In German university towns, such as Göttingen, a widespread fascination with all things Italian can often be observed. The Viani family, importers of Italian specialities for many years, are now supplying Italophiles with vino, pasta, espresso and focaccia sold in their own shop. Located on the ground floor of a timber-framed house in the historical town centre, the shop’s premises have been redesigned by the Hanover-based Atelier Verführt in a sober but elegant style. ERCO’s contribution is the efficient visual comfort provided by Quintessence wallwashers fitted with metal halide lamps and Optec spotlights for flexible accentuation of objects.

Published in November 2011

Bodegas Portia
A state-of-the-art winery, the Spanish Bodegas Portia in the wine country of Ribera del Duero operates according to industrial standards. This does not detract from the fascination inherent in wine as a complex result of natural processes governed by the immaterial ingredients of time, intuition and experience. Celebrating the mystery of wine, Foster + Partners have created a spectacular architecture starring an equally immaterial element: light.
The technology change at ERCO towards LED systems is making huge strides. Once again, this Lichtbericht features a number of amazing projects based on LED lighting systems. To further back and reinforce what we believe to be a positive trend by launching new products, all our new ranges for 2012 are based on LED technology. Page 16 will give you a first impression of the diverse and innovative LED products for indoor and outdoor applications.

An LED case study involving ERCO’s own Technical Centre is described in detail on page 20. The entire foyer section here has been updated to feature the latest state-of-the-art LED lighting system and the 79% savings in energy are a welcome side effect. As a further positive upshot, aside from reduced operating costs, CO₂ emissions are cut by 68.13 tons a year.

100% LED lighting in retail: A successful example of this is the GANT Woman Store in Prague. Featuring Logotec LED spotlights and Quintessence LED wallwashers and directional luminaires, it shows through skillful integration of vertical illuminance components into the lighting design how to create a pleasant light atmosphere for customers. Vertical illuminance – i.e., wallwashing – is also the topic of an extensive study conducted by architectural researchers Prof. Dr. Kai Schuster and Dr. Marc Kirschbaum, featured from page 12 in this Lichtbericht. The study examines and describes scientifically the influence of systematic wall illumination on spatial perception and wellbeing of the users. It sensitises us to the importance of a more careful use of light in a design context and shows how the ratio of vertical to horizontal illuminance components allows statements to be made on the use and character of architecture.

LED technology is just as suitable for the hotel and gastronomy sectors. Ibis, a hotel chain operating in the highly price-sensitive economy sector, has opted for LEDs in its new design and lighting concept to stand out as a hotel from the ever increasing competition. Vertical illuminance using Quintessence LED wallwashers as a central component of the perception-oriented lighting concept underlines the warm and cheerful atmosphere of Ibis’ new interior design.

The illumination of art in museums and galleries is, by nature, a classic case for wallwashing. The Fleming Collection in London picked ERCO’s Logotec LED wallwasher for its lighting system. With a connected load of 14W, it meets all the requirements of a modern and energy-efficient lighting solution for high-quality exhibits.
London Bespoke tailor Douglas Hayward saw stars such as Clint Eastwood and Michael Caine stream in and out of his shop. When the founder died in 2008, the company on Mount Street, Mayfair, needed to reinvent itself: with an interior design concept that combines tradition with future – and light provided by ERCO.

Douglas Hayward Bespoke Tailors, London
Architect: Walters Consultancy, London

Vienna The Rahimi family business is the prime address for high-quality oriental carpets in Vienna. Magnificent antique items are set off to produce an optimum scope in the redesigned store in Spiegelgasse 1 – effectively illuminated by Cantax spotlights and Quintessence wallwashers.

Rahimi & Rahimi oriental carpets, Vienna
Architect and lighting design: Achsauf, Sadrgh Orelakishe, Martin Haber, Vienna

Vienna The listed façade of a former, five-floor trade fair palace hides a contemporary grand hotel that combines historic building fabric with a modern design at 5-star level. The clever lighting design featuring recessed ceiling and floor luminaires supplied by ERCO adds significantly to the special atmosphere.

Strindger Hotel Händelhof, Leipzig
Interior and lighting design: Markus-Ödenhoorn, Rüsslingen

London This is not just any cafeteria; it is the cafeteria of one of the best-known and most productive “architecture factories” in the world – the Riverside Studios of Foster + Partners in London. Wall paintings show spectacular views of the partnership’s projects, uniformly illuminated by Optec wallwashers for halogen lamps.

Foster + Partners, Riverside Studios, London
Architect: Foster + Partners, Christopher Lam, London

Sydney Grosvenor Place, a 180m high office tower built in 1988, is one of the works of Austrian-born Harry Seidler [1923-2006]. After his emigration and periods in England and the USA, Seidler advanced to become the leading exponent of modern architecture in Australia. New lighting in the foyer now emphasises the architectural design even more favourably while at the same time affording massive cuts in energy and maintenance costs. The lighting tools chosen by the designers include wallwashers, downlights and directional luminaires for metal halide lamps from ERCO.

Grosvenor Place Building, Sydney
Architect and lighting design: Harry Seidler & Associates, Sydney

Hamburg The International Maritime Museum in Kaispeicher B, the oldest quayside warehouse in the harbour city, displays exhibits from the seafaring world in an area measuring 10,000m². Along with ERCO spotlights, it is the Quintessence wallwashers in particular that ensure uniform illumination of the walls and backgrounds.

MMK, Hamburg
Architects: MWL Architekten, Hamburg
Exhibition architecture: Kiao Design, Hamburg
Lighting design: Urike Brand, Hamburg
www.internationales-maritimes-museum.de
Bright prospects

ZARA, Via del Corso, Rome

Photographs: Thomas Mayer, Neuss

www.zara.com
In recent years, the wine countries of Northern Spain have evolved into an Eldorado of extraordinary architecture. Wineries use architects of international renown, such as Calatrava, Moneo, and Gehry, striving to beat their competitors in the realm of spectacular design. Buildings such as the headquarters of Marqués de Riscal, whose style mimics that of the Guggenheim Museum of Bilbao, are highlights of this unofficial competition. The new bodegas constitute trademarks, attractions and unique characteristics, all essential in today’s climate of fierce competition for market shares and reputation. The most recent example of this trend is provided by the Grupo Faustino: Its Bodegas Portia, newly designed by Foster + Partners and located in Ribera del Duero, combines efficiency and elegance, takes advantage of the natural topography of the surrounding landscape, and ingeniously alludes to the functional processes of winemaking – all effectively accentuated by Claude R. Engle IV and his integral lighting concept.

