tune the light
Light for museums

Contents

Situations in the museum

Using light to guide through the museum

Pages 4-5

Two-dimensional exhibits

Accent lighting for a dramatic effect

Pages 6-7

Three-dimensional exhibits

Wallwashing for a harmonious impression of the room

Pages 8-9

ERCO headquarters

ERCO has its headquarters in Lüdenscheid, an industrial town steeped in tradition, right in the heart of Germany. The ERCO plant consists of prizewinning industrial buildings as a living expression of a corporate culture defined by innovation, communication and quality awareness.

Technology

Optimal use of professional lighting tools

Pages 12-14

Services and media

Experiencing light, using services and accessing information – worldwide.

Pages 16-17

Communicating and preserving

Light makes cultural values visible

Pages 2–3

The Light Factory

ERCO specialises in architectural lighting. First and foremost, we see ourselves as selling light, not luminaires. This approach has been the trademark of our work for many years. That’s why we call ourselves: ERCO, the Light Factory. ERCO’s indoor luminaires, outdoor luminaires and lighting control systems constitute an extensive range of lighting equipment for general, comprehensive, architectural lighting solutions. Development and client support at ERCO are guided by our vision of 100% LED and all our efforts are geared to producing innovative optoelectronic LED systems when creating, directing and controlling light. Innovation is the key to achieving efficient visual comfort and scenographic excellence at an ever higher level. ERCO lighting tools encourage a transformation of technology into culture. This approach results in lighting tools for the user that satisfy all the technical and economical requirements of lighting practice, while at the same time opening up the whole fascination and magic of that “immaterial material” known as light.

100% LED

The breakthrough of LED technology is probably the biggest development in lighting technology for decades. ERCO plays a leading role in implementing these advances with practical LED lighting tools: Our vision of 100% LED has already been implemented in our new product range and is implemented in an ever growing number of ERCO’s projects.

Checklist for museum lighting

The way to an individual lighting concept

Page 15

Two-dimensional exhibits

Wallwashing for a harmonious impression of the room

Pages 10-11

Technology

Optimal use of professional lighting tools

Pages 12-14

Services and media

Experiencing light, using services and accessing information – worldwide.

Pages 16-17

Communicating and preserving

Light makes cultural values visible

Pages 2–3

The Light Factory

ERCO specialises in architectural lighting. First and foremost, we see ourselves as selling light, not luminaires. This approach has been the trademark of our work for many years. That’s why we call ourselves: ERCO, the Light Factory. ERCO’s indoor luminaires, outdoor luminaires and lighting control systems constitute an extensive range of lighting equipment for general, comprehensive, architectural lighting solutions. Development and client support at ERCO are guided by our vision of 100% LED and all our efforts are geared to producing innovative optoelectronic LED systems when creating, directing and controlling light. Innovation is the key to achieving efficient visual comfort and scenographic excellence at an ever higher level. ERCO lighting tools encourage a transformation of technology into culture. This approach results in lighting tools for the user that satisfy all the technical and economical requirements of lighting practice, while at the same time opening up the whole fascination and magic of that “immaterial material” known as light.

100% LED

The breakthrough of LED technology is probably the biggest development in lighting technology for decades. ERCO plays a leading role in implementing these advances with practical LED lighting tools: Our vision of 100% LED has already been implemented in our new product range and is implemented in an ever growing number of ERCO’s projects.
The diversity of the international museum landscape is enormous – museums cover a huge variety of topics ranging from archaeology all the way to contemporary art and from literature through to modern technology. Some account for just a few square metres, while others fill entire urban districts. Regardless of this, however, they all have a common denominator – each sees its mission as collecting, preserving and exploring their chosen subject matter as much – maybe more so – as communicating and presenting their topics. Specifically, institutions which preserve and exhibit important cultural assets underline their status with representative architecture. In these museums, whether they boast a long tradition such as the Louvre in Paris or are as young as the Guggenheim Museum in Bilbao, architects, lighting and exhibition designers, and curators apply strict quality standards right down to the aspect of lighting. As a result, light in “museum quality” has become the benchmark, even for other types of architecture. Good museum lighting meets the requirements of the visitors, but also of the curators and operators – visual comfort, optimum perception of the exhibits, clear and safe orientation in the building, and a high quality experience, but also conservation of the exhibits as well as economic efficiency and sustainability. Lighting concepts which meet these criteria contribute to preserving the cultural heritage of humanity for future generations.

