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THORN
www.thornlighting.com

Make the most of your lighting with PEC

All too often a place of work, or study, or play is something occupants endure rather than enjoy. Yet a carefully planned lighting scheme can transform an uninspiring environment. In offices it can increase productivity and improve mood and morale and in the city centre it can reduce accidents and crime.

Thorn's PEC programme is conceived to harness the skills and facilities in lighting product

and scheme designs to fulfil the three principle criteria of PEC, namely Performance, Efficiency and Comfort, that form the cornerstones of delivering quality lighting.

It can meet your needs precisely, being equally applicable for lighting indoors and outdoors, be it for work, leisure or movement. By acting as an analytical design tool the PEC programme drives designs for efficient and

sustainable solutions while, at the same time, delivering quality lighting, designed for people to fulfil all their visual needs. It is an unique yet dynamic concept that will change lighting practice.

This newsletter illustrates some of the ways PEC is helping users to achieve their objectives. Let us help you to achieve yours.



Green award winners

The Zumtobel Group, Thorn's parent company, has announced the winners of its first international award for 'Sustainability and Humanity in the Built Environment'. Designed to commend outstanding sustainable and humanitarian solutions in contemporary architecture and engineering, the award carries a prize of EUR 140,000, shared among two categories: the Built Environment and Research & Initiative. For the former the jury honoured Morphosis Architects for the San Francisco Federal Building; while the latter award went to Schlaich Bergermann Solar, Stuttgart, Germany, for the design of the Solar Updraft Tower. The two winning projects were selected from a worldwide total of 40, proposed by a global network of experts in architecture and engineering.

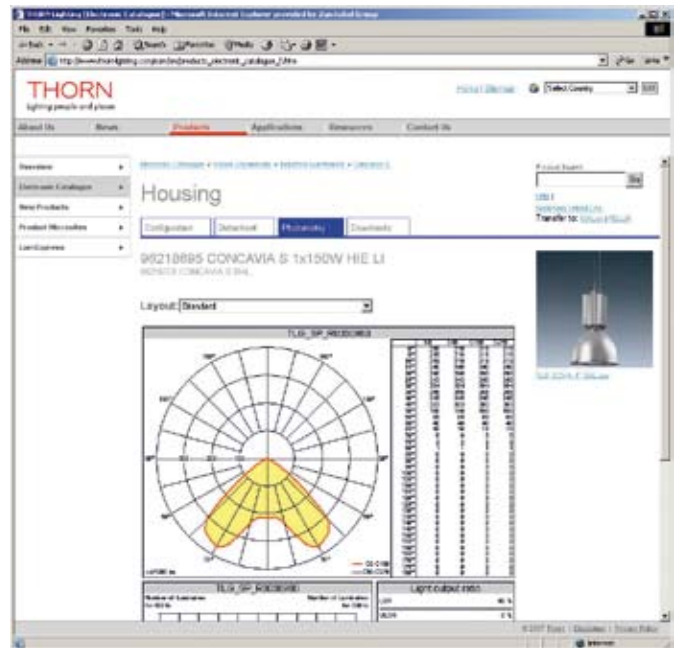


Thorn re-weaves its web

An electronic catalogue complete with lighting software downloads is the headline feature of Thorn's faster and easier-to-use website. Visitors can view performance data for more than 6,000 luminaires or download up-to-the-minute product information, photometric data files, line drawings and photos.

Whether you're an existing customer or a first time user the website is a one-stop shop for all your lighting needs. The user can navigate swiftly from initial 'selection' through design - immediately transferring the photometry provided into an opened DIALux or Relux lighting calculation programme - to studying installation instructions. Other highlights are new product reports, customer newsletters, a comprehensive events schedule and marketing materials to request or for downloading.

www.thornlighting.com



Back on the road again

Following the resounding success of its inaugural touring exhibition last year, which visited 88 venues throughout Europe, Thorn's Travelling Light 2007/8 Roadshow promises more attractions, more lectures and more effects this year. Once again the mobile showroom, as the title suggests, enables customers to experience 'hands-on' the latest developments in luminaires and systems.

The tour will visit 48 major cities in 12 European countries during the next six months. Nearly 30 product ranges (40 per cent new) from spotlights to road lanterns, are displayed on the 16m long trailer, which now features a marquee for presenting urban lighting effects.