It is the first time Lord Foster and his team have designed a winery. What they came up with as an overall layout for the building looks like a stylised trefoil. Three wings reach out from the centre like rays from a star. Each wing houses one of the three phases of winemaking: the fermentation in steel tanks, the maturing in oak barrels, and ultimately, the bottling and stocking. The heart of the facilities beats in the centre of the complex. This is where all the processes occurring in the three wings are controlled. In addition, it comprises the light-flooded public area including a shop, a degustation lounge, and a restaurant overlooking the large nearby terraces and pools, and beyond, the wine country. Glassed-in galleries on a mezzanine level allow visitors to witness the production processes in all three wings, thus making the enjoyment of wine – well beyond its degustation – a sensual experience embracing the long tradition of Spanish wine culture.

The lighting concept by the design firm Claude R. Engle follows the approach of transparency. A mostly discreet illumination lures visitors into the world of wine. Carefully placed accents will please both enthusiasts of state-of-the-art winemaking technology and wine aficionados seeking to explore the romantic aspects of winemaking. To achieve this, Engle placed the focus of his design on the key elements of wine production, inspired by discussions with the winemakers, he decided to use accent lighting to illuminate only the temperature readouts, the spouts and the tank openings throughout the wing dedicated to fermentation. Put to the practical test, it was soon con-
At Bodegas Portia, modern architecture and state-of-the-art winemaking technology meet a wine culture that evolved over centuries and is represented by local wine-growers. This makes for a promising blend of tradition and avantgarde.

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firmed that this minimum amount of light was sufficient even for the winemakers. "They say the wine is sleeping. Hence, we provide only as much light as is needed for the wine production, but take heed not to wake the wine," says Engle. As a result, the industrial lighting instruments fitted with fluorescent lamps, concealed between the ceiling's wooden blades, are seldom used.

At Bodegas Portia, the "sleeping" wine matures in the barrique, as tradition requires it. ERCO Gimbal projectors fitted with 20W metal halide lamps and Spherolit reflector steep the oak barrels in a warm and subtle light. The paths connecting the barrel storage areas are distinguished through a zoned illumination of a cooler light colour (5,000K) so that the winemakers can carry out all activities without having to modify the lighting arrangement. The architects achieved a fascinating effect by leaving a gap between the concrete walls located beneath ground level and the wall construction out of wooden girders, then fitting the gap with wine-red glass so that daylight seeps through in the appetizing hue of a Reserva.

The wing in which bottles are stored – the Nave de Botellas – is illuminated by ERCO Parscan projectors with flood reflectors fitted with 100W low-voltage halogen lamps. This projector type with outstanding anti-glare properties guarantees maximum visual comfort and a flexible, directed, yet discreet illumination. Mounted on the hall ceiling, they accentuate the impressive bottle walls of Bodegas Portia. The effect they produce by lighting individual bays is reminiscent of the atmosphere in a cathedral – a cathedral of wine.

While the lighting concept in the production areas calls for the greatest possible subtlety, the visitors' areas in the centre of the winery require more extensive, uniform lighting. Fine-wood surfaces and low-key colours in the restaurant, the bar, and the degustation lounge make for an exclusive aesthetic. In this environment, downlights for 75W low-voltage halogen lamps achieve a particularly pleasing light quality. They are incorporated into the vertical blades of the louvre ceiling. In addition to pieces of modern art, the wall decoration features staves of old wine barrels. They are lit by Parscan wallwashers. All in all, the concept of openness and transparency is continued throughout the gastronomy and visitors' areas. Rows of large windows allow visitors to see both the wine barrels resting inside the Nave de Barricas and the vast scenery of Ribera del Duero.
The entrance is the only part of the winery where Foster + Partners departed from their global concept of transparency. There, the architects concealed the central tank, which stands 7 metres tall, behind blue-green frosted glass. Lighting designer Engle accentuated this giant piece of technology with colourful lights so as to make its shape vaguely and mysteriously visible through the large glass surfaces. In summary, the lighting concept builds on the architecture in all parts of Bodegas Portia, enhances it, and adds individual accents. Architecture and lighting together have turned what was a functional building into an adventure where the magic of winemaking becomes tangible for the visitor.

Norman Foster
Norman Foster is one of the most important architects practising in the world today. He is chairman and founder of Foster + Partners, based in London, with project offices worldwide. Over the past four decades the practice has pioneered a sustainable approach to architecture and ecology through a strikingly wide range of work, from urban masterplans, public infrastructure, airports, civic and cultural buildings, offices and workplaces to private houses and product design. He became the 21st Pritzker Architecture Prize laureate in 1999 and was awarded the Praemium Imperiale Award for Architecture in 2002. In 2009, he became the 29th laureate of the prestigious Prince of Asturias award for the Arts.

Claude R. Engle IV graduated from College of Wooster with a BA in Theatre and Philosophy and received an MFA in Creative Writing from New York University. In Barcelona for six years, he worked as a freelance lighting designer as well as a translator of architectural papers and publications. He received numerous awards for his designs for theatre and dance companies. While in Spain, he oversaw the installation of the firm’s lighting design for the Palau de Congressos in Valencia, the Kimmel Center for the Performing Arts in Philadelphia and many other projects in Europe and the USA. He is currently Senior Designer for Regent Tower, a multietage tower in Sydney, Australia, Freedom Tower at the World Trade Center in New York, and the Winspear Opera House in Dallas, Texas.

www.crengle.com
Wallwashing and perception

Architectural researchers Prof. Dr. Kai Schuster and Dr. Marc Kirschbaum examine spatial perception and spatial effect as a function of lighting.

Environmental psychology is an academic field investigating people’s interactions with the environment, their perception (cognition), attitude (emotion) and action (e.g. Zimbardo & Gerrig 2008). This simple model quickly expands under the assumption that these components are closely linked and personal variables determine the intensity of spatial perception and the evaluation of space. Examples of personal variables are previous experiences, current state, action targets, etc. Although psychology places the focus on the person, environmental psychology acknowledges in the concept of affordance introduced by Gibson (1989) that the room in itself affects the individual independently: because of the room’s equipment and design – and here especially the lighting, the room situation affords con-dment and design – and here especially the independently: because of the room’s equipment and design – and here especially the lighting situation affects our impression of a room – we think and day in and day out. Different using light-ing tools in different ways changes a space substantially, our experience of it and our usage pattern. In designing our own home, for instance, we make sure that furnishing and lighting in a room or a room zone harmonize to form a unit and fit its specific pur-pose. A reading corner, therefore, tends to be illuminated differently from the workplace in the kitchen or the workbench in the bed- room.

Lighting research in the context of work environment and ergonomics has long since been a recognized, interdisciplinary field that evaluates just how much lighting situation influences the performance of individu-als in the industry, but also their cognitive capabilities. Less known are research efforts that have gone so far as to probe a connection between lighting and our experience of food – wine connoisseurs may find the article by Oberfeld et al. (2009) of interest here.

