

# HOW WE DO IT

**PROJECT STORY BOOK** 

zumtobel grou



## **CREATIVE DRIVING FORCE**

**TO BE THE** 

IN ARCHITECTURAL LIGHTING

1500





around them.

We make the normal interesting. We make icons iconic. We make the exciting amazing and the impressive unbelievable. Our combination of high quality engineering, attention to detail and technical expertise enable our customers to be creative with light.

Through an uncompromising commitment to design and innovation, we have established ourselves as a global leader in LED lighting for the architectural, hospitality and residential markets.

With a collaborative and flexible approach, we go out of our way to provide an outstanding experience for our customers.

## OUR

## PURPOSE

## Т0

Lighting can turn spaces into experiences. Using the captivating power of light, we change the way people see or react to buildings, environments and the space

## OUR PROMISE

## HOW DO WE DO THIS?

A CONTRACTOR OF THE OWNER

We are best known for making buildings faces look stunning. We put our lights exactly where they should be to give you a warm, fuzzy feeling inside.

First, we listen to you because every great relationship starts with understanding (and conversation), then...We help you to see what light can really do - We look at what you want to light and we show you how we would do it.

## **CREATE AMAZING** EXPERIENCES WITH LIGHT

IS TO

If we don't have what you need, we make it - it's that simple.

It really is customer LED (see what we did there)

Our Project Story Book takes you through a selection of projects from the last year, right through the brief, the inspiration, the application and the products that were used.

So sit back, take five and enjoy reading what our products are capable of...



## **PROJECTS**

Here's State & ride Strength



- 1

Client: Coca-Cola Croatia. Lighting design: Zumtobel Group. acdc products: BLADE and FUSION.

Osijek pedestrian bridge spans the Drava River and is one of the city's most iconic landmarks. However, compared to other iconic bridges around the world, Osijek pedestrian bridge was quite literally, left in the dark.

2017 was the year all that changed. The bridge underwent a spectacular transformation with dynamic full colour lighting from acdc. The project was funded by a Coca-Cola marketing campaign, to mark 50 years of production in Croatia, and to celebrate its success as an active member of the local community.

To give this bridge a full makeover, a dynamic, full colour lighting scheme was required, highlighting its beauty and to reinforce its iconic status. Enhancing the city's recognisability and attracting more tourists. It was important for the lighting to become integral to life in Osijek, and to be the backdrop for many memories and important life moments.

## **OSIJEK BRIDGE**

**CROATIA** 

## SOLUTION

acdc's Parent company, Zumtobe was invited to design, supply, inst commission a new lighting solution the creative driving force in the Zu group we couldn't wait to start we

For this type of project our BLADE a FUSION LED luminaires were a match made in heaven. BLADE - our linear wall graze luminaire with its mains on-board easily grazes up to an impressive eight meters in height. It's narrow beam is fully dimmable from 0-100% (not a flicker in sight) and even running at a massive length of 210m, very little additional cabling was required because of its clever loop in/loop out wiring. It doesn't stop their either, BLADE also features a single, combined power and data cable which did not distract from the overall design. (Very discreet) Working in harmony with BLADE - FUSION was the perfect partner to graze down the towering 35 meter pillars, dominating the skyline at either end of the bridge. In case you don't

IP66 architectural floodlight. Kickin a huge 2000lm. Take your pick if you want i colour, colour change or dynamic wh don't let its small size fool you, FUSIO offers a high output as well as focused light with minimal light pollution.

They say "Life is art, so live yours in colour". So FUSION's intense colour saturation ensures a vivid colour display and as with all acdc Iuminaires, 2-step MacAdam ellipse guarantees colour consistency.