Communicating and preserving
Light makes cultural values visible
Situations in the museum
Using light to guide through the museum

Creating light signals for urban spaces
A holistic lighting concept that also considers the external effect will transform museum buildings into nocturnal highlights of their situation. Glazed buildings that shine from the inside out attract attention in and to their environment.

Using light to design welcoming façades
Illuminated façades communicate an open house to the museum visitor. In conjunction with illuminated signage, it reaches a long way out and creates an inviting gesture whilst arousing the interest of visitors.

Artfully guiding the way to the museum
Clear pathway lighting guides the streams of visitors and facilitates orientation.

Effectively illuminating paintings
Light does not only make art visible; it also allows art to shine out, for example, by using narrow light beams to draw attention to paintings.

Using light to model sculptures
The high-contrast change of light and shadow emphasizes the shapes of the sculptures and highlights fine textures. Accent lighting using brilliant light creates effective points of interest on the way through the exhibition.

The professional lighting of artwork is, without a doubt, one of the central challenges of museum lighting. The light for exhibition rooms, however, is only one aspect of its function in the museum. Lighting starts with the building outside, to create striking signals for urban spaces at night, to emphasise exhibits in the outdoor area, and to guide visitors into the museum using inviting pathway lighting. Inside, the bookshop and café are part of the extended programme of the museum, where attractive lighting for the sales areas and a pleasant atmosphere are relevant issues in lighting design. In traffic zones such as foyers, halls or pathways outside, lighting can be particularly effective in facilitating orientation by using brightness and narrow beams to point out important elements. In the exhibition rooms, accent lighting is used to create a hierarchy which sets off central items in the collection from their spatial context and emphasises their special significance.

Using the foyer to point the way to the exhibition
Foyers help in the visitors’ transition from a bright outdoors to the lower brightness of the exhibition rooms. Uniform illumination in the foyer creates a spacious impression and helps to identify its various functions.

Enjoying food in good light
Good food, a stimulating atmosphere and a pleasant ambience are factors contributing to a successful restaurant concept. Good light on the product selection, visibility of the diners at the table and suitable lighting in the room create the premises for it.

Art to buy
The almost automatic visit to the museum shop at the end of a tour allows visitors to take home mementoes of the exhibition. Differentiated ambient lighting accentuates books, objects and souvenirs to increase their appeal as an incentive to buy.

Accentuating sculptures in the outdoor area
Powerful lighting technology and durable, tough product design creates an effective presentation of sculptures in the outdoor area. This allows the museum to extend its exhibition into the surrounding area during the hours of darkness.
Two-dimensional exhibits

Accent lighting for a dramatic effect

Using accent lighting to create an atmosphere rich in contrast

Individual illumination of pictures in museums using narrow beams of light creates a dramatic atmosphere. The intense contrast between bright and dark regions assigns the role of protagonists in the exhibition scenography to these exhibits. The narrow beams direct the viewer’s attention to concentrate on the artwork. The interior and the architecture play but a secondary role.

Some exhibitions present stark contrasts of light and dark scenes through the very content of their pictures. In these cases, accent lighting adds a special magic to the scene, as the mood in these pictures harmonises with the atmosphere in the exhibition. Precise adjustment of the beams of light forms the exhibits and artwork and arouses a special fascination in that they appear to be self-illuminating.

Using different levels of illuminance, the accent lighting can also create hierarchies of perception to give structure to the exhibition.

Correctly positioning luminaires

When illuminating paintings and sculptures, the optimum angle of incidence of the light is 30°. Any larger distance to the object would create a problem in that the observer standing in front of the object would cast a shadow on it. A steeper angle of incidence, on the other hand, would lead to a significant degree of grazing light with long shadows on the exhibit.

Using light beams to accentuate pictures in the room

The narrow-beam accent lighting on the exhibits directs the attention of the museum visitor onto the artwork. Using exchangeable lenses for different beam diameters, the lighting can be adjusted to the individual size of the pictures.

Perfecting the enjoyment of art through visual comfort

Lighting design is only one aspect to enhance the quality of the exhibition experience; another is the level of visual comfort of the lighting. A correct luminaire arrangement ensures uniform illumination of the artwork without shadows being cast on the picture as the observer stands in front of it. Narrow beams of light and a shielded front lens minimise direct glare on the way through the exhibition. Appropriately arranged luminaires also prevent disturbing reflected glare.

Minimising shadows cast by the observer

Positioning two spotlights to the side to illuminate the picture avoids reflected glare on the exhibits and prevents the observer casting shadows on the picture.

