

## 55 Princess Street Top lighting for prime location

*55 Princess Street is a prime location for offices in the heart of Manchester. As part of a recent refurbishment, design firm Hoare Lea Lighting was commissioned to provide*

The building accommodates more than 17,000 m<sup>2</sup> of office space arranged over seven floors. With its glass and metal façade it is a striking structure in the centre of Manchester. Lighting design plays a prominent role with mood and accent lighting combining with indirect lighting to create an elegant space. The interior lighting scheme extends to the canopy on the street side, thereby visually linking interior and exterior.

### Stunning design

. LED+LENSTM -technology combines high lighting levels and light comfort. A nearly invisible LED module, integrated in the centre of each luminaire makes additional connections for emergency lighting unnecessary.

**SOLUTION B:**  
Smart Safety &  
Emergency  
Lighting

**SOLUTION E:**  
Architectural  
Integrated  
Lighting Systems



## Hempelmann Kassel: expert chooses ETAP

To accommodate its steady growth, Hempelmann Kassel has recently commissioned a new and larger building. It is comprised of a modern warehouse, showrooms for e.g. light engineering and offices for its 45 employees. ETAP supplied a total of approx. 400 lighting luminaires and emergency lighting for a surface area of 40,000 m<sup>2</sup>.

Optimised energy use is achieved mainly via the daylight dependent ELS control. Fewer than 200 E5 luminaires provide excellent and uniform lighting in the warehouse. The industrial rail system incorporates 60 escape route and signage luminaires K1, enabling employees to rapidly and safely exit the building in the event of an emergency.

In the offices and showrooms, 65 UM18 luminaires with the innovative MesoOptics™ technology create a pleasant work environment, without any glare on the computer screens. A total of 50 high-quality emergency lighting luminaires of the K9 series with state-of-the-art LED technology ensure the safety of the employees. The ETAP Safety Manager (ESM), a central, computer controlled monitoring and control system, continuously checks the proper operation of each individual emergency lighting luminaire. The entire building is a showcase of efficient, energy-saving lighting in warehouses and offices. It obviously reinforces the credibility of Hempelmann Kassel in the area of high quality lighting concepts.

**SOLUTION B:**  
Smart Safety,  
Emergency &  
Security Lighting

**SOLUTION C:**  
Energy Savings  
Technologies &  
Systems



### Lighting Controls Materials

- Emergency lighting with ESM
- daylight dependent ELS control



## European Parliament

In the context of the 'Relighting' programme, the European Parliament has renovated the lighting in the corridors of the Paul-Henri Spaak building. ETAP was responsible for both the emergency lighting and the accent lighting. The solution not only saved on energy, but also made the building safer. It is also seamlessly integrated in the existing architecture.

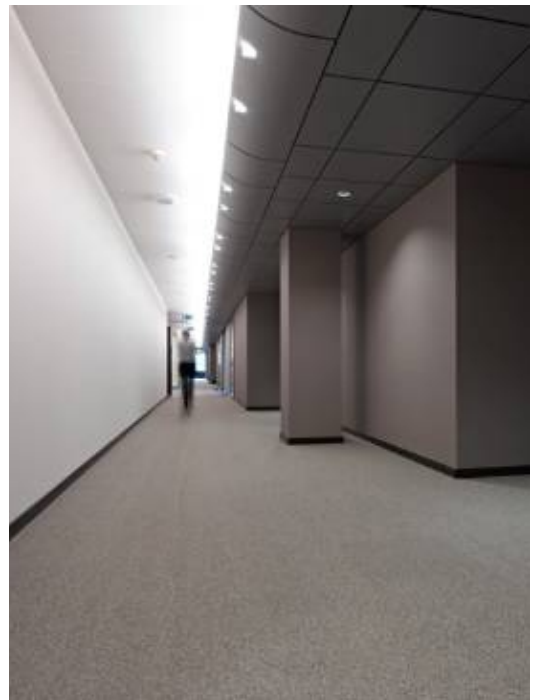
ETAP Sales Director Michel Nicosia explains: "We chose the K5 luminaires because of the maximum integration in the ceiling. The choice for the K9 escape route luminaires was also a matter of architectural integration: they fit in seamlessly with the newly installed Flare spots. "With these new luminaires we increase the safety," says Nicosia. "And soon we will be going a step further. The entire emergency lighting installation is connected in a later phase to the ETAP Safety Manager (ESM). This is a central monitoring and operating system that allows the customer to monitor the installation and check at all times whether the connected luminaires are standard compliant and are working correctly."