To accommodate the lighting requirements of all events and special occasions, the partnership of these two ranges offer a multitude of scenes and infinite colours. The possibilities are endless.

bel Vice Pr or Benelux and a Paidic commented: Eastern Europe, Sa

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"We were delighted to accept Coca Cola's with this exciting lighting invitation to partne nise the importance of campaign and reco the pedestrian bridge for the City of Osijek. It is an extraordinary honour to illuminate the bridge, which will now attract even more tourists and have an even greater iconic appeal. Not only as a partner but also as a citizen of Osijek, I feel extremely proud and privileged to be part of such an important and transformational project."

More than 20,000 people attended the ceremony to celebrate the switch on of the lights, which were set to red to reflect the Coca Cola brand.

Not only as a partner but also as a citizen of Osijek, I feel extremely proud and privileged to be part of such an important and transformational project

SASA PAJDIC - ZUMTOBEL BUSINESS DEVELOPMENT VP: BEE. DACH

## LOUIS VUITTON



### **PROJECT BRIEF**

**Client:** Louis Vuitton Architect: Booth Hansen Lighting Design: Schuler Shook acdc product: BLADE PRO

The Palmolive Building - One of the great Art Deco masterpieces of downtown Chicago and the home of fashion giant Louis Vuitton. This project was part renovation and part preservation, involving the painstaking restoration of beautiful original elements and the integration of new modern glass window bays. Bringing the old and the new together as one.

When the project began, the only remaining original parts of the lower storeys were sections of cast iron columns and lanterns. Restoration of the columns started with updating the original light sources in the lanterns with LED panels and decorative top pieces were re-created to complete the 'historic frame'. The new modern store front bays are an interpretation of the original design using larger spans of glass suitable for modern retail to entice shoppers.

For lighting designer Schuler Shook it was important that the lighting was viewed as part of the wider composition of the full



### SOLUTION

Various design schemes were tried and tested, and the final approach was a linear up-light scheme that integrated well into the existing design.

We love it when a plan comes together and this is no exception. Light is set into raised curb bases and skims up the light coloured cast iron panels at the base, revealing the decorative aspects. The contrast of the lit panels against the black cast iron creates interest, while the vertical emphasis ties the whole design together.

Integration and glare were the two big considerations for this design. Schuler Shook's choice was acdc's BLADE PRO- a recessed linear wallwash luminaire. Why?

Well, firstly BLADE's slim profile was a winner, measuring in at a slim 65mm wide allowed it to integrate seamlessly within the design, truly discreet and not distracting the focus from the boutique style frontage. Secondly, as the fittings integrated at street level, glare control was of a huge importance. The lighting needed to show the couture frontage in their best light (pardon the pun) and to tempt shoppers and passers by without dazzling them.

building, balanced against the need to draw attention to the shop front. Robert Shook, Director at Schuler Shook explains:

"We wanted the lighting for the base of the building to marry well with the previous work we did on the building. As this consisted largely of highlighting the architectural form by sharply grazing light in warm white (3000K) up the vertical surfaces adjacent to the set backs, it made sense to use grazing uplight, and warm white light at the base as well. We also wanted to make sure that the new lighting at the base was noticeable in the context of the relatively bright ambient light on the street".

## **ROBERT SHOOK - DIRECTOR. SCHULER SHOOK**

BLADE's specially designed micro louvre is the ultimate in glare control and shields the LED light source from view. Then the icing on the cake was BLADE's four beam angles and three tilt options for fine tuning of the lit effect making BLADE the undeniable choice for this fashion icon.

The 2016 edition of the annual Serpentine Pavilion is a 14 metre high complex sculptural structure designed by Copenhagen/NYC based architecture firm Bjarke Ingels Group (BIG). For many years, Zumtobel has been a sponsor of the Serpentine Pavilion and long-term partners with BIG.

The Serpentine Pavilion is created from stacked, open-ended rectangular boxes creating a fascinating three-dimensional structure.

Constructed from pale green translucent fibreglass, it appears linear and yet curvaceous, modular and et sculptural, depending on which way you view it.

As day becomes night the pavilion is enhanced by specialist lighting from acdc to reveal the beautiful structure.