In terms of the aspects of perception and evaluation of space as factors of vertical and horizontal illumination in rooms, however, psychological research is still in its infancy. This article gives a review on an empirical study conducted in cooperation with ERCO on the subject of spatial perception and evalua-tion as a factor of lighting. The results of this study are presented after a brief synopsis of psychological perspectives of the human mechanisms of spatial perception and evalu-a-tion.

Spatial perception from the perspective of environmental psychology

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heterogeneously using horizontal illuminance, the light beams are clearly visible. The wall illumination is different: the room in image a features vertical illuminance, the room in image b, horizontal illuminance. Whereas the room in image b with hori-
zontal illuminance (black line in the semantic
differential) appears rather more dark, the room with vertical illuminance (image a; an orange line) gives the impression of being brighter and more spacious. This room was generally felt to be more public and formal. The vertical illuminance here was said to increase the ability to find one’s bearings and a feeling of safety (easier to discern, clearer, safer and more reassuring). On the whole, the room with vertical illuminance was perceived to be more pleasant, cosier, more stimulating and inviting and, ulti-
ately, nicer.

The detailed results for the department store example are shown as a semantic dif-
ferential. The statistically significant differ-
ences are indicated in two ways: (a) The term pairs are shown in bold print and (b) the average indicator is filled in on the scale. The orange line refers to the image with ver-
tical illuminance, the black line to the room with horizontal illuminance.

The aforementioned example was only one pair of the altogether nine image comp-
parisons. Across all room situations, the respondents showed the following results: 1. Irrespective of the appeal, vertical illuminance gave the impression of a more spa-
cious, public and less informal room and was felt to be easier to discern and clearer.
2. In regard to three of the image pairs, the respondents explicitly preferred the vertical illuminance situation: a company lobby, a clothing store, a flight of stairs.
3. In the other room situations, the horizontal illuminance received more positive and emotional reactions. They were felt to be more inviting, cosier, suggesting a higher level of privacy and seemed more interesting and riche in contrast.

On closer inspection of the study results taking into consideration the room types, usage aspects and the “public room – private room” dimension, the following conclu-
sions can be drawn: Vertical illuminance is preferred in situations where the room is clearly used for public purposes and where it is necessary to find one’s bearings. This is qualified when the room use is geared to emphasise objects in the room (exhibition situations). In these cases, it is this very argu-
ment of focusing on a central element in the room that had respondents prefer largely across-illumination. Horizontal illumin-
ance was preferred for any room that was interpreted to be private, being associ-
ated with such attributes as cosier, more comfortable, but also darker and less stimu-
lating than vertical illuminance.

Private versus public rooms
On the whole, the research results fit into the theoretically-derived spatial perception patterns described above. Obviously public room are felt to be more pleasant with ver-
tical illuminance in that they appear safer, easier to discern, clearer and more reassuring. Unknown, public room situations require us to find our bearings, so that we “instinctively” look for security anchors such as comprehension, brightness, clear structure, room boundaries. At the same time in semi-public and private rooms, we would sooner see focused lighting rather than uniform illumination, precisely with the aim of underlining the private character of the room. If the room setting is designed to focus on individual items, such as in exhibition situations, point source lighting becomes the preferred concept of choice even for public rooms. In this sense, the ter-
minality coined by Richard Kelly (based on Maack & Pawlik 2009) lets us deduce that in environments which require orientation and comprehension, “visibility” (ambient luminance) is a priority, and that vertical illuminance increases the information in a room. If the attention of users of the room is to be drawn to something, if they are to “recognise” it (focal glow), vertical surface illuminance is usually more distracting and considered less suitable. Of course – and psychology is well aware of this – architec-
ture and spatial illumination are also about creating positive tension (cf. “soft fascina-
tion” based on Kaplan & Kaplan 2005). In this respect, the optimal fit does not neces-
sarily achieve the best spatial impression, as do slight variations and “disruptions” (cf. Berlyne 1974). Hence, it is likely that – again in agreement with Kelly – a cleverly interrelated mix of focused light in exhibition situations using “focal glow” and vertical illuminance as “play of brilliants” adds to the experience of the room and the artwork.

In this respect, our analysis is but an initial explorative study. In the interest of optimising its real-life validity, for instance, a series of research projects in true environ-
ments is required as a next step, in which the same room comparing vertical and hori-
zontal illuminance is rated by room users, based on standardised empirical methods using a technically and physically comparably paramet-
ised light intensity. A field of research that is as challenging to environmental psycholo-
gists as it is fascinating and which ultimately can only be conducted as an interdisciplinary project in cooperation with innovative research partners.

Example of living space: Here, the majority of the respondents, interpreting the concept with focused, horizontal illuminance as private and as more appropriate for the situa-
tion. Conversely, the same room can suggest various usage contexts through use of different or chang-
ing illumination.

Example of company lobby: In rooms clearly perceived as public places, the respondents preferred the lighting concept focused on verti-
cal illuminance. Associ-
ated attributes include: subtler light intensity, easier to comprehend, clearer and more reassuring.

Example of semi-public space: Here, the majority of the respondents associated attributes such as cosier, more comfortable, but also darker and less stimu-
lating than vertical illuminance.


Dr. Marc Kirschbaum (architect) studied architecture in Kassel (Dipl.-Ing.), Manchester (GB) and as a Fulbright scholar in Seattle/USA (Master of Architecture) receiving his doctorate in Kassel (Dr.-Ing.). Marc Kirschbaum does research and teaches architectural theory and design at the Institute of Design in Built Fabric at the University of Kassel. In 2009 and 2010, he was a visiting professor at the Clemson University, School of Architecture in South Carolina/USA. Together with Kai Schuster, he is a partner of the pragmatagora – architectural studio (www.pragmatagora.de).

Authors: Prof. Dr. Kai Schuster studied psychol-
ogy (Dipl.-Psych., Dr. phil.) and architecture (Dr.-Ing.). He worked as an environmental psychologist in different research insti-
tutions and at the Institute of Psychology at the University of Kassel. Since 2010, he has been a professor at the Darmstadt University of Applied Sciences where he lectures in social psychology and sociol-
ysis at faculties including the Department of Architecture. His work has focused on architectural psychology and theory. Together with Marc Kirschbaum, he is the partner of the pragmatagora – architectural studio (www.pragmatagora.de).