The exhibition will be supported with a series of presentations of PEC (Performance, Efficiency and Comfort) and an illustrated catalogue, Product Focus.

To find out when the truck will be in a city near you, check your local Thorn website.





Lessons for the future

▲ Creative lighting

The pioneering Glassworks, near Folkestone harbour in Kent, England, comprises two refurbished five-storey warehouses, and is owned by the Creative Foundation, a charity founded by Roger De Haan CBE to regenerate the town's historic heart with art led projects. The development provides studio spaces for artists and local education bodies, and with its daylight and low energy ethos, the right lighting was critical. The minimal Jupiter fluorescent was the luminaire specified, giving glare-free lighting with controlled luminance to upper walls and ceilings. An attractive, bright, and open space - ideal for ideas and learning - results.

Architect: Pringle Richards Sharratt
Installer: P A Grant Electrical
Photo: Richard Seymour

Class act

The new Jupiter II fluorescent brings an understated, minimalist look to commercial and educational premises. And it has performance as well as sleek lines - high efficiency single or twin T16 lamps, from 14W to 80W, and interchangeable louvres or diffusers (including an asymmetric option for corridors).

Whether surface or suspended (direct/indirect), Jupiter II is available for mounting singly or in continuous lines or squares. Integrated emergency and digital dimmable options add further flexibility.

Two other refinements are offered - the addition of uplight and integrated intelligent lighting control 'Sensa' modules. A close offset mounting variant can also be supplied.





▲ Dual colour office lighting may influence our biological clocks

With field studies examining whether cooler, blue light can affect our biological clocks and hence our feeling of mood and alertness the introduction of the MenloSoftSR Dual Colour luminaire could hardly be more welcome.

By employing T16 lamps of mixed colour appearance, namely a central 4000K lamp and two outer 17000K lamps, the luminaire delivers ultra cool lighting. Used with a wall control plate three scenes can be recalled, while the light level and balance can be adjusted. The luminaire mimics daylight patterns over time. The user can adjust the light to their mood. Above all it delivers atmospheres with warm and cool spaces.

There is a choice of models: 600mm square for 24W lamps or 300 x 1200mm for 54W lamps.

Thorn continues to research the long-term effects of blue light on people in workplaces, including its own studies. These will yield valuable and reliable assurance on its appropriateness.

▼ Denmark builds greener schools

The aim of Grønvang Primary School in Vejen was to create ideal study conditions for pupils and staff while being as sustainable as possible, hence the ingenious blend of daylight and artificial light. Natural light is maximised in all the main spaces, especially the two storey atrium, while the artificial lighting, Fata Morgana and Glacier pendants supported by Novaline bulkheads, is daylight linked and dimmer controlled.

According to architect Jens Ravn from Arkos Arkitekter: "The result is a multifunctional space where the light accentuates the architecture and holds the space together. Elegant and graceful pendants harmonise with the building's lightness, while linear fluorescents built into the ceiling and along the room's balcony emphasise the architectural forms".

The exterior lighting was also carefully considered with Avenue lanterns providing stylish but sustainable illumination.



A lighting scheme matching every mood

Being a local municipality or retailer is like constantly throwing a party. Naturally, you want plenty of people to visit you and enjoy themselves, but the last thing you're looking for are gatecrashers.

At night-time, however, it's all too easy to pick up the wrong sort of clientele. For vandals and thieves prefer the dark because it covers their activities and puts the fear of crime into others. And it's largely because these places are often so badly lit.

As well as being a useful deterrent, of course, lighting's the perfect ambassador. Light can enhance a cultural landmark, or create attractive public places that encourage participation and a sense of community. It can create an air of romance in a busy outdoor café, or of reassurance in a lonely plaza.