Inside, the Pavilion hosts a café and a bar for activities during the day and by night hosting a programme of live events. For night scene BIG envisioned a glow from the base, light grazing up the walls to emphasise the curvaceous textures and form, gradually fading out to dissolve the structure into the dark sky.

To preserve the purity of the lines, BIG requested all lighting equipment to be concealed.

The lighting approach remains faithful to the vision, while meeting the practical and technical requirements for the space. A minimum of 100 lux was required on the floor and 200 lux on the bar, with an average of 10 lux on a clearly designated exit route needed in case of emergene

## SERPENTINE GALLERY

### LONDON, UK

## SOLUTION

We love a challenge at acdc and this project allowed us to "stretch our creative muscles" Several simulations, calculations were produced, material samples were measured to evaluate how light would interact with the material and careful consideration was taken to create the external 'glow' that BIG envisioned. The open nature of the structure naturally reduced the amount of reflected light back into bar, while the inward sloping form increased the likelihood of glare. (Lots of things to think about).

There was only one product for the job - acdc PLAZA floodlight family. PLAZA 10 and PLAZA 20 with 3000K warm white LEDs (to be precise).

PLAZA stepped up with its elliptical and wide beam angles distributed at the perimeter. The elliptical beam doing what it does best - creating an even wash on the structure with limited glare. Not to be left out, PLAZA's wide beam optic (pointing back outwards) smooths and extends the effect.

These two beam working together angles light to the inside faces of the cubes creating the illusion that the Pavilion is glowing when viewed from outside.

We were able to achieve 70 lux on the concourse, boosted by a series of PLAZA 20's smaller sibling - PLAZA 10. Eight fittings at 4.3m provided the supplementary general lighting and concentrated extra light on the bar.

PLAZA was the only choice for this creative masterpiece, the IP66 protection level made it suitable to the non-permanent open structure. It's ultra-compact size and low power usage could not be dismissed. To explain - The PLAZA 10 used at high level measures a tiny 100mm x 138mm for a truly minimal presence, yet delivers a punchy 731 Ims while consuming only 10w of power. (What more can you ask for?)

It was important for us that the lighting at night would enhance the geometry of the structure and be coherent with the perception

of the pavillion during day time. Zumtobel and acdc's installation achieved that effect successfully by carefully placing and orienting each one of the luminaires **MARIA SOLE BRAVO, SENIOR DESIGNER, BIG** 

The lockable bracket with marked angle increments was also invaluable for on-site focusing and adjustments, ensuring the lighting stayed put. Last but not least, the wide selection of beam angles and distributions available with the acdc PLAZA was essential to suit the complex geometry as well as taking care of the visual comfort of visitors.

The final result of the lighting approach is striking. In line with BIG's vision, the lighting enhances the sculptural nature of the Pavilion beautifully, while providing the necessary functional light to create a safe and pleasurable visitor experience.

## GOLD ON 27

DUBAI

### **PROJECT BRIEF**

Client: Jumeirah Group Location: Burj Al Arab Hotel – Dubai, UAE Lighting solution: AIR mini Lighting designer: Delta Lighting Interior design: Keane/ AK Design Gold On 27 is a new nightspot perched high above Dubai on the 27th floor of the iconic Burj Al Arab. Bedecked in gold leaf and with exquisite designer details from internationally acclaimed DJ Darko De Jan, Gold On 27 is very much the new place to see and be seen for the city's most discerning socialites. Delta Lighting wanted to find a lighting solution that would highlight the premium atmosphere of the bar and blend unobtrusively into the interior space. The golden interior demanded a lighting solution with a golden finish, helping to craft a pleasant yet dynamic environment with high levels of visual interest.



### SOLUTION

If you're looking to create a feeling of ambience, style and luxury acdc's downlight range is your "go to" product.

Delta lighting couldn't resist our soft edged architectural downlight - AIR. Available in two sizes, Delta lighting went with the smaller of the two - AIR mini.