Avoiding reflected glare

Paintings protected behind glass can cause glare if the luminaires mounted on the ceiling are reflected in the glass as the observer stands in front of them. Reflected glare is easy to avoid through proper arrangement of the luminaires using narrow beams and shielded front covers.

Restricting the light beam to the size of the painting

Paintings appear to be self-illuminating if the beam of light is restricted precisely to illuminate the exhibit. The resulting concentrated and mysterious atmosphere stands in contrast to the darker room. The beams can be adjusted to the picture size using framing attachments on a projector spotlight.

Illuminating display cabinets without glare

Glass cabinets can be illuminated from the outside if the spotlights are positioned away from the reflection surfaces in the observer’s field of vision.

Using different levels of illuminance

Using light beams to accentuate pictures in the room

Using narrow-beam accent lighting on the exhibits directs the attention of the museum visitor onto the artwork. Using exchangeable lenses for different beam diameters, the lighting can be adjusted to the individual size of the pictures.
Two-dimensional exhibits

Wallwashing for a harmonious impression of the room

Using wallwashing for a bright and spacious impression of the room
Uniform wallwashing provides a neutral backdrop for exhibitions and presents artwork on the walls in an objective manner. It is suitable particularly where the mood to be induced for viewing artwork is to be contemplative rather than dramatic. Uniform illumination of vertical surfaces gives the impression of a bright and spacious room, with even brightness levels creating a harmonious atmosphere in which pictures and wall form an integrated whole.

Combining wallwashing with accent lighting
For some exhibitions, using nothing but dramatic accent lighting or uniform wallwashing is too extreme a presentation concept. Combining both approaches, however, opens up further options. Wallwashing, on the one hand, generates a basic brightness in the room and enables good perception of exhibits on the wall. Accentuation, on the other hand, differentiates individual works of art using directed light of a higher illuminance or enhances the modelling effect on sculptures.

Using washlighting to emphasise large areas
Washlighting using a wide beam angle is suitable for emphasising larger artwork or a group of objects. The oval flood characteristic is ideal, for instance, to emphasise a group of pictures, a long table or wall shelving, as it requires only one luminaire instead of two or three spotlights with spot or flood distribution. This approach helps to minimise the investment costs in exhibition design.

Using vertical illumination to emphasise architecture
Washlighting large areas of the wall creates a bright and spacious impression of the room. It provides a calm backdrop for artwork and gives the room the appearance of an integrated whole. As indirect lighting on the walls, wallwashing also ensures a pleasant level of brightness in the centre of the room.

Seeing pictures as part of the walls
The uniform illumination of vertical room surfaces gives artwork a prominence similar to the room and creates a homogeneous appearance.

Arranging luminaires correctly for uniform wallwashing
The distance from the wall for washers should be one third of the room height to achieve a uniform light distribution on the wall. The luminaire spacing is the same as the wall offset.

Arranging luminaires for an integrated wall design
The arrangement of two wallwashers spaced at half the room height creates a stepwise illumination with a noticeable effect on the artwork.

Using coloured walls for harmonious contrasts
Curators like to use coloured wall surfaces to produce coordinated contrasts between picture and wall colour. Uniform wallwashing underlines the calm character of the exhibition concept.

Using wallwashing to illuminate large pictures
Uniform illumination particularly benefits artwork of a large format. Wallwashing creates a uniform impression of the room.

Using vertical illumination to emphasise architecture
Washlighting large areas of the wall creates a bright and spacious impression of the room. It provides a calm backdrop for artwork and gives the room the appearance of an integrated whole. As indirect lighting on the walls, wallwashing also ensures a pleasant level of brightness in the centre of the room.

Seeing pictures as part of the walls
The uniform illumination of vertical room surfaces gives artwork a prominence similar to the room and creates a homogeneous appearance.

Arranging luminaires correctly for uniform wallwashing
The distance from the wall for washers should be one third of the room height to achieve a uniform light distribution on the wall. The luminaire spacing is the same as the wall offset.

Arranging luminaires for an integrated wall design
The arrangement of two wallwashers spaced at half the room height creates a stepwise illumination with a noticeable effect on the artwork.

Using coloured walls for harmonious contrasts
Curators like to use coloured wall surfaces to produce coordinated contrasts between picture and wall colour. Uniform wallwashing underlines the calm character of the exhibition concept.