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New products 2012

A fusion of optics, electronics and information technology, optoelectronics combines all the dimensions of our guiding principle, “tune the light”: producing light, guiding light, controlling light. As a result, ERCO has focused its innovative capabilities on optoelectronics as a core competence. Virtually all new products use LEDs as light sources; in many product areas ERCO uses highly efficient LED optical systems developed and produced in-house with Spherolit lenses – side by side with custom-designed electronic control gear. The following pages give an overview of ERCO’s new products. More from 1 January 2012 at: www.erco.com/products

Light Board spotlights
- For exhibition and presentation lighting
- Interchangeable Spherolit lenses for different light distribution patterns
- Low to high lumen categories
- Hinge technology adapted from the computer industry for smooth, precise adjustment
- Integrated control gear, hidden cables
- Directly dimmable via potentiometer

Light Board recessed luminaires
- System design with Spherolit lenses for different light distribution patterns
- For ceiling-integrated exhibition and presentation lighting
- Integrated control gear
- Directly dimmable via potentiometer

Option spotlights with LEDs
- For economical and flexible lighting of sales rooms and shop windows
- Highly efficient ERCO LED lighting technology with collimators and Spherolit lenses
- Spherolit lenses replaceable without tools for different light distribution patterns
- Low height for use in rooms with low ceilings
- Directly dimmable via potentiometer

Option spotlights for HIT
- For economical and flexible lighting of sales rooms and shop windows
- Highly efficient ERCO lighting technology with Spherolit reflectors
- Spherolit reflectors replaceable without tools for different light distribution patterns
- Horizontal position of the control gear results in a low luminaire height
- Thermal separation of luminaire head and control gear

Cantax spotlights, floodlights and wallwashers with LEDs
- Cantax with LEDs has advanced to a new generation: same housing size, yet with a higher luminous flux, or smaller housing with the same luminous flux
- Highly efficient ERCO LED lighting technology with collimators and Spherolit lenses
- Spherolit lenses replaceable without tools for different light distribution patterns
- New narrow spot characteristic

Logotec with LEDs
- Optimised for the requirements of sales room lighting
- ERCO LED lighting technology with collimators and Spherolit lenses for exceptionally high efficiency and light quality
- Interchangeable Spherolit lenses for a wide range of light distribution patterns
- Integrated control gear, directly dimmable via potentiometer
- Also available as recessed spotlights

The compact, flat housing is specially designed and built for the use of LEDs.
New products 2012

Compar with LEDs
- Rotatable and tiltable recessed spotlights
- For ceiling-integrated illumination of sales rooms
- Addition to the existing range for metal halide lamps
- ERCO LED lighting technology with collimators and Spherolit lenses for exceptionally high efficiency and light quality
- Different Spherolit lenses for a wide range of light distribution patterns

Quintessence double-focus downlights with LEDs
- Ambient lighting in rooms with high ceilings
- Inconspicuous ceiling aperture, excellent visual comfort thanks to a high level of glare control and double focus
- Highly efficient ERCO LED lighting technology with collimator and Spherolit lens emits no spill light
- Different sizes and lumen categories

Cylinder surface-mounted and pendant luminaires
- Simple form as an inconspicuous, high-quality architectural detail
- Maximum efficiency through perfect matching of LED lamp, lens and control gear
- High level of visual comfort through Darklight technology
- Appropriate accessories transform Cylinder into a pendant luminaire
- Light distribution patterns for ambient lighting and wallwashing

Cylinder pendant luminaires
Using appropriate accessories such as pendant tubes or cable suspensions. Cylinder luminaires can also be suspended as pendant luminaires.

Compar uses the modular mounting ring of the Quintessence system.

LED Double-focus downlights 6.7W - 27W 435lm - 2160lm Size 3, 5, 7 flood, wide flood

Powercast with LEDs
- Universal, effective lighting tools for the outdoor area
- New, additional light distribution patterns and lumen categories with LEDs
- Spherolit lens technology for efficient visual comfort
- With double cable entries for through-wiring and efficient installation

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Using appropriate accessories such as pendant tubes or cable suspensions. Cylinder luminaires can also be suspended as pendant luminaires.

Compar uses the modular mounting ring of the Quintessence system.

LED Double-focus downlights 6.7W - 27W 435lm - 2160lm Size 3, 5, 7 flood, wide flood

Powercast with LEDs
- Universal, effective lighting tools for the outdoor area
- New, additional light distribution patterns and lumen categories with LEDs
- Spherolit lens technology for efficient visual comfort
- With double cable entries for through-wiring and efficient installation

Quintessence double-focus downlights with LEDs
- Ambient lighting in rooms with high ceilings
- Inconspicuous ceiling aperture, excellent visual comfort thanks to a high level of glare control and double focus
- Highly efficient ERCO LED lighting technology with collimator and Spherolit lens emits no spill light
- Different sizes and lumen categories

Cylinder surface-mounted and pendant luminaires
- Simple form as an inconspicuous, high-quality architectural detail
- Maximum efficiency through perfect matching of LED lamp, lens and control gear
- High level of visual comfort through Darklight technology
- Appropriate accessories transform Cylinder into a pendant luminaire
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ERCO Technical Centre: An LED case study

Proven concept, around 75% less energy: Using its own innovative LED lighting tools, ERCO – the Light Factory – has now upgraded the entrance foyer of its Technical Centre at the Lüdenscheid headquarters to feature the latest state-of-the-art systems. Optimised in energy usage, the lighting update is expected to pay off in as little as five years through increased efficiency.

The transparent foyer has served as the visiting card of the company since 1989. Harmonised with the building’s architecture and with a significant component of vertical illuminance, its previous lighting concept still met the requirements of perception-oriented lighting design. The new implementation of this proven concept demonstrates the enormous potential of LED technology. It communicates both to staff and visitors the latest standard required to experience, appreciate and explain ERCO’s lighting philosophy.

Wallwashing and LED technology: two factors of efficient visual comfort that reinforce each other. In combination with lighting control as a further factor in ERCO’s concept, the foyer is set for energy-efficient, daylight-dependent illumination and scenographic design.

Through uniform wallwashing of the walls, some over 12m in height, the pleasant impression of brightness achieved through vertical illuminance alone is such that conventional ambient lighting of the floor area is largely unnecessary. Floor-to-ceiling glass façades allow intensive utilisation of daylight – the brightness contrasts and reflexes softened by wallwashing. Lighting accents are produced by ERCO’s Logotec LED spotlights with “narrow spot” characteristic; installed on track, these are found in such places as the communication area of the foyer lighting up the chrysanthemum decorations on the tables. A Light System DALI includes sensors for energy-saving, daylight-dependent lighting control, but also ensures attractive, scenographic effects. The connected load of the updated system has reduced the original power consumption by 75%, down to 6.48W/m²; the LEDs have an average life of 50,000 hours, compared to between 3,000 and 5,000 hours for halogen lamps. The investment costs therefore must be seen against significant savings in energy and maintenance.