Balance and continuity was an important consideration to create an inviting atmosphere within this dynamic interior and they felt AIR Mini would give identity to the space to reflect the high end luxury feel for this socialite hotspot. The discreet soft edge trim of AIR mini meant there was no visual impact on the opulent decor, so the focus was on the light effect and not the fitting, thus creating a glamorous atmosphere whilst integrating into the interior design concept.

AIR Mini is in no way shape or form a one trick pony and provides the perfect solution in terms of flexibility (more flexible than a yoga instructor). The wide range of optics allowed Delta Lighting to choose a variety of different beam angles to suit the different areas in the bar, directing the light exactly where it needed to be, they were also able to highlight the different textures and varying tones of gold decoration, whilst still providing lighting for conversation and relaxation. Overlooking the Arabian Gulf and Dubai skyline, Gold on 27 claims to host the masters in the art of mix-ology. Renowned for its exclusivity with entrance restricted to hotel guests, this new bar promises to be more accessible to guests with a more relaxed dress code and new reservation app.

Staying true to its name the spacious venue is fitted with gold furnishings. The textured walls of the bar shimmer and a lighting design needed to pick out flashes of the bars art deco design.

The "piece de resistance" was how AIR Mini can be customised to suit any internal decoration. ALL the fittings were customised in a number of different gold RAL finish to match the different tonal areas of the bar.

The result is a breathtaking design that oozes luxury for residents to enjoy, setting a new standard for the cities hospitality experience where residents are able to enjoy an evening of glamour whilst taking in the breathtaking views from this phenomenal setting. Creating an experience they will never forget. Our work here is done.

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ntad Design, was Brian Rol ner. He explains: appointed as t "Prioritis of liturgical ornamental screen pieces incl covering the wall at the back of the altar), two altars, carved stone features and a Jacobean font cover was particularly important. We also needed an energy efficient balance between ambient task and dramatic focus lighting."



## SOLUTION

In order to fit with the historic nature of the church, the fittings had to be subtle and discreet. Consistency of optics and LED colour was also vital.

We worked closely with Brian Robinson, Designer at Pentad Design providing mock-ups and demonstrations at the planning stage, essential for winning the trustee's approval and funding.

We had products suitable for all the areas of the church. PLAZA (up-lighter) SPEK (spot) ARTEMIS (marker) AIR (downlight) and ULTRA (linear) were specified but what about consistency? Well our 2 step MacAdam colour binning sorts that problem out.

Outside, a 3000K colour temperature brought out the texture of the church's magnesium limestone exterior and the full family of PLAZA went to work lighting the top half of the church including the tower and clerestory windows armed with its full range of optics to make the main focal point.

ARTEMIS and SPEK worked together on the magnificent spike at the top of the churches tower. Although these fittings are small in size they pack a mean punch and using a 10° optic gave the pinnacle a sparkling crown effect (fit for a king).

areas including the nave, crossing, chancel altar and the breathtaking timber ceiling. ULTRA in 100mm sections are also used to illuminate the altar back without creating any shadows. Not



acdc is a positive, innovative and personable company to work with. I chose acdc because I know from having used acdc luminaires on other projects they are high quality and and UK designed manufactured. I also continue to be impressed with acdc's vision **BRIAN ROBINSON, DESIGNER, PENTAD DESIGN** 