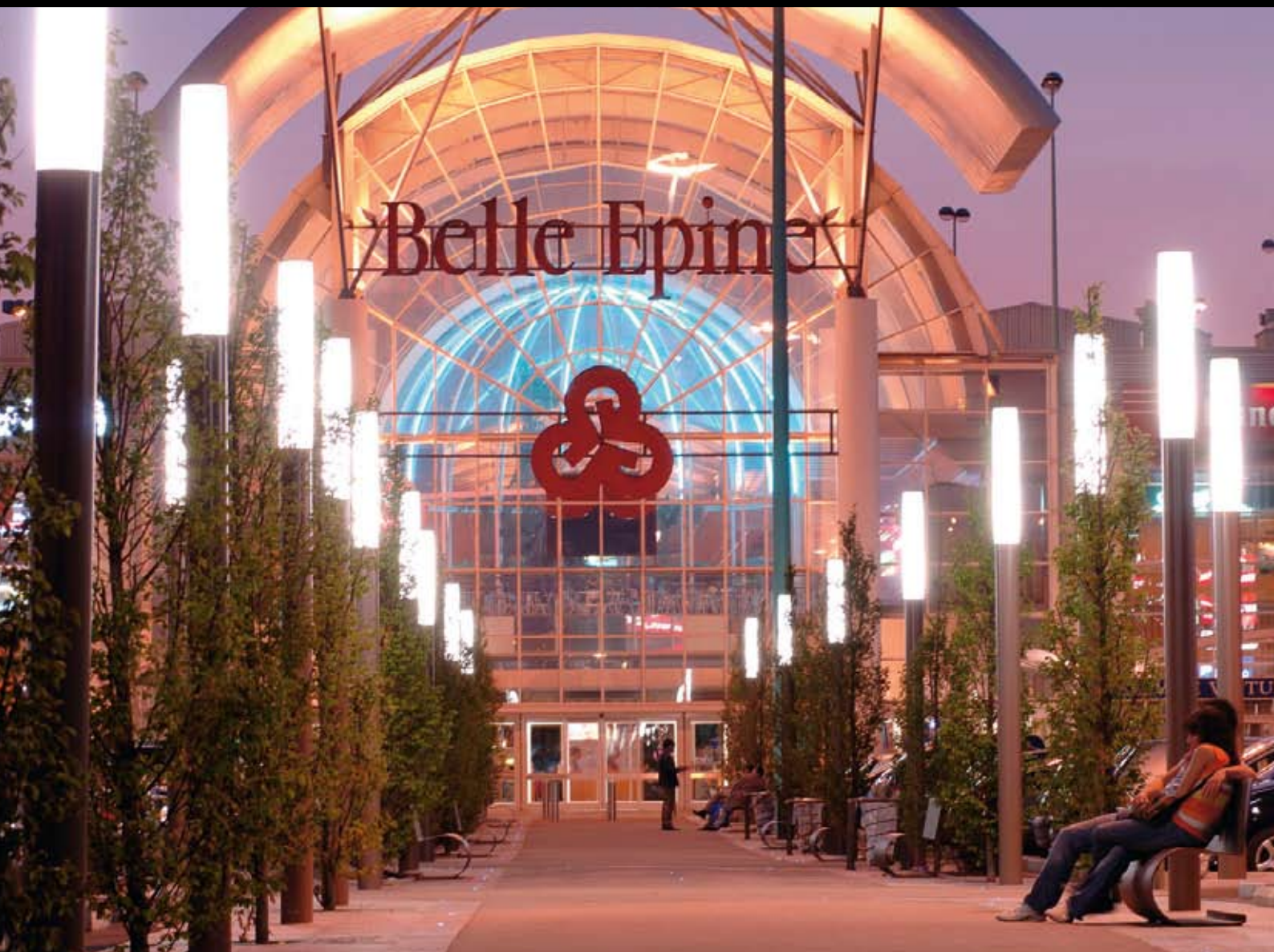
However you decide to use exterior lighting, it's good to know that the self-same medium will help you attract people while repelling less welcome boarders. Because of the wide range of urban activities it is necessary to analyse the visual requirements of each and choose the luminaires carefully in order to produce the best results. Here are some of the Thorn's latest examples.

Shopping centre lives up to its name

The Belle Epine Shopping Centre near Paris certainly lives up to its name for it translates literally from French as 'Beautiful Thorn'! One of the largest retail facilities in Europe, the centre is set to attract over 18m visitors this year.

The principal entry and parking areas are lit with 44 Alumet lighting columns, finished in RAL 7006, and using low energy 2 x 55W TC-L lamps. The sleek decorative luminaires speak of direction by both day and night as the line of columns always leads the eye and the footstep. The visitor is beckoned towards the entrance.