Using wallwashing to illuminate large pictures
Uniform illumination particularly benefits artwork of a large format. Wallwashing creates a uniform impression of the room.
Three-dimensional exhibits
Modelling sculptures with light and shadow

Defining shapes with shadows
Directed light, produced by spotlights, creates hard-edged shadows for distinctive modelling of three-dimensional objects. The position of the light source is crucial for the shadow image. A steep angle of incidence over a short distance produces long and large shadows. Generally, an angle of incidence of 30° has proven optimal for the modelling of sculptures. Exhibition lighting based solely on directed light further enables sharp contrasts of light and dark. The localised beams of the accent light evoke a magical atmosphere in which individual aspects can mysteriously stand out against the dark.

Producing brilliance
Brilliance is useful in drawing attention to specific parts of an exhibition, as the highlights produced on the surfaces appear to wander when changing position in the room. The arrangement of these highlights also sheds light on the shape of edges and forms of the exhibits. Objects are enhanced by emphasising their shape and texture through brilliance effects. Such manifestations of brilliance depend on the compression of the light source, as the intensity of the light is of secondary importance. Point light sources such as spotlights with LEDs, therefore, are ideal as tools for brilliant accent lighting.

Emphasising shapes with shadows
Curves and contours are emphasised effectively through the progression of shadows.

Luminaire arrangement for large objects
Large exhibits require multiple luminaires, each with narrow beams of light, to prevent glare for the observer.

Uniform light for multiple exhibits
Large areas with multiple exhibits are best illuminated using a grid of washlighting illumination that presents the exhibits as a whole.

Directed light forms the basis for good modelling of sculptures. A single spotlight results in harsh contrasts.

For balanced contrasts on sculptures, the main illumination is supplemented with a lower intensity filling light provided by a second spotlight.

Directed light for modelling and brilliance
Compact light sources such as spotlights allow for highly contrasting shadow effects and highlights. Brilliant spotlights, now also with LEDs, give the impression of value and prestige on glass surfaces such as metal or glass.

Diffuse and directed light
Diffuse light comes from flat light sources such as luminous ceilings. Similar to an overcast sky, light is emitted uniformly from various directions producing virtually no shadows and leaving a flat impression of the sculpture. Directed light, such as natural sunlight or accentuating spotlights, delivers the alternative of high-contrast shadows that give a dramatic effect, even to subtle contours.

Diffuse light for a calm atmosphere
Skylights with an incidence of indirect daylight or luminous ceilings, as the technical alternative, provide diffuse light in the room. The soft shadows create a peaceful impression. Compared to high-contrast accent lighting, they give exhibits an objective appearance.

Emphasising shapes
Uniform light for multiple exhibits
Luminaire arrangement for large objects
Directed light produces virtually no shadows for a calm atmosphere on objects.

Luminaire arrangement for large objects
Directed light for modelling and brilliance
Diffuse light for a calm atmosphere
Luminaire arrangement for large objects
Directed light forms the basis for good modelling of sculptures. A single spotlight results in harsh contrasts.

For balanced contrasts on sculptures, the main illumination is supplemented with a lower intensity filling light provided by a second spotlight.
Using efficient Spherolit technology
Exhibits of different sizes, luminaires positioned at varying distance from the object and specific lighting concepts demand a wide range of beam characteristics. Very narrow light distributions are predestined for small works of art and large distances to achieve stark contrasts and good visual comfort. Oblong sculptures, on the other hand, are best illuminated using an oval beam characteristic to accentuate the exhibit with a single luminaire. Spherolit lenses are ideal for variable exhibitions, since their capacity to be changed easily makes delivering different distributions quick and uncomplicated.

Projection effects
The optical imaging system of projector spotlights enables sharp-edged beams of light or the precise projection of patterns. Adjusting the lens changes the edge definition of the beam for such aspects as high-contrast differentiation of the surroundings. An additional framing attachment illuminates the images with a precision beam giving the artwork the appearance of glowing from within. Gobos or structured lenses add graphic patterns for a scenicographic design.

- Narrow spot: Used to accentuate small objects with high light intensity or to project over greater distances between the luminaire and the target object. Beam angle < 10°.
- Spot: This is the standard characteristic for accent lighting for objects of all kinds, especially to reveal the three-dimensional shape. Beam angle 10°–20°.
- Flood: Used for efficient accentuation of large objects or to uniformly illuminate a complete spatial zone. Beam angle 25°–35°.
- Wide-flood: Used for flexible, floodlighting illumination of face areas and spatial zones, especially useful for the presentation of goods. Beam angle > 45°.
- Oval flood: The oval flood Spherolit lens has an axially symmetrical light intensity distribution, producing an oval beam of approx. 20° to 60°.
- Wallwash: The light distribution of the wallwasher is designed to produce very good uniformity.