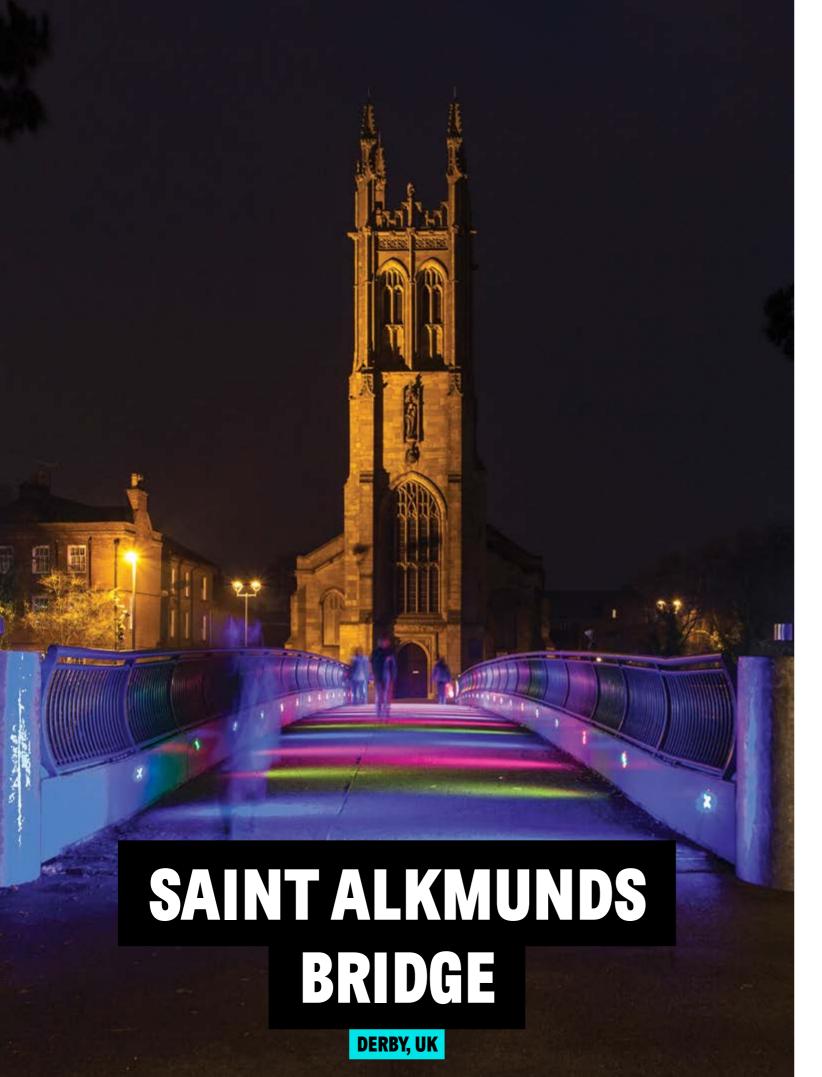
KAKA

## KNARESBOURGH, UK

Now come inside, PLAZA illuminates the key

to be left, AIR Mini downlights were used to illuminate the area under the organ soffit using a wide beam for uniformity whilst making the most of the recessed LED position to control the glare and finally, the Slingsby Chapel monument is softly lit with SPEK 12° optic to create the impression that the tomb is coming out of the ground.

Being a Grade I listed building the control system needed to be wireless. With controls including dimming and pre-set scenes, so the lighting can be changed to suit the full calendar of events held by the church every year.



acdc's luminaires have been used to create a stunning effect on Saint Alkmund's Way Cycle and Footbridge which provides a direct link between Derby city centre and the historical St Mary's church.

Viewed by an estimated 1,500 pedestrian and 70,000 motorists every single day, St Alkmunds Bridge is one of Derby's most prominent bridges. It was originally a joint design project by the local council and local artist Denis O'Connor. The bridge design was inspired by the traditional silk route through the city and the artwork – the loom, silk strands and bobbins which adorns the bridge are reflected in Mr O' Conors design.

The installation of the new LED lights on St Alkmund's Way footbridge is funded by a Section 106 agreement, to give additional funding to enhance the local area.



### SOLUTION

The project came with a challenging brief (which is right up our street). It included an unusual lighting effect that could be triggered into different lighting colours by the movement of people.

Following removal of the existing lighting, acdc's MAGNA and ECLIPSE luminaries were the obvious choice.