Photo: Studio 1+1





Mallorca gets a lighting facelift

Mallorca, one of the Balearic Islands off the east coast of Spain, is a favourite destination for many holidaymakers. Every evening, as the night draws in over Mallorca, a variety of urban luminaires ensure that buildings and thoroughfares throughout the capital, Palma, are seen in the right light. At the magnificent 14th-century Gothic cathedral, La Seu, light from Contrast floodlights makes the best of the golden sandstone exterior.

The surrounding area is softly lit with S500 lanterns while in the nearby Parc de les Estacions, which joins the older with the more modern parts of the city, local Thorn agent, Salamanc Albertí, has used Avenue lanterns with 150W HST lamps to light the way.



Cut down to size

Now there's Mica Slim - a shallow version of the popular in-ground 'drive-over' Mica luminaire.

Mica Slim is up to 60 per cent slimmer and can be installed in all types of ground. It allows the landscape or exterior designer to give a project a strong night time appearance, with the advantage of concealed equipment.

Made from die-cast aluminium, the circular luminaire is available in three sizes, distinguished by diameter and depth. The 113 and 165mm Ø models have a 175mm burial depth, while the larger, 235mm Ø version is only slightly deeper at 195mm.

There are other plus points in favour of Mica Slim - a selection of five different lamp types, including LEDs and colour mixing, and a choice of optical control. Internal adjustments offer offset (angled) accent lighting while frosted glasses and domed windows give a screened appearance for guidance and avoid any awareness of the lighting source.





▲ **A temple for the art of lighting**

Thorn's most exciting new exterior luminaires - Band, Cesar and Milo - have been used to illuminate Antwerp's Royal Museum of Fine Arts (Koninklijk Museum voor Schone Kunsten). This remarkable 19th century temple of art displays a fine collection of Flemish paintings including work from Rubens, Van Dyck, Jordaens and Brueghel.

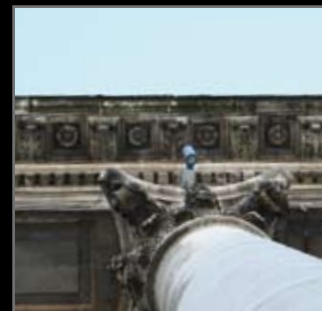
The architect wanted to create a hierarchy of illuminance without overlighting, whilst paying special attention to focal points such as the two-horse chariots, which serve as the museum's logo.

LED Band luminaires, many DALI controlled, are used for the base of the chariots, above the entrance doors and for backlighting the pink galleries that house the busts - each figure being lit from above by two Milo LED spotlights.

The Corinthian columns and verticals are lit by Cesar projectors (35W HIT), augmented by various Contrast (35W & 70W HIT) and Mini Pinspot LED spotlights. A mix of warm (3000K) and cool (4200K) lamps varies the colour appearance.

The overall result is a scheme of unity, beauty and economy - electrical consumption has been halved.

Architects: Bureau Robbrecht & Daem, Hilde daem
Technical specification: Bureau EDV
Installer: Fabricom-Gti
Photo: Toon Grobet





▲ **Sculpting by light**

Visitors to the Rajiv Gandhi Memorial, sited at Sriperumbudur near Chennai in southern India where the former Prime Minister was assassinated on 21 May 1991, have been impressed by the after-dark effects achieved there by new urban lighting.

Candle luminous columns illuminate the entrance; elsewhere a 45m long stonewall with bas-reliefed frieze is lit by QBA floodlights with metal halide lamps and barn door attachments.

QBA is ideal for this kind of specialised lighting where a controlled beam is required. The beam lights only the murals and not the surrounding area, thereby creating a very dramatic effect at night. A warmer colour temperature lamp picks out the central carving of Rajiv Gandhi.

▼ **Band Intensive will brighten façades, bridges, monuments**

With more and more designers wishing to utilise colour to set the tone of a façade...and with users seeking to reduce power consumption and maintenance...the introduction of Band Intensive could hardly be more timely.

The slim, 800mm line of 36 high power LED's creates a concentrated and uniform beam over 10 metres. The choice of five saturated colours is complemented by RGB/ RGBA mixing.

Band Intensive is designed for illuminating columns, towers and pillars - in short, any building façade application that benefits from a broad band of light.



