

## PRESS INFORMATION

### Innovation and integration



An individual lighting solution from Siteco for multi-space workplaces in the Maki Building on the Novartis Campus in Basel.

For some years now the headquarters of Novartis Pharma AG has been a place of highly active building construction: the Novartis Campus is being created on the St. Johann works location in Basel. The area will be consistently redesigned to the year 2030 and the plan is for around 10,000 people to work there. The numerous research, representation and administration buildings will be constructed according to the designs of internationally prominent architects. Tadao Ando, David Chipperfield, Diener & Diener, Frank O. Gehry, Adolf Krischanitz, Peter Märkli, Álvaro Siza and others will be leaving their signature there or indeed have already done so. The master plan that combines all sections to form one unity was drawn up by Vittorio Magnago Lampugnani from Milan. One of the recently completed campus buildings is the WSJ 174 office building, the so-called Maki Building, planned by the Japanese architect Fumihiko Maki. It contains office space on seven storeys with a total of 150 multi-space workplaces.

#### Uninterrupted expanses

'Light follows architecture' was the motto of the planners and architects with this project, characterised by its high level of transparency and openness. The individual office storeys are connected with each other by cross-storey rooms. Not one wall disrupts the storeys, framed by large window areas. This uninterrupted expanse was not in the least to be disturbed by the lighting concept. The lighting designers from Licht Kunst Licht were therefore confronted with the difficult task of keeping the volumes of space free of luminaire bodies but still to supply good visual conditions for office work.

The challenge was solved with a customer-specific development implemented in close cooperation

## PRESS INFORMATION

### Innovation and integration

with Siteco: in terms of lighting technology a luminaire with merely 1.4 m mounting height was planned that therefore comes significantly closer to visual tasks than floor-standing luminaires with a height of around 1.9 m. This was on the one hand the pre-condition for the intelligent use of LED technology as the direct distribution component, and on the other hand a particular challenge for the handling of indirect light. In order to achieve homogeneous ceiling illumination, sideboard luminaires with LEDs were specified for the office furniture with precisely the same location heights in addition to the LED luminaires for the desks.

#### Integrated twin-component lighting solution

A fixed central console runs between two desk levels situated opposite to each other and adjustable in height. A 2m long luminaire at a height of 70 cm above the working plane is positioned upon the console. The luminaire represents an integral part of the office furniture, which in turn required close coordination with the furniture suppliers. It takes on two functions: firstly high power LEDs with custom optics directly illuminate the area of the visual task. Each employee can separately switch this direct light at his or her desk. And secondly fluorescent lamps as an indirect component brighten the ceiling. Only a very small amount of their luminous flux is emitted downwards via a translucent PMMA strip. The ceiling illumination across the complete building floor is implemented via the light profiles installed on the sideboards, but without direct LED light in this case.

The unusual luminaire position demanded careful glare elimination for the indirect components from the desk and sideboard luminaires, as people standing could otherwise look down onto the luminaire. Eldacon® microprismatic plates were therefore used as enclosures. These emit highly homogeneous light and ensure omnidirectional glare reduction: Siteco commenced extensive development work in 2007 that covered selection, configuration, optics, and thermal management of LEDs and the light guidance for fluorescent lamps via reflectors and prismatic structures. Samples and test constructions showed once again the advantages of Siteco Eldacon® light direction technology via highly precise microprismatic structures, enabling homogeneous luminance – without visible lamps – with a high light output ratio.

With T16 fluorescent lamps and optic LEDs, light sources are used that achieve greater efficiency when compared to compact fluorescent lamps in standard floorstanding luminaires. This in turn enables reduced connected load per workplace. Further potential for saving is achieved with the daylight-dependent control of the indirect components via DALI protocol. Interesting functional details are use of both fluorescent lamps as emergency lighting and the possibility to couple single luminaires via a connection element to continuous rows.

**Press Contact**

Ladislav Varga

Marketing Department

Siteco Lighting (M) Sdn. Bhd. - AN OSRAM BUSINESS

No 3A-15, IOI Business Park, No 1, Persiaran Puchong  
47100 Puchong

Tel. +603 8070 4722

Fax. +603 8070 8845

E-mail [info@siteco.com.my](mailto:info@siteco.com.my)

Internet: [www.siteco.com.my](http://www.siteco.com.my)

## PRESS INFORMATION

### **Innovation and integration**

Constructional authority: Novartis Pharma AG, Basel/CH

Engineering: Zwimpfer Partner Architekten SIA, Basel/CH

Design architect: Maki and Associates, Tokyo/JP

Lighting design: Licht Kunst Licht AG, Bonn/DE

Office lighting solution: Siteco Beleuchtungstechnik GmbH

Electrical consultant: Sytek AG, Binningen/CH

Construction supervision: Caretta & Weidmann AG, Zurich/CH

Electrical contractors: Etavis Kriegel + Schaffner AG, Basel/CH

Furniture supplier: Bene AG, Wallisellen/CH