The customer also wanted them to be low in maintenance. To meet this demand, an exceptional cabling solution was provided: by putting plugs on the luminaire on the one hand and the battery and driver on the other hand, battery and driver can be dismantled separately. This allows you to carry out maintenance or repairs without having to remove the luminaires from the ceiling.

### Lighting Controls Materials

- Emergency lighting with ESM

**SOLUTION B:**  
Smart Safety,  
Emergency &  
Security Lighting



## Itsme

The light source for ETAP's K4 signage series is an OLED, an LED version based on organic materials. The organic materials are evenly spread across the entire surface of the safety sign. Hence the pictogram is no longer illuminated, it is the light source itself, which results in perfectly uniform lighting.

In addition, the K4 is also the slimmest emergency luminaire on the market. Since light source and sign form a single unit, the panel is a mere 4 mm thick. Electronics are built into the wall or ceiling. The luminaires are powered by EBS Compact, ETAP's central battery system.

Design and innovation is one thing, but safety obviously remains the first concern in emergency lighting. That is why the K4 luminaire is fitted with patented light source monitoring: a sensor constantly measures the sign's effective brightness and issues a warning as soon as it no longer satisfies the standard. Furthermore itsme's Rotterdam subsidiary's emergency installation is connected to ESM (ETAP Safety Manager). ESM continuously monitors the operation of the luminaires and immediately reports battery or operational issues. It also controls the central battery system EBS Compact. With ETAP's OLED emergency lighting, itsme puts safety in the forefront and enhances its innovative image, by providing a visible example to its customers.

### Lighting Controls Materials

- EBS compact
- ETAP Safety Manager (ESM)



**SOLUTION B:**  
Smart Safety,  
Emergency &  
Security Lighting

## Schröder Landmaschinen

The German company Schröder Landmaschinen was fully focused on innovative technology for the expansion of its headquarters in Wildeshausen. The Excellum2 light control system fits in perfectly with this ambition.

Schröder's facility management did not choose Excellum2 for no reason. Decisive factors included energy efficiency, user-friendliness and flexibility. In addition, Excellum2 is able to communicate with various other protocols, which makes the system future-proof.

In addition, the alarm installation was integrated into the light control. When at the end of the day the alarm is activated, the light fixtures are automatically switched off, except those that have to stay switched on for safety reasons. In the beginning of the working day, when the alarm is deactivated, the lighting installation switches over to normal calendar mode. During a break-in alert, all luminaires are switched on with full illuminance. A good example of a 'smart building': the integration of several building techniques to maximize efficiency of the various technical installations.

**SOLUTION A:**  
Lighting  
Automation &  
BMS Integration

**SOLUTION B:**  
Smart Safety,  
Emergency &  
Security Lighting

**SOLUTION C:**  
Energy Savings  
Technologies &  
Systems

### EXCELLUM2 OPERATING PRINCIPLE

- Calendar function: at the beginning of the working day, the lighting installation automatically goes into ON mode; in the evening it goes into OFF mode. The calendar can be programmed months or even years in advance, taking into account public holidays and other closures. Also when exceptionally the lighting has to stay on longer, this can be adjusted in advance. Outdoor lighting and lighting in the showroom are controlled separately. Lights are on but dimmed at night to prevent the building being in complete darkness.
- Offices and small conference rooms: when lighting is in ON mode, motion detection is activated. If no motion is detected for 15 minutes, lighting is dimmed to 30% of illuminance. After another five minutes, the luminaires are switched off.
- Offices with windows: same as other offices. In addition, the lighting is automatically dimmed to 500 lux on the work surface by means of daylight sensors.
- Corridors: when lighting is in ON mode, motion detection is activated. If no motion is detected for 10 minutes, lighting is dimmed to 20%. The lighting is never completely switched off in the corridors for comfort reasons.
- Large conference room: when lighting is in ON mode, three scenarios are possible: a) lighting switched on 100%; b) all luminaires 50% dimmed; c) only downlights are switched on.
- The lighting can also always be manually switched on or off by means of the switches.

