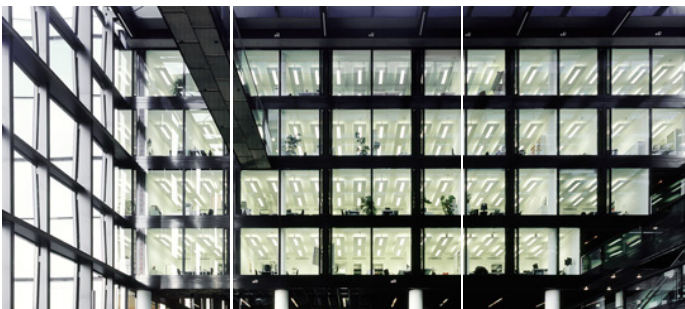


## P R E S S I N F O R M A T I O N

### **Energy efficiency as a guiding theme: the Süddeutsche Verlag new building complex in Munich**



Following 60 years of industrious journalism, the Süddeutsche Verlag has abandoned its headquarters in the Munich city centre and built a new complex adjacent to the printing works on the edge of the city. The company has now been based in a 28-storey tower block with a connected low building since November 2008. The twin buildings not only offer modern working conditions for approximately 1,850 employees but also enable extremely energy-efficient operation, and in addition give the building owners enormous flexibility with regard to room concepts. The lighting concept from Siteco was a decisive influence upon all three factors.

#### Challenges seen as chances

There are buildings that are planned and constructed, and there are relocations that result in happy expectations; with the new Süddeutsche Verlag building it was neither one nor the other. Apparently the city mayor, Christian Ude, was heard to say "I feel like crying" during the farewell party at the old headquarters in the Sendlinger Strasse.

And this was a sentiment shared by others, because many of the newspaper journalists were reluctant to relocate to the tower block in München-Steinhausen, although the architect Oliver Kühn attested that "Well, basically, it's become my very best building...".

A series of stumbling blocks had to first be removed however before the architect's opinion could be expressed. For example, the original design for the building with a height of 145 metres was capped by a public petition. Munich desires tower blocks with a maximum height of 100 metres, meaning that a wide-ranging replanning of the publisher's headquarters was required.

The new planning following capping by the petition had the salutary effect of optimising the project. The atrium was improved as a result of the new dimensions, an efficient ventilation system was

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installed and even the eye-catching glass facade in its present form is the result of repeated reworking. The reservations of the building's users resulted in similar improvements. Those who move from a privileged inner city location to a new place more distanced from the centre tend to be extremely critical.

GKK+Architekten did not attempt to reconstruct the previous headquarters, but rather relied upon communicative structures intended to compensate for the missing urbanity; a generous canteen, a café, the atrium and several areas designed as free spaces are just some of the places giving employees the opportunity to meet and socialise, and perhaps even to establish a level of personal identification with the location.

An optimal balance of ergonomics and ecology

A main demand of the construction authorities was flexible technology. Working processes in the media business sector are inclined to change rapidly, meaning that the publishers expect several relocations during operation. Ideally, the spacial geometry and building technology should be so flexible that space can be rented out at any time. A further decisive factor was energy efficiency. The publishing building was certified with the gold "Leadership in Energy and Environmental Design" by the U.S. Green Building Council. This certification evaluates in detail factors such as construction and operation with regard to saving resources, sustainability and level of innovation for buildings.

It was a matter of principle that with respect to the cost-efficiency of the building, working conditions for users should be attractive. The main focus of the Süddeutsche Verlag portfolio is still based upon newspapers, journals and books, but the range of activities of the media house now includes press databases, content and archive management, PR and agency services as well as much administration.

In other words, work with computer screens takes place throughout the building, and in many areas employees depend upon communicative room structures; the ambience should not only promote a sense of wellbeing but also creativity. The list of duties for the lighting designer Dominik Ortman and the electrical planners from the Munich offices of CBP Cronauer Beratung und Planung was therefore sufficiently detailed.

Glare-free light control with a high light output ratio

In order to satisfy the complex catalogue of requirements presented by the lighting design, both an

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efficient as well as a relatively young technology was implemented: microprismatic structures float in all rooms lying immediately behind the facade, whether open-plan or cell office, meeting or traffic zones. 6,000 ELDAICON® frameless custom luminaires were integrated into the acoustic panels suspended below the ceilings.

The basis for the ELDAICON® light control technology developed by Siteco are multi-layer, highly precise microprismatic structures of plastic used as luminaire covers. The interplay of effective edges (guiding of light) and preventative edges (blocking of light) of the microstructures is perfectly matched to create precisely determined light distribution with a high level of homogeneity, and without direct or reflected glare. Because of the precise refracting structures this results in the high lumen output and surface luminance characteristic of modern T5 lamps being more optimally controlled compared to conventional specular louvres. Due to omnidirectional glare control and complete concealment of the lamps, workstations and luminaires can be arranged at random. In terms of acoustics the use of plastic surfaces is highly advantageous compared to aluminium reflectors; aluminium reflectors installed with the building's acoustic panels would have significantly lessened the effect of these.

Behind the ELDAICON® light control modules of the Süddeutsche Verlag custom luminaires are found two T5 lamps (28 watt and 35 watt) operated by electronic DALI control gear. This gives luminaires with a particularly high light output ratio.

The flush installation of the luminaires within the acoustic sails creates a calm ceiling appearance and a very bright spacial ambience. This in turn is emphasised by the small indirect light component (8%) that brightens the ceilings and makes the spaces appear friendly, and also giving the building a lively appearance from outside during nocturnal hours.

Efficiency and absence of glare from ELDAICON® light control technology are also features of the Quadrature recessed luminaires installed as an alternative to the custom luminaires in spaces where acoustic panels could not be fitted. Small meeting rooms in the depths of the building for example are illuminated with Quadrature linear fluorescent luminaires installed in the ceilings. In this case primary light control is implemented with a highly specular reflector and only then is light emitted without glare via a prismatic cover downwards. This luminaire system thus also enables lighting fit for computer screens, soft brightness gradations, balanced shadowing and good vertical and horizontal illuminance levels.

Rooms flooded with light

## PRESS INFORMATION

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Central access to the publishing building is via a generously dimensioned atrium. This foyer more than 20 metres high connects the low building with the tower, and is bordered on three sides by transparent office walls and on the fourth by a glass facade. Protruding plateaus positioned like terraces one above the other make up the individual storeys on the rear of the building. A peripheral gallery on the first floor functions as a space for communication, an important traffic artery and as an interface to the tower block. Central rooms for exhibitions, conferences and training are situated behind the gallery.

The quantity of light in the atrium is sumptuous thanks to daylight flooding through the glass facade and roofing, but also because of artificial light spilling in from the adjacent offices. Additional direct light is emitted by downlights and linear fluorescent luminaires installed in the roof vaults.

The gallery and plateaus are illuminated by a special Siteco luminaire: similar to a dotted line, a sequence of diffuse light channels and low voltage halogen spots have been integrated into the expanded metal ceilings. And where this was not possible, Lunis C surface mounted downlights with narrow beam light distribution achieve required illuminance levels.

#### Central intelligence for decentral room parameters

An intelligent light control system was installed based upon the interplay of energy-efficient optical components such as prismatic louvres, modern T5 lamps and ballasts with cut-off technology, and controls the complex balance of lighting and interior solar protection in accordance with daylight levels and human presence. DALI ballasts enable the formation of luminaire groups according to lighting requirements and the switching and control of these. The DALI control is connected via a gateway to the central building technology controlled by LON. Users can determine technology preferences in individual rooms via operation interfaces.