MAGNA and ECLIPSE are micro in size, both with an IP67 rating and both can be fitted in-ground or wall mounted. The subtle differences in design made them a great working partnership for this bridge. MAGNA makes the most of its triple LED by delivering 350lm washing the walls with light, whilst ECLIPSE recessed LED luminaire delivers 90lm with eyelid option painting the walkway with light without blinding walkers.

The LED fittings were installed as part of a system incorporating the RGB colour model and a DMX controller. This RGB colour model is an additive colour model in which red, green and blue light are added together in various ways as a wave effect on the bridge in a rainbow burst of colour. Over the years the original 40 fittings (over 10 years old) have grown tired and ceased working due to ingress of water and vandalism and the existing illumination levels had become insufficient.

acdc luminaires were chosen and we jumped at the chance to improve the poor quality lighting on the bridge and (of course) provide the creative element of the design.

This sensory experience guides people over the bridge and provides a stunning focal point adding a spectrum of colour to a once tired and gloomy structure. Changing the way pedestrians and viewers use and react to the environment around them.

Needless to say, Derby Council are delighted with the scheme which has resulted in a substantial energy savings, a long maintenance free life, higher levels of illumination and an aesthetically stunning bridge that has had a fantastic response from local residents and visitors.

## **OLDHAM TOWN HALL**

### OLDHAM, UK

## **PROJECT BRIEF**

Client: NG Bailey Lighting design: BDP Photography: BDP/Nick Caville acdc product: BLADE Micro

The framework for the huge light wall is a steel structure extending 8m out from the original glazed brick façade of the town hall, forming a grand new circulation zone.

With the new light wall representing an iconic beacon of the hall's regeneration, BDP sought a solution which would offer enough power and brightness to illuminate each of the 257 translucent glazed panels.

The light wall had to produce a vibrant, modern landmark to create an exciting, welcoming public space and give a dramatic effect from outside.

"

The whole process was managed very professionally and the good service acdc provided was crucial to the success of this project

**KATJA NURMINEN, SENIOR LIGHTING DESIGNER, BDP** 

## SOLUTION

BDP specified acdc's BLADE Micro luminaire for back lighting the impressive frosted glass panels.

Working closely with the designers with several trials and mock-ups. BLADE Micro proved beyond any doubt it would meet BDP's design and performance objectives. (It did exactly what it says on the tin). Blade with extra bright 4200K LEDs were selected. This project asked a number of questions from BLADE - Will the fitting lengths suit the panels? How can the glare be controlled in this public space? Can you guarantee the quality and continuity of the light across a wide expanse of glazed panels? And how much would this all cost?

BLADE scored 10/10. It's three available lengths, running end to end blasted the panels with light but at the same time louvre and cowl minimised any glare and shielded the LED from view. Continuity of the lit effect across this unforgiving surface is guaranteed with our 2 Step MacAdam ellipse process. BLADE was put through its paces and stood up to rigorous testing and various site mock ups as well as being cost effective, receiving approval from all the designers, architect and most importantly the end client.

Paul Whittaker, Project Manager at acdc, adds: "The mock ups were carried out as soon as the first glass panels went in. Because the façade and new pedestrian square were closed off at the time, we were fortunate this was relatively easy. Mocking up to define the correct product specification was key, so we tried different LED colours, optics and accessories. Blade Micro proved it was indeed the perfect solution. Its low profile, high output, constant colour binning and wide range of accessories were particularly beneficial for the scale of this project."





**Client:** Crown House Technologies Lighting Design: Hoare Lea Lighting acdc product: ORELLE Pro

For local people and visitors to Nottingham city the intu Victoria Centre offers top brands and great restaurants - 24 million visitors to be exact per year.

The centre has recently undergone a £42 million transformation to create a stylish, contemporary retail space that attracts top brand retailers as well as many more visitors.



## SOLUTION

3,000 metres of acdc's (Nearly 2 miles). **ORELLE PRO 24V indirect linear luminaire** were needed to light the coffered ceilings throughout the centre.