Sure to be a winner

► A racing certainty

One of France's leading racehorse training establishments, Grosbois near Paris, now has an illuminated track lit exclusively by EP145 lanterns on decorative Diabolo columns. The 75 Victorian style suspended lanterns include a horizontal lamp compartment complete with aluminium optic for enhanced performance. This minimises the spread of light above the horizontal results, increases training time, whilst underlining the charm of the site, which is situated within the picturesque Grosbois Estate.

Photo: Studio 1+1

▼ Ice rink saves on running and maintenance

The Gigantium Ice Arena in Ålborg, north Denmark, is conserving energy with the introduction of controllable lighting in its new 3,500 seater ice rink. Gigantium Arena was anxious to maintain an adequate level of illumination with good colour while wishing to reduce electrical load.

Titus Sport luminaires with 4 x 80W T16 lamps, controlled by an energy management system, offered the best answer both for their efficiency and for the ability to operate each lamp for the same length of time irrespective of the switching pattern employed, thus reducing maintenance.





▲ Mundial on the ball

At a time when rugby fever has been in everyone's mind, following the Rugby World Cup hosted in France during September and October, more and more of Europe's top clubs - and a number further afield - are switching to Thorn's Mundial floodlights. The latest recruit is Albi, capital city of the Tarn department, located in the Midi-Pyrénées region of southwestern France.

The multi-purpose 'Stadium Municipal' is equipped with a rugby ground and an eight lane 400m athletics track. It is the home ground of Sporting Club Albigeois (SCA), who have risen from the ranks to a place among the elite of French rugby, playing in the Top 14 league.

Some 120 Mundial 2kW floodlights have been installed on four 36m-high tilted masts, together with 50 Titus Industry luminaires (2 x 49W T16 lamps) in the stands. With the help of better lighting not only are the players winning, but the new lighting lifts illumination levels (1046 lux horizontal and 796 lux vertical) for high definition colour TV, without any light spill.

Photos: Patrick Dumas

▼ Pools win

The city of Amberieu en Bugey in South West France has restored the 'Laure Manaudou' Swimming Pool, where the World and Olympic women's 400m freestyle champion learned to swim.

The primary objective of swimming pool lighting is safety; the pool attendant must be able to see a swimmer in difficulty clearly, and secondly, the lighting must provide a pleasant and visually comfortable environment for the swimmers, both in the water and when standing on the pool side.

This is achieved by 83 adjustable Areafloods with 70 to 400W metal halide lamps. Even when the pool is in use and the water turbulent, it is possible to see the lane markings on the bottom.

At 'Laure Manaudou' pool, the windows have been carefully designed to give the swimmers visual contact with the outdoor scene without admitting views of high sky brightness. In this way excessive high luminance reflections in the water are avoided and energy use for lighting kept to a minimum.

Outside Avenue XL Virtual lanterns and a mix of Mica and blue E/Fact LED in-ground lights also ensure safe and friendly illumination.

Photos: Pierre Cruzet



Best street combo

Thorn's lightweight aluminium Civic and Celest road and street lanterns offer the best combination of features, durability and performance.

Recommended for both major traffic routes and urban settings the much improved Civic will accommodate HPS, HIT, HME and TC-TEL lamps from 50W to 250W, while the Celest, specially designed for minor roads, residential areas and car parks, is custom built for 36-80W TC-L lamps giving excellent colour rendering (Ra82) at high efficiency (typically 76 lumens per circuit watt).

Both models are sealed to IP66 and feature electronic versions with inbuilt Telea lighting controls, enabling municipalities to reduce energy consumption and manage individual lighting zones. Tool-free access ensures fast and safe maintenance, and installation is achieved 'straight from the box'.



Civic sizes 1 and 2



Celest

Piazza II - no ordinary bulkhead

If you're looking for exterior wall lights that deliver security and surround illumination with a touch of style, then look no further than the redesigned Piazza II.

The Piazza II retains its reputation for toughness and competitive pricing, while gaining improved optics, a smaller version and better looks.

Two types are available, one with opal diffuser for residential premises and the other, larger model, with prismatic lens for widely spaced illumination of building surrounds and car parks. IP65 rated, the Piazza II is supplied with compact fluorescent or discharge lamp (from 2 x 18W to 70W).

LumExpress