Mounting location in listed buildings
The positioning of luminaires can pose a challenge in historic buildings that, for aesthetic and conservational reasons, may be off limits for the installation of luminaires – precious old vaulted ceilings or ceiling decoration may be too good to damage with lighting infrastructure. Projecting sections on walls, ceilings and columns can help to mount luminaires in a concealed position thereby focussing perception onto the works of art.

Reducing the damage factor with LEDs
The relative damage factor is used to assess suitable light sources for conservation requirements such as in museums. It specifies the ratio of the damaging radiation intensity and the illuminance. Warm white LED lighting is even better suited for delicate objects than low-voltage halogen lamps with or without UV filter.

<table>
<thead>
<tr>
<th>Light source</th>
<th>Relative damage factor f (mW/lm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LED warm white, Ra 90</td>
<td>0.149</td>
</tr>
<tr>
<td>QT12-RE with UV filter</td>
<td>0.159</td>
</tr>
<tr>
<td>QT12-RE</td>
<td>0.169</td>
</tr>
<tr>
<td>HIF 930</td>
<td>0.182</td>
</tr>
</tbody>
</table>

Preventing spill light
The soft progression of brightness at the beam edge ensures precise and neat accent lighting on pictures. The Spherolit lenses of ERCO’s LED spotlights enable a soft progression free of spill light. Conventional technologies used for accent lighting, in contrast, can create ring-shaped light patterns outside the central beam of light. This spill light detracts from the effective illumination of artwork and disrupts the enjoyment of pictures. It is therefore advisable to use spotlights with precise beams of light for professional exhibition lighting.

- Narrow spot
- Spot
- Flood
- Oval flood
- Wallwash
- Framing: The framing attachment produces a sharp-edged beam.
- Gobo projection: Gobos or structured lenses are used to project patterns and images.

Precise light beams with Spherolit lenses
The LED optical systems concentrate the light with no losses and spill light to the sides is minimal. As a result, no circular artefacts arise even outside the main light beam.
Technology
Technology for efficient visual comfort

Optimal light quality through visual comfort
Avoiding glare is a primary mission in museum lighting. Precise optical systems are the key to preventing spill light. Other accessories are available to optimise the visual comfort for demanding visual tasks. Black anti-glare rings for spotlights or wallwashers, for example, restrict the view into the luminaire to minimise direct glare and direct the focus onto the artwork.

Adjustment of illuminances
Luminaires in museums should be dimmable for a number of reasons. At the most basic level, it makes sense to adjust the illuminance levels which ensure maximum conservation of the works; equally, the demand is there to balance the brightness of luminaires mounted on the walls to prevent direct glare and direct the focus onto the artwork. In many museums, track systems are used for spotlights or wallwashers, for example, to prevent spill light. Other accessories are available to enhance the standard visual comfort of the luminaires.

Upgrading existing systems to efficient lighting technology
In many museums, track systems are used as the basis for variable and flexible lighting design. They ensure quick and easy replacement of the luminaires for new exhibitions. Due to the consistent system design of the LED spotlights, luminaires with conventional lamps are easy to replace. An LED luminaire’s luminous efficacy, which is around four times higher than that of low-voltage halogen lamps, characterises the shifting towards the warmer white range.

Creating lighting effects in exhibitions
The curator’s decision in favour of a specific exhibition concept provides guidelines for the lighting concept. The scope of options ranges from uniform illumination all the way to sharp contrasts through dynamic light sequences. Use light to communicate the topic of your exhibition!

Using vertical illumination
Walls in museums are important presentation surfaces and therefore deserve special consideration in the design. Uniform illumination of the walls using special wallwashers enhances the perception of art and also creates a bright and harmonious impression of the room.

Ensuring flexibility
To ensure a quick response to changing forms of art and presentation in the long run, it is wise to opt for an adjustable infrastructure with track. Exchangeable lenses for different beam angles, lamp dimming options and flexible lighting control ensure optimum lighting conditions for museums, also in the future.

Integrating the aspect of conservation
The requirements of conservation of the paintings are often a contradiction to the visitors’ demands for appropriate levels of brightness. In order to protect the exhibits, it is vital to shield them against damaging artificial light or daylight spectra. Today, dimmable warm white LED lighting is considered the optimum for sensitive works of art.