ORELLE Pro and coves are the perfect combination- compact and slim ORELLE PRO puts lines of light into the ceilings for a stunning architectural effect.

4000K white ambient light, was Intu's choice. With its minimised LED spacing ORELLE Pro provided an even, continuous and powerful light output with excellent colour rendering while all LEDs are within a 2 step MacAdam ellipse to ensure colour constancy across the whole two miles of product.

Not limited to straight lines, ORELLE Pro is available in five lengths from 110mm to 1810mm and can follow shapes and curves thanks to its flexible connectors.

We knew installation times were of the essence so ORELLE Pro's Plug and socket interconnection ensured rapid installation and kept any downtime to a minimum so there was no interuption to people's retail therapy.



The centre's refurbishment was more than a lick of paint, it included the removal of staircases and walkways to open up visibility, enhance shop frontages, new ceilings, new flooring materials, the list is endless and (of course not forgetting) a new lighting scheme

New linear lighting was integral to the new design of the centre, creating a modern, bright and dynamic visual impression. To ensure a quality look and feel, achieving a constant lit effect and colour/visual consistency was essential.

With the shopping centre open for long hours every day of the week, a fast turnaround with flexible out of hours installation was essential for avoiding disruption and keeping the centre operational. Long-term reliability and ease of maintenance were also important considerations, given the centre's daily opening.

Chris Fox, Senior Lighting Designer at Hoare Lea. said:

"Aside from being able to offer the right lighting solution for this project, one of the reasons we choose acdc was because we were confident in their ability to manage a large order. They held high levels of stock and were able to provide a quick delivery."

The lighting has met all our expectations and has played an integral role in transforming the intu Victoria Centre **CHRIS FOX, SENIOR LIGHTING DESIGNER, HOARE LEA** 

## **STADKAMER**

HOLLAND

**PROJECT BRIEF** 

Client: Zwolle Lighting Design: Zumtobel acdc products: BLADE

Formed out of Zwolle library and arts centre, Stadkamer is a new organisation and a hub for information and advice, education and development, language, literature, performances, art and culture. It's a place where families and friends can read and borrow books, study and work, socialise and meet for coffee. A social hub like no other. acdc couldn't wait to get our creative juices flowing on this project illuminating the frosted canal plate curtain wall façade. We were happy to support with several mock-ups, to ensure the desired lit effect would be achieved. (No problem it's what we do). The defining feature of Stadkamer's building, one of the first cortex façades in

the Netherlands, meant lighting the facade required a dynamic colour changing lighting scheme, which would create a striking, even illumination in full colour. The power of acdc's BLADE MICRO luminaire in addition to its compact dimensions was another a key influencer behind Stadkamer's decision to choose acdc.

## SOLUTION

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Now for the technical bit.. Delivering up to 4,100lm per metre, BLADE MICRO RGB is a powerful, wall grazing linear LED luminaire providing an even wash of light up to 10 metres. (Yes you heard that right), ideal for this project.

BLADE MICRO is available in standard or extra bright formats and provides a continuous and powerful light output with excellent colour rendering.

For this installation, BLADE MICRO uses 18×64° optics, mounted end-to-end for a continuous wallwash effect at the top of the curtain wall at a height of 7.7 metres. Creating an even light from top to bottom, helped by the reflecting surface on the bottom of the concrete wall and façade, which reflects light upwards. The surface and structure of plates also reflect the light in a diffused way to generate a homogeneous lighting effect across the whole surface.

The installation is completed with two DMX CueCore solid-state controllers that enable individual LED control and 0-100% dimming to create fully controlled spectrum of colour.

The translucent façade gives an understated appearance during daylight hours but once darkness falls, the building takes on an almost magical appearance of a glowing box.