<table>
<thead>
<tr>
<th>Lighting concept</th>
<th>Old (Halogen)</th>
<th>New (LED)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connected load per m² (W/m²)</td>
<td>26.09W/m²</td>
<td>6.48W/m²</td>
</tr>
<tr>
<td>Comparison connected load (%)</td>
<td>100%</td>
<td>25%</td>
</tr>
<tr>
<td>Comparison operating costs (%)</td>
<td>100%</td>
<td>25%</td>
</tr>
<tr>
<td>CO₂ savings per year</td>
<td>68.13t</td>
<td>Equals a reduction to 25%</td>
</tr>
</tbody>
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Old
(Halogen)

New
(LEDD)
Wallwashing as perception-orientated light

Vertical illuminance is an effective concept to enhance the effect of a room and promote perception. More still, it can play a significant role in energy-efficient lighting design. The diversity of illuminated vertical surfaces in architecture extends from smooth, plastered walls to textile hangings all the way to stonework facades or walls made of vegetation.

It is not only the architectural design task that falls to vertical illuminance but also that of enabling users of architecture to perform classic visual tasks. This includes recognising the environment and reading information on walls, ranging from information signs and text plaques, posters, paintings in museums, books and files on shelves through to merchandise in stores.

In contrast to horizontally focused lighting concepts with the same connected load, vertical illuminance is important from an energetic aspect for a brighter spatial impression. Walls become more noticeable and are often brighter than the floor. Since the field of vision of the human eye is sooner drawn horizontally than vertically and the gaze is generally directed ahead, walls tend to draw more attention than the floor or ceiling. The practice of reflecting light off walls using vertical illuminance produces a diffuse component of light in the room which adds to the ambient lighting. These factors lend special relevance to vertical illuminance in the discussion of sustainable lighting design.

LED technology

Wallwashers with an asymmetrical light distribution are well suited to produce uniform vertical illuminance. Combined with the high luminous efficacy of the LEDs and ERCO’s effective lighting technology, wallwashing is a key factor in ensuring efficient visual comfort.

The lighting technology of wallwashers is identified by a wide beam light distribution for uniform vertical and horizontal illumination of the wall. These luminaires therefore need an asymmetrical light distribution which extends up to the base of the wall but also ensures sufficient illumination in the upper area of the wall. A preferably homogeneous level of illumination gives the impression of uniform brightness. Conventional rotationally symmetrical light distributions do not lend themselves to uniform wallwashing, as their beam directed from the ceiling diagonally onto the wall produces a focal point (hot spot) in the upper area.

Simplifying just two possibilities of using LEDs to produce suitable light distribution patterns for uniform wallwashing would be as follows: firstly, LED lens wallwashers with Spherolit lenses – a particularly economical technology because of its high light output ratio. It is based on dividing a large lens into many individual, three-dimensionally dished facets, each of which directs the light through refraction. The asymmetrical shape of the spherolites produces the particular light distribution required for wallwashing. The transmission of light using a primary LED lens, collimator and Spherolit lens has fundamentally lower losses than with reflectors. The Spherolit lens technology also allows for shallow recess depths. ERCO’s Program features this wallwasher technology primarily in product ranges derived from spotlights.

The recessed luminaires in ERCO’s Quintessence range additionally feature combinations of Spherolit reflector technology with Darklight technology for exceptionally high visual comfort. The illuminated plane of the diffuser is hidden from the view of the observer due to the Darklight reflector in the cut-off angle. In washlights or double washlights, the diffuser disperses the high point-source luminance of the LEDs to produce a soft-edged beam. The special Spherolit wallwasher segment in the reflector illuminates the upper wall area achieving uniform light distribution over the whole wall. The two LED wallwashing technologies introduced here are found in a wide variety of ERCO’s products and open up an extremely new, creative scope for designers in developing efficient and sustainable lighting solutions.

Thomas Schielke
The new store on Via del Corso, however, catches the eye not only for the sheer size of its sales area – more than 3,000m² over five levels. Even from an architectural perspective, the refurbishment of the Palazzo Bocconi, which dates back to 1887 and was previously occupied by the La Rinascente department store, holds tremendous appeal. In the Inditex group, it also sets the global standard for sustainability and efficiency in shopfitting. “Environmental protection is a key component of our global strategy,” Inditex CEO Pablo Isla announced at the group’s annual general meeting in 2010. Fittingly, then, the whole building was refurbished with the aim of meeting the standards required to obtain a LEED platinum certificate.

Not without a certain amount of pride, the company reports that its new eco flagship store on average uses 70% less water and 30% less energy per year than a conventional store, not to mention saving the environment over 200 tons of CO₂ emissions a year. The integral approach of the LEED certificate takes account of such factors as choice of materials and recycling of the construction waste, but also heating, air conditioning and, of course, the building’s lighting system.

It is therefore no mean feat of ZARA’s designers working with the architectural firm Duccio Grassi that in spite of the efficiency parameters, the store does not at any point give the impression of asceticism or starkness – quite the contrary. The sense of space inside the renovated Palazzo is overwhelming: three upper levels designed as open galleries encompass an enormous void in the centre, carried by the delicately embellished, original cast iron columns of the neo-Renaissance Palazzo. Cream wall and ceiling surfaces along with a light, natural stone floor contribute as much to a bright atmosphere as do wall screens made of slats and perforated metal sheets which filter the daylight coming in through large window sections.

In line with the principle of efficient visual comfort, the store’s artificial light concept largely dispenses with general lighting on horizontal surfaces – except for such key functional zones as pay desks, landings and access points; these are highlighted by square Quintessence downlights elegantly mounted flush into the ceiling. The most important light component is lighting for vertical product presentation areas provided by Optec spotlights and floodlights for metal halide lamps. The spotlights are mounted on tracks, which in some places are installed in suspended elements. These elements are fitted with inserts at the top for fluorescent lamps to brighten ceiling areas. A further aspect of ZARA’s sustainability programme is using 35W metal halide lamps as standard lamp types instead of 70W versions. Even with lower lamp wattages, the Optec spotlights with efficient Spherolit reflector technology produce a defined, uniform beam of light which is sufficient to accentuate the presentation areas by creating rich contrasts even from large heights.

www.zara.com
The roots of GANT are in the USA, where, in 1949, Bernard Gant started supplying Ivy League students with shirts from his store in New Haven, Connecticut. Today, GANT is an international brand combining traditional American style with a European flair. The brand is also expanding in Central and Eastern Europe, where it collaborates closely with the lighting consultants of ERCO’s Vienna and Prague offices when it comes to equipping the stores with GANT’s characteristic corporate lighting. It was especially the Logotec LED spotlight system, launched at the EuroShop fair in 2011, that intrigued GANT’s interior designers and decision-makers. The outcome could be admired just a few months later in the GANT Woman Store located in Prague’s shopping centre Myslbek, where GANT opened the first store lit entirely by ERCO’s LED technology.