### Lighting Controls Materials

- 2 Excellum2 controllers
- multi-sensors for presence detection and daylight-dependent control
- DALI push-buttons and switches for manual light control



## Solvay Corporate Centre

Chemical giant Solvay has moved its Corporate Centre to Neder-Over-Heembeek near Brussels. The building was thoroughly renovated, which also included new lighting. Taking into account energy-efficiency, but also with a great sense of architecture.

“This is the company's business card,” clarified Technical Manager José Thomas. “We just wanted a little more refinement in the details here and a superior architectural finish, but nonetheless highly efficient and without budgetary adventures. And in this ETAP has helped us enormously. They were the only ones to be able to seamlessly integrate the luminaires into the climate ceiling with metal slats. The solution is highly energy-efficient, also because it is fitted with daylight control and presence detection.” The central staircase is flanked by two columns of seven R8 luminaires each: a clever example of lighting architecture. “Illuminating a staircase is no easy feat,” Thomas claims. “This solution provides even light distribution across the three floors.”

### Fresh and whimsical

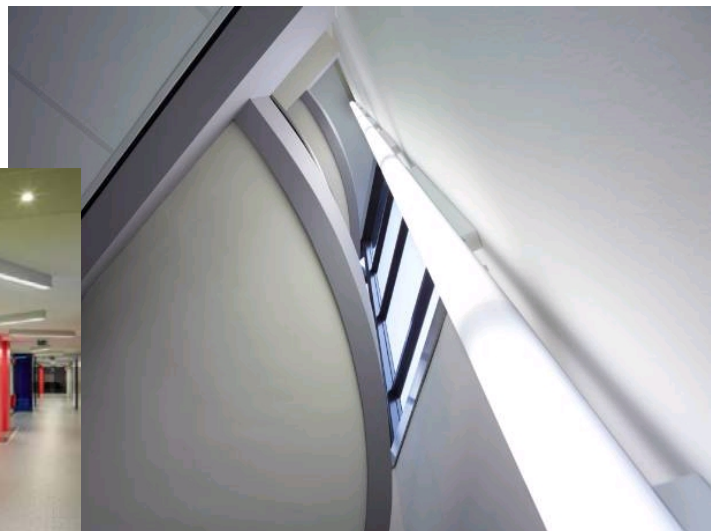
The financial department's building was also given a facelift. “Here the architect abandoned the traditional restraint that applies to our offices,” states Thomas. “It could all be a little fresher and more whimsical.” The new approach is illustrated by the fanciful line pattern of Kardó 90 luminaires in the corridors, which appear to have been mounted randomly on the ceiling. The clear Flare spots provide functional lighting in the individual offices enclosed in coloured Plexiglas.

### Materials

- UT1 diffusers
- R8
- Kardó 90

**SOLUTION C:**  
Energy Savings  
Technologies &  
Systems

**SOLUTION E:**  
Architectural  
Integrated  
Lighting Systems



## Solarwind .... Symbol of sustainability

The principal's mission, collaboration between project developers Progroup and Schuler, was ambitious: Erecting a passive building in the heart of Luxembourg that would satisfy three international environmental seals of approval: BREEAM (English), HQE (French) and DGNB (German). The result, Solarwind, has therefore become a symbol for sustainable building by using environmentally friendly materials and the application of energy-efficient technologies such as solar panels, wind turbines and geothermal energy.

The lighting's power consumption had to be less than 5 Watt per square metre. Due to the building's specific requirements, it was furthermore immediately clear that a tailored lighting solution was necessary. The integration of light control and other techniques were high on the agenda as well. For office lighting, together with the Boydens consultancy we developed a modular reflector luminaire with fluorescent lamps. The luminaire's housing also incorporates fire detection technology. Luminaires near the outside windows are fitted with an ELS sensor, which dims the light depending on available daylight. Each module is furthermore fitted with a motion detector, which switches on the light whenever someone enters the office.

Flare LED downlights have a high specific luminous flux. We have provided for air extraction and in addition have integrated the K9 module for emergency lighting. It goes without saying that the combination of three technologies in a single luminaire represents a major asset both aesthetically and practically. The lobby and corridors between offices feature Elisse luminaires in surface-mounted version. For the emergency lighting in the corridors, ETAP was able to convince the client to go for the aesthetic and energy-efficient K9 LED lighting.