## **OXFORD STREET**

## LONDON, UK



### **PROJECT BRIEF**

Occupying 89m of Oxford Street façade from North Audley St to Balderton Street, is situated on one the busiest and prestigious shopping destinations in London. The project brief was to unify the block of buildings, by picking out the features that would render the façades character best at night. To ensure the façade not only looked impressive at night, unsightly cabling should not detract from the buildings charm and architectural beauty during the day, attracting higher end retailers and discerning shoppers, by giving the development presence and charisma.



## SOLUTION

Through extensive lighting trials and 2D Photoshop visuals LDI picked out the features that would render the façades character best at night.

What better product for this project but PLAZA? This ranges loves nothing more than bringing a building face to life. With its vast range of colour temperatures ranging from warm white to cooler tonal whites, various optic sizes and unobtrusive style... we can safely say PLAZA achieves exactly that on this project.

Let's start with the Red brick vertical features - These are picked out by 10° PLAZA 10 in 2700K, giving an inviting warm glow to the red brick texture. Narrow beam uplighting was meticulously planned to ensure the right amount of shadow and highlights, allowing the form of the building to be expressed from wherever your view point. Then onto the window reveals and wider features these were lit with PLAZA 10 using  $12 \times 40^{\circ}$  optics, and to link and unify the vertical FINO (who else?) With its ultra compact profile and high performance working in perfect harmony with PLAZA to produce a stunning effect.

As we come to the lighter stone buildings, with darker columns. PLAZA 10 with 3000K are used to preserve the lighter finish. This intentional change in colour temperature across the design, makes the light stone buildings a feature within the whole estate.

All visible fittings needed to be as unobtrusive as possible especially in this busy shopping zone, fittings were RAL finished to match the various mounting surfaces, ensuring minimal visual impact on the façade by day, and all cabling routes are well concealed. So shoppers and visitors experience the lighting without seeing the fittings. To ensure no glare is experienced by pedestrians or building occupants the fittings are equipped with glare snoots (Finished to match the fittings) and louvres where necessary finished in a matt black to ensure glare control is optimal.

The result is a perfect balance of colour, highlighting the architecture for people to enjoy the beauty of the building - but not blinded by it.

## TROIA CATHEDRAL

ITALY

## **PROJECT BRIEF**

Owners of this historical monument approached world renowned architects Stefano Cibelli, Piero Guadagno and Giordana Arcesilai to provide an innovative lighting scheme to enhance the interior space.

An innovative lighting scheme with low energy consumption was required to highlight the architectural detail, whilst remaining respectful to the original structure and the functionality of the space. The interior is a three-nave-shaped Latin cross, containing a central nave. Two side aisles, separated by two impressive rounded arched arcades of 6 marble columns each with a double first column seen when entering the main door. Careful consideration was required when lighting the beautiful carved wooden crucifix by Pietro Frasa, which is linked to the town's popular traditions and festivals. Of particular ceremonial importance are the stone pulpit and the two chapels, that of the patron saints and the Chapel of the Assumption from which the cathedral takes its name.

### SOLUTION

Here is a perfect example of the Zumtobel group's multi-brand approach, acdc and Thorn working together to provide, innovative technology and products that meet the three lighting criterias.

Firstly, the illumination of the central heart of the building was with Thorn's SATIN 2 linear projectors alongside the beams and with QBA projectors for the general lighting. In the side aisles, acdc's BLADE linear fittings frame the aisles picking out the texture and form of the arches using a 3000K colour tone. ARTEMIS (our miniture spotlights) are used aroun the church telling the story depicting the stations of the cross, the story of Jesus Christ on the day of his crucifiction. (Via Crucis)



The design incorporated a lighting control system, preprogrammed to the suit the different needs of the space, allowing the lighting to be tuned to suit a more solemn scene during ceremonial services, to an artistic theme whilst sightseeing groups are visiting the building.

The cathedral of Troy is full of history, charm and culture, and the new lighting enhances the liturgies and celebrations, improves tourist's enjoyment and experience whilst remaining respectful of the cathedral's religious function.



# KEEP IN TOUCH



You Tube !///

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