All concerned are extremely happy with the result. The store is a consistent step forward in the development of GANT’s interior design: The lighting tools’ reduced power usage and longer lifespan fulfill today’s standards of sustainability while the light quality was once more refined compared to the conventional concept of relying on HIT light sources. Based on the concept of efficient visual comfort, the store is lit in keeping with human perception. Wallwashers light the rooms evenly with vertical illuminance, while flexible spots accentuate certain areas and products.

The store’s special atmosphere carries to the outside through the shop windows. To accentuate the shop window decoration flexibly, the store uses Logotec LED spotlights, floodlights and wallwashers mounted on ERCO’s 3-circuit track. Their exchangeable Spherolit lenses offer a variety of light distribution patterns ranging from narrow spot to wide flood, as well as more uniform illumination such as provided by oval flood and wallwash. Hence, the backgrounds can be lit evenly using vertical illuminance while special areas are precisely accentuated. One special characteristic of ERCO’s LED spots managed to surprise even the seasoned experts of the GANT store design department. The Spherolit lens technology prevents any diffuse spill light, which makes the shop windows’ colours appear in better contrast, yielding a crisp, attractive look and feel.

The lighting concept’s qualities such as good visual comfort, a pleasant warm-white hue, good colour rendition and low heat emission not only serve to make the store more appealing to customers but also ensure good working conditions for GANT staff in Prague. At a value of Ra > 85 on the colour rendering index, the performance of warm-white LEDs ranks at the level of the halogen metal halide lamp common in the retail sector, thus fulfilling the high standard needed for viewing coloured textiles.

LED lighting tools integrated in a natural lighting concept that combines vertical illuminance with spill-free accent lighting: This helps GANT cut its energy usage for lighting by approximately 30% compared to the previous concept using HIT lamps. By reducing heat emission, another 30% can be saved in air conditioning. These factors, along with eliminating the need for expensive lamp replacements, guarantee that the investment pays off quickly in terms of total cost of ownership.
Vertical illuminance for hotels: Ibis opts for LEDs

At Ibis, the Accor Group’s economy hotel brand, everything hinges on optimum value for money. The ever-increasing competition in the sector is addressed with a new design and lighting concept.

Since 2009, Ibis has gradually opened hotels of a new generation in Germany in answer to the increasing requirements of the hotel's guests. Emanating an attractive, yet natural atmosphere, the design language developed by Düsseldorf-based interior design office Dreesen + Partner for Ibis includes elements such as clarity, concentration on essential aspects and a straightforward approach. In working out the details of their lighting concept, the designers drew from the expertise of the hotel and gastronomy sector specialists at ERCO’s German sales organisation. The result: attractive lighting and efficient visual comfort – a sustainable investment based on reliable calculations.

Executives at Accor are well aware of the effects that light in this context can achieve. “We wanted it to highlight the atmosphere of our new design, signal a true ‘welcome feeling’ among guests,” Klaus Rohrbeck, Technical Director at Accor Germany, explains. Setting out to accomplish these objectives, the designers examined and optimised all five factors of efficient lighting technology and intelligent lighting control. This took them away from their original lighting concept involving a grid of downlights for extensively uniform lighting to a more differentiated design in which wall-washing and accent light are the dominant features.

“We used a third less luminaires than for the general lighting, yet managed to improve the impression of brightness through perception-oriented lighting design,” Martin Wexer, Segment Manager for Hotel and Gastronomy at ERCO Leuchten GmbH, emphasised. The positive effects of this are reflected in the investment involved and the operating costs; and, of course, it meant compliance with the trade association’s requirements and the DIN standards. The design gave attention to areas such as the foyer, reception, bar and restaurant based on their respective functions; each, however, featuring vertical illuminance to define architecture as “ambient luminescence” and to provide orientation as appropriate. Accent lighting is added as “foveal glow” to emphasise functional areas through brightness contrasts, this includes the reception desk, the lifts, but also the table areas in the restaurant and the few, high-quality decorative objects found in the hotel, such as plants and fruit bowls. The third component of the “language of light” – “play of brilliance” – is used just as sparingly, e.g. in the form of decoraative pendant luminaires above the reception area or the high tables in the restaurant section, which finely serve as design elements in the room.

The tools for these lighting design components combine effective lighting technology with efficient lamps: vertical illuminance is provided by Quintessence LED lens wallwashers 28W, whereas accent light is added by Quintessence LED directional luminaires 21W with different light distribution patterns, harmonised with the dimensions of the zones and objects to be illuminated. The warm white LEDs matched the situation. The energy consumption of LED luminaires is linear with regard to the dimmer setting resulting in further savings during operation.

The new lighting therefore optimally brings to bear the modern, attractive interior concept while also standing up to close review under economic aspects. The initial extra investment of Ibis in LED technology will pay off in a little over four years – with an assumed period of depreciation of around ten years taken from the expected 50,000 operating hours of the LED luminaires and an average burn time of 15 hours per day. In a nutshell: a sustainable solution benefitting the environment, the guests and the operators.

With their high levels of luminous efficacy save energy by definition – their colour temperature resembling that of halogen lamps, while their excellent colour rendering presents meals and drinks in the most appetising light. Add to that the fundamental efficiency advantage of LED lighting technology with its projected, directly emitted light over the reflected light of conventional lamps. Where the designers originally calculated a connected load of around 10,000W for lighting on the ground floor, the figure reduced to 5,800W as early as in the first step in 2009 thanks to ERCO’s concept of using low-voltage halogen lamps and metal halide lamps, and right down to a mere 2,300W in the hotels in Frankfurt, Bonn and Aachen Normaluhrt, which all now feature LED technology. One advantage of the LEDs, specifically over the similarly efficient metal halide lamps, is their dimmable lighting. This was one of the criteria in the set of requirements stipulated by Ibis to ensure lighting in the individual areas.
The history of the Joslyn Art Museum, a mono­lithic structure of art­deco style with a modern annex by Foster + Partners, is a perfect illustration of the American Dream. George A. Joslyn (1848–1916), born in New England to a family of little affluence, went west to seek his fortune, made his way to the top of the newspaper business, and later became the wealthiest man of Nebraska when he founded the "Western Newspaper Union", a printing empire. Apart from donating to many other charitable causes for his adopted home town of Omaha, his wife Sarah endowed a number of cultural institu­tions, including the Joslyn Art Museum, after his death. Its collection comprises works from antiquity to contemporary art. However, the focus rests on European and American works from 19th and 20th century.