### Lighting Controls Materials

- ELS
- Motion Detection
- EBS Dynamic Light

**SOLUTION C:**  
Energy Savings  
Technologies &  
Systems

**SOLUTION E:**  
Architectural  
Integrated  
Lighting Systems



## L und M GmbH .... Spectacular lighting for server room

In May 2010, the foundation stone was laid for a new building according to the latest ecological standards and adapted to the lean work processes that L und M pursues. A special requirement to be met by the Kiel architect firm HKW Architekten was to put the core server of the company in the limelight through inventive and innovative lighting.

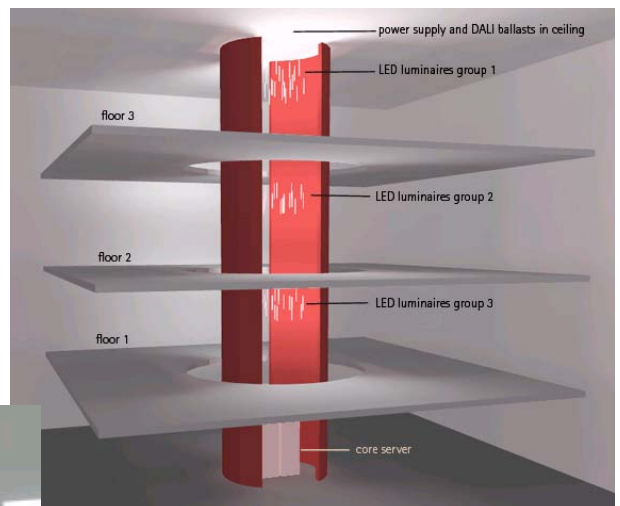
The luminaires made of 90 tubular HaloOptics® polycarbonate diffusors are suspended from a ceiling unit to transparent feed cables of various lengths. The ceiling unit also contains DALI ballasts ensuring that the 90 LED lamps can be dimmed in three independent groups according to each building floor. Thus diverse beam paths and light patterns can be generated via programmable dynamic scenes from the core servers at the bottom of the building across the entire building height.

With this unique LED installation, ETAP has impressively succeeded in reflecting the L und M mission, efficient flow of information, via the clever use of light.

### Lighting Controls Materials

- DALI Ballasts
- DALI Control system for grouping & scenes

**SOLUTION D:**  
Architectural  
Scenes & Modes





## Furet du Nord Lille.... High Ceiling Lighting

Illuminating an atrium from a height of 18 metres and achieving illuminance in excess of 800 lux! Impossible? Not to ETAP.. The result can be admired in the main branch of the Le Furet du Nord bookstore in Lille.

Le Furet du Nord on Place Charles de Gaulle in Lille is a concept in northern France. Books, multimedia and office supplies are on display over seven floors with an impressive 6,000 m<sup>2</sup> in surface area. Every day this bookstore, one of the largest in Europe, attracts thousands of buyers in search of reading or audio material.

In 2014 the store underwent a thorough overhaul, with a lot of attention on lighting. In this context, the focus was on adjusted lighting levels in the various zones, visual comfort and energy efficiency. It is no coincidence that the architectural firm TGMP turned to ETAP for this project. ETAP has been Le Furet's partner for ten years, with projects in both newbuilds and conversions, in Englos, Coquelles, Aéroville and Dunkirk to name a few.

Since the atrium serves as the store's lobby as well as its reception area, the lighting level on the ground floor had to be high: more than 800 lux. The client requested an energy-efficient LED solution that would not require maintenance. ETAP's answer consisted of two 8-metre E7 lines with narrow-angle lenses. Our engineers were confident, which was a good thing: the correct measurement of the lighting level could only be carried out after the scaffolding required to install the luminaires at that height, was removed. Mission more than accomplished, and as a bonus it appeared that the imposing relief on one of the walls – a 'brick library' – could benefit from floodlight, thus attracting even more attention.

### Materials

- Atrium: E7 lines with narrow-angle lenses
- For each zone (middle aisles, wall racks, cash register) ETAP supplied the most suitable solution – primarily LED luminaires.

**SOLUTION E:**  
Architectural  
Integrated  
Lighting Systems