Benefitting from efficiency and visual comfort
Economically efficient lighting technology reduces the operating costs and provides the financial scope to invest in the collection and presentation. Excellent luminous efficacy, a high light output ratio and long life have a positive effect on the operating costs. ERCO’s modern LED technology offers this and more. Well shielded luminaires and careful luminaire arrangement ensure a high quality of light and visual comfort in the exhibition.

Checklist for museum lighting
The way to an individual lighting concept

Creating lighting effects in exhibitions
The curator’s decision in favour of a specific exhibition concept provides guidelines for the lighting concept. The scope of options ranges from uniform illumination all the way to sharp contrasts through dynamic light sequences. Use light to communicate the topic of your exhibition!

Using vertical illumination
Walls in museums are important presentation surfaces and therefore deserve special consideration in the design. Uniform illumination of the walls using special wallwashers enhances the perception of art and also creates a bright and harmonious impression of the room.

Ensuring flexibility
To ensure a quick response to changing forms of art and presentation in the long run, it is wise to opt for an adjustable infrastructure with track. Exchangeable lenses for different beam angles, lamp dimming options and flexible lighting control ensure optimum lighting conditions for museums, also in the future.

Integrating the aspect of conservation
The requirements of conservation of the paintings are often a contradiction to the visitors’ demands for appropriate levels of brightness. In order to protect the exhibits, it is vital to shield them against damaging artificial light or daylight spectra. Today, dimmable warm white LED lighting is considered the optimum for sensitive works of art.

Benefitting from efficiency and visual comfort
Economically efficient lighting technology reduces the operating costs and provides the financial scope to invest in the collection and presentation. Excellent luminous efficacy, a high light output ratio and long life have a positive effect on the operating costs. ERCO’s modern LED technology offers this and more. Well shielded luminaires and careful luminaire arrangement ensure a high quality of light and visual comfort in the exhibition.
ERCO showrooms
Experiencing light and using services – worldwide

ERCO is a cosmopolitan, globally active company. ERCO showrooms and offices can be found in all major markets. Here, our well-educated, specially trained employees work as lighting advisors. This worldwide network ensures reliable service and competent, on-site support especially on international projects: from providing advice during the planning stage, tendering, sample supply, project planning and supply logistics to customer service and training.

*Consultant to the consultant* – this is how ERCO lighting advisors see their role in the building process: they provide professional support to designers in all matters relating to lighting technology and in each individual project phase. With case-related specialist information and customised product documentation they help customers to make the correct decision when selecting lighting equipment.

The showrooms and offices provide ideal facilities for meetings during the project phase. Each facility has a mock-up section for sample products, provide assistance on lighting issues and space.

Many issues only emerge during the building process and require site meetings. ERCO employees help to organise samples, products, provide assistance on lighting technology issues and solve logistical problems.

On site

Events and seminars

These turn ERCO showrooms into meeting places for the local light and architecture scene. The showroom is designed to make it possible to explain "tune the light": to design the qualities of light in terms of time and space.

Light qualities

Experiencing the product variety and scope for design of ERCO’s range of luminaires up close and personal: ERCO’s showrooms provide visual examples from the exterior design to the mock-up section inside.

www.erco.com/contact

ERCO Media

To provide designers with optimum support at every stage of their work, ERCO offers a multitude of both classic and digital media. Our extensive range of material is divided into information on products, reference projects and didactic subjects.

All ERCO documents have been designed to perfectly complement the design of coherent and uniform lighting concepts. The layout, structure and terminology of the various areas of the product range have been harmonised to make orientation as easy as possible for users.

www.erco.com

The ERCO light Scout is the leading medium in terms of up-to-date product information. The product section of the Light Scout and the PDF product specification sheets are all regularly updated. Light Scout meets the requirements of a globalised market place with product information in 10 versions for different languages and regions and with Internet navigation in 5 languages.

Digital design data

The ERCO light Scout contains all the important information and design data – in black and white, compact and always accessible.

Product specification sheets

These documents are available online in PDF format and contain detailed information on a specific product.

Products

Our extensive range of lighting solutions for architectural applications is divided into the three product ranges: lighting controls, indoor luminaires and outdoor luminaires. This structure is repeated in both the Light Scout and the printed catalogue.

www.erco.com/lightscout

www.erco.com/products

www.erco.com/technical

www.erco.com/education

www.erco.com/contact

www.erco.com/newsletters

“ERCO Lichtbericht”.

Scout and our magazine “ERCO Lichtbericht” include the "Projects" area of the ERCO Light Scout and our magazine "ERCO Lichtbericht".