The additional gallery was opened on 10 June 2011 and houses a permanent exhibit based on the collection of the Fleming Bank, founded by Robert Fleming in Dundee, Scotland, in 1873. When the Fleming Bank was acquired by the Chase Manhattan Bank in 2000, its art collection was transferred to the Fleming Wyfold Art Foundation, which, in 2002, started running a gallery on the first floor of 13 Berkeley Street in Mayfair. It has met with such recognition, both on the part of critics and the public, that its curators jumped on the occasion when the second floor became available for rent in 2010. The additional gallery was opened on 10 June 2011 and houses a permanent exhibit based on the collection, whereas the first floor now displays temporary exhibits featuring contem­porary Scottish art. The upper floor of the build­ing, which dates back to 1895, provides an area of 140m² with an attractively adorned stucco ceiling and columns. While the historical walls are painted white, a square of partition walls was installed inside and serves as the display surface; its medium shade of grey achieves a certain contrast while providing a neutral back­ground for the works of art. Whether it was the thriftiness often attributed to the Scots or the collection’s roots in financial business, the fact is, the curators calculated very wisely when it came to choosing their lighting instruments, which had them opt for an ERCO track system with Logotec LED wallwashers and projectors in warm white. They not only provide high­quality illumination while protecting the exhibits, but also pay off within just a few years through sub­stantially reducing the power usage by compari­son to, for example, low­voltage halogen lamps, and cutting down on maintenance cost: Lamp changes are now a thing of the past.

The Fleming Collection has long enjoyed its place within London’s cultural scene as a col­lection and gallery for Scottish art. It goes back to the collection of the Fleming Bank, founded by Robert Fleming in Dundee, Scotland, in 1873. When the Fleming Bank was acquired by the Chase Manhattan Bank in 2000, its art collec­tion was transferred to the Fleming Wyfold Art Foundation, which, in 2002, started running a gallery on the first floor of 13 Berkeley Street in Mayfair. It has met with such recognition, both on the part of critics and the public, that its curators jumped on the occasion when the sec­ond Floor became available for rent in 2010. The additional gallery was opened on 10 June 2011 and houses a permanent exhibit based on the collection, whereas the first floor now displays temporary exhibits featuring contem­porary Scottish art. The upper floor of the build­ing, which dates back to 1895, provides an area of 140m² with an attractively adorned stucco ceiling and columns. While the historical walls are painted white, a square of partition walls was installed inside and serves as the display surface; its medium shade of grey achieves a certain contrast while providing a neutral back­ground for the works of art. Whether it was the thriftiness often attributed to the Scots or the collection’s roots in financial business, the fact is, the curators calculated very wisely when it came to choosing their lighting instruments, which had them opt for an ERCO track system with Logotec LED wallwashers and projectors in warm white. They not only provide high­quality illumination while protecting the exhibits, but also pay off within just a few years through sub­stantially reducing the power usage by compari­son to, for example, low­voltage halogen lamps, and cutting down on maintenance cost: Lamp changes are now a thing of the past.

**Architects:**
John and Alan McDonald, Omaha (core building from 1931), Foster + Partners, London (annex from 1994)

**Lighting design:**
HDR, Randy Niehaus, Trevor Hollins, Omaha

**Photos:** Tom Kasler, Omaha

www.joslyn.org

**Vertical illuminance for exterior lighting:**
**Joslyn Art Museum, Omaha**

**LED wallwashing for galleries:**
**Fleming Collection, London**

**Architects:** Trehearne Architects, London

**Lighting design:** GIA Equation, London

**Photos:** Dirk Vogel, Dortmund

www.flemingcollection.com

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**Photos:** Dirk Vogel, Dortmund

www.flemingcollection.com
The villa’s name goes back to its ancient foundations, artfully exposed after the renovation. The building rests on the ruins of a former fortress built by Sébastien Le Prestre de Vauban, a Baroque master builder. Featuring rugged, prismatic outer surfaces and an underground section, the annex, joined to the neo-classicist villa from two sides, alludes to the former casemates. The façade shell with its warm, earthy metal hue consists of perforated red brass sheets. The inside is also characterised by clear, expressive surfaces of various contrasting materials: light wooden floors, white stucco surfaces, walls and ceilings out of bush-hammered concrete with sparkling quartz elements, all brought to life through carefully arranged lighting.

As soon as visitors approach the building, they can gain an idea of how light architecture creates eye-catching imagery. For an attractive effect, even from a distance, wallwashers were chosen to illuminate the vertical surfaces of the entrance and the glassed-in foyer. The annex’s lighting in passages and general spaces consists chiefly of edgeless downlights incorporated in the concrete ceilings, a feature that requires extraordinary craftsmanship. Double-focus downlights, directional luminaires and wallwashers from the ERCO Program give structure to the complex sequence in which the visitor discovers and explores the rooms. Thanks to its outstanding colour rendition, the brilliant light of the low-voltage halogen lamps brings out the properties and textures of the various materials. Efficient power usage has been ensured by designing the lighting concept in accordance with human perception and using modern IRC lamps.

The annex’s exhibition rooms have luminous ceilings, which, on the upper floor, mix daylight and artificial light, while they use only artificial light on the lower floor. A groove running all around these ceiling lights contains ventilation devices and an ERCO track. In tune with each exhibition, Parscan spotlights and wallwashers are used to properly accentuate the exhibits, creating a perfect, flexible “white cube”. This allows the visitor to experience a stimulating sequence of rooms, each with a distinct character and each illuminated skilfully by the Licht Kunst Licht designers to achieve maximum dramatic effect.

The modern annex with its shell made from perforated brass sheets is joined to the historical Villa Vauban from two sides. In the galleries of the annex, lighting components of the luminous ceiling are flanked by tracks. Parscan spotlights subtly make the paintings stand out from within their more diffusely lit environment.

A futuristic annex triples the exhibition space for the Ancient Art Museum in the city of Luxembourg. The new architecture engages the historical urban villa from 1873 in an effective dialogue. Space, material and light make up that dialogue’s language.

Architects: Diane Heirend & Philippe Schmit architects, Luxembourg; Philippe Schmit, Luxembourg.
Lighting design: Licht Kunst Licht AG, Bonn/ Berlin
Project management: Alexander Rotsch (engineer)
Photos: Lukas Roth, Cologne
www.villavauban.lu

Villa Vauban, Luxembourg

Expressive spaces, clear surfaces, contrasting materials: These are the stylistic devices of the architectural design by Diane Heirend and Philippe Schmit.

Light gives structure to the visitor’s tour through the building. Wallwashers are used to accentuate certain walls for additional effect. General spaces such as the foyer as well as halls and stairways are fitted with high-pressure lights directed onto the floor. By contrast, the exhibition rooms of the annex are characterised by a concentrated, space-filling light that allows the art to take centre stage.

