the rest of the team members (e.g. architects, interiors, electro-mechanical) is vitally important to the overall success of the project. I am also really happy that the project was a success for the end user.

How do you rate this project in terms of your top 10 projects?

This is definitely one of my favourite projects. I would put it second behind a landscape project I did in Byblos in 2008 (Byblos Sud) and just ahead of the BDL Money Museum.

Wadad Said Khoury Student Center

wins illumination Award





The IES Illumination Awards provide a unique opportunity for public recognition of professionalism, ingenuity and originality in lighting design, based on the individual merit of each entry. Judges are selected from a broad professional spectrum that represents knowledge of lighting and design excellence. The judging system is based entirely on how well the lighting design meets the program criteria. This program is not a competition and is therefore open to any entrant, regardless of professional affiliations or qualifications. The lighting design of the Wadad Said Khoury Student Center of the LAU in Beirut, Lebanon, was recognised with one of these awards. LAU aimed for a modern architectural design, maintaining elegant and straight lines throughout the project. SLOTLIGHT from Zumtobel suited these requirements perfectly and was used in the gym, music room, dance hall and corridors. ONDARIA complements the modern feel of the social areas. The bespoke skylights solution in the cafeteria adds a special feature to the room and is the realization of an intelligent lighting concept.

Fluorescent lamps provide a balanced solution with warm and cold colour temperatures under a diffuse cover. The lighting control system adjusts the light intensity and colour temperature. This solution allows the end user to configure and set as many different scenes as they require and can simulate any time of day or year.

Congratulations to Cherine Saroufim Sacy, M. Interior Architecture, MFA. Lighting Design from IDEPCONSULT Mounir Saroufim and Partners for winning this richly deserved award. Cherine Saroufim Sacy said: "I was overwhelmed to receive the award and I am very thankful for the recognition of our design. It is great to have such strong partners like Zumtobel, who can really help us realise our design visions".



United Arab Emirates

Zumtobel Lighting GmbH (Branch) Light Centre 4B St., Al Quoz Industrial Area 1 Dubai T +971 04 3404646 F +971 04 3476957 info@zumtobel.ae dubai.zumtobel.com

Headquarters Zumtobel Lighting GmbH Schweizer Strasse 30 Postfach 72 6851 Dornbirn, AUSTRIA T +43/(0)5572/390-0 info@zumtobel.info

ZG Licht Mitte-Ost GmbH Grevenmarschstrasse 74-78 32657 Lemgo, GERMANY T +49/(0)5261 212-0 F +49/(0)5261 212-7777 info@zumtobel.de

zumtobel.com



Top quality – with a five-year guarantee. As a globally leading luminaire manufacturer, Zumtobel provides a five year manufacturer's guarantee on all Zumtobel branded products subject to registration within 90 days from the invoice date and in accordance with the terms of guarantee at **zumtobel.com/guarantee**.

10/14 © Zumtobel Lighting GmbH Technical data was correct at time of going to press. We reserve the right to make technical changes without notice. Please contact your local sales office for further information. For the sake of the environment: Luxo Light is chlorine-free paper from sustainably managed forests and certified sources.