Licht Kunst Licht:
Lighting designer of the year 2011
An excellent year for Prof. Andreas Schulz and his firm Licht Kunst Licht, based in Berlin and Bonn: He and his team won the title “Lighting Designer of the Year” at the Deutscher Lichtdesign-Preis (German lighting design awards) ceremony held in Cologne on May 5. Overall, they had earned the most points in the various categories evaluated for the award. The firm’s continuous supreme performance is also gaining international recognition: For the Telekom Bridge in Bonn, it won the IALD Radiance Award 2011, a special prize this renowned association awards to the project with the highest jury point ranking among all the winners. Congratulations!
Burgos in Northern Spain has long been a historic place considering its location at the Camino de Santiago and the tomb of "El Cid", the national hero, in the town’s Gothic cathedral. However, it wasn’t until the 1980s that it was realised just how far back its historical roots go. At that time, archaeologists made sensational findings from primeval times in the Sierra de Atapuerca, about 20 kilometres from Burgos: the relics of human settlements that, by now, have come to comprise a time period of about one million years. This fact and the enormous abundance of finds in the caves of the Sierra prompted the excavation sites to become listed as part of the UNESCO World Heritage as early as the year 2000: Of all hominid fossils in the world, 60% come from these sites; nowhere in the world are there more researchers at work in a single excavation area.

In light of this, it is not surprising that the heart of Burgos was chosen as the location for a modern, majestic complex comprising a museum, a research institute and a congress centre. The new environment provides ample space and yet immediate proximity for the aspects of research, communication and discussion of human evolution to interact. It was designed by the award-winning Spanish architect Juan Navarro Baldeweg, who, having designed the museum and institute buildings in Altamira, had already been involved in a similar project. The museum’s central building, a gigantic hall, is flanked by the institute and the congress centre. To allow the hall to remain free of posts or pillars, Baldeweg came up with an exterior framework of crossed beams which was painted in bright red and dominates the spaces between the hall and the two other buildings. Glass fronts and skylights let plenty of daylight in. As you can see, Baldeweg did not shy away from architecturally striking design features such as the above-mentioned bright-red framework or the emerald-green siding, enveloping one entire wing, broken up only by erratically spaced, diamond-shaped windows.

The lighting concept both in the exhibition areas and in circulation zones (aisles, etc.) serves to accentuate the architecture; smooth vertical illuminance brings out the rooms’ structure. Wallwashing is used in many quite distinct parts of the building, as it defines the rooms, provides glare-free “ambient luminance” and, most notably, helps to dampen any excess of contrasts which can result from the abundant natural light. By applying light in a manner compatible with human perception and combining it with the energy-saving technology of ERCO wallwashers with fluorescent lamps, the concept has achieved a harmonious lighting solution which deserves the label “efficient visual comfort.”

Wallwashing for museums: Museo de la Evolución Humana, Burgos

A new building complex combines both research and communication of findings about human evolution. The museum and its adjoined institute showcase the many different uses for vertical illuminance.
Backlights

Spring reception for the Internationale Gartenschaup 2013 in the IMM, Hamburg
An International Garden Show requires years of preparation. Hamburg is currently gearing up for 2013 and at an annual spring reception, friends and sponsors from politics and business were brought up to date about the progress made. This year’s event on 21 March was held under the motto “bridges to new shores”, aptly chosen for the venue in the HafenCity: The special setting in and at the International Maritime Museum (IMM) was further enhanced by a temporary light installation devised by Hamburg-based lighting designers Team Licht in cooperation with ERCO.

www.hafenCity.com
www.IGS-hamburg.de

New showroom in Buenos Aires
ERCO has been present in Argentina’s capital Buenos Aires with its own showroom and team for a total of 13 years now. The team has come to establish itself as a firm partner of architects and lighting designers in South America’s dynamic market. Edgardo Cappiello and his team have now moved to new premises in Puerto Madero. A trendy new quarter, built here on the former docks, sees modern high-rises next to converted warehouses such as Hotel Faena designed by Philippe Starck – an attractive address for architects, lighting designers and all creative customers of ERCO Argentina.

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International Summer Light Workshop for students
The International Summer Light Workshop at ERCO in Ludenscheid was held for the fourth time from 23 – 26 August 2011. The successful event involved students in the fields of architecture, interior design and lighting design who are keen to sample practical planning and use of architectural lighting tools in a professional setting. The experience of intensive cooperation with fellow students from all over the world is an added bonus that the 14 participants from such countries as Indonesia, Hungary, Croatia or Spain do not want to miss. To all participants and the workshop leaders a big thank you and good luck with future projects!

www.erco.com/seminars

ERCO on Facebook
ERCO now has its own page on Facebook, the world’s largest social networking site. Set up earlier in the year, it not only provides ERCO with a new, quick and uncomplicated news, image and video channel – those who are involved in architectural lighting will also find here a platform to communicate with ERCO and dialogue or exchange ideas across any distance. We warmly invite you to join as a “follower” of ERCO on Facebook:

www.facebook.com/erco.lighting

Film: Lighting with LEDs
You will now find a new, 18-minute film about lighting with LEDs on our website, the ERCO Light Scout. The film documents how ERCO introduces the latest LED technology in architecture and gives insight into the design, development and production of the LED lighting tools. We hear from people who contribute to a successful technology change at ERCO. The film can be downloaded in the Download section of our website (www.erco.com/download) in different formats or embedded in your own website using an HTML code.

www.erco.com/led

Green light for the garden show: The temporary lighting effects originate from Hauke Giesecke / Team Licht (left) aided by
Kai Petriess (centre) and Ingo Dahl (right) from ERCO Hamburg.

Grand opening ceremony at ERCO in Buenos Aires on 11 May 2011: an event that brought together the light and architecture scene of the metropolis.

Students learn design theory in their courses. ERCO’s workshop provides the opportunity to experience lighting effects and the use of lighting tools in a practical setting.

ERCO recognises optoelectronics as a core competence and has developed its own efficient concepts and approaches for architectural lighting with LEDs. The new film provides broad insight into the various divisions that deal with LED lighting tools, all the way from research to production.

MAMBA (Museo de Arte Moderno de Buenos Aires).
In German university towns, such as Göttingen, a widespread fascination with all things Italian can often be observed. The Viani family, importers of Italian specialities for many years, are now supplying foodies with vino, pasta, espresso and focaccia sold in their own shop. Located on the ground floor of a timber-framed house in the historical town centre, the shop’s premises have been redesigned by the Hanover-based Atelier Verführt in a sober but elegant style. ERCO’s contribution is the efficient visual comfort provided by Quintessence wallwashers fitted with metal halide lamps and Optec spotlights for flexible accentuation of objects.

Bodegas Portia
A state-of-the-art winery, the Spanish Bodegas Portia in the wine country of Ribera del Duero operates according to industrial standards. This does not detract from the fascination inherent in wine as a complex result of natural processes governed by the immaterial ingredients of time, intuition and experience. Celebrating the mystery of wine, Foster + Partners have created a spectacular architecture starring an equally immaterial element: light.