

The background image is a nighttime photograph of a city street. On the left, a stone building features a large, illuminated coat of arms above an archway. In the center, a building with a sign that reads 'OPERA HOUSE' is visible. To the right, a covered walkway with classical columns and a balcony runs along the street. People are walking on the cobblestone pavement, and the scene is lit by streetlights and building lights against a dark blue sky.

PLAZAS AND LANDSCAPES

SEGMENT GUIDE

ZUMTOBEL Group

A NEW LANGUAGE OF LIGHT

**Through integrated light we frame the plaza.
Through guidance we open up new space,
Enabling you to experience, explore and play**

**This guide introduces the five fundamental methods
of how light can be applied or integrated into an a
plaza space.**

**Through a series of inspirational case studies we
aim to provide a full picture of what can be achieved
through a multi-disciplinary design approach.-**



THE CREATIVE DRIVING FORCE IN ARCHITECTURAL LIGHTING

Front page

Project Title: Oxford Street, London
Lighting Design: Lighting Design International
Photography: Andrew Beasley

This page

Project Title: Kimpton Fitzroy, London
Lighting Design: Lighting Design International
Photography: Gavriil Papadiotis





WE CREATE

AMAZING EXPERIENCES WITH LIGHT

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 around them.

Project Title: Serpentine Pavilion, London
Lighting Design: Aecom
Photography: Zumtobel

TO AMAZE

By lighting a plaza or a landscape space, a new urban setting is created in the hours of darkness.

Bringing people out of their homes by creating a new destination, a node or a meeting point which amazes with light.

Project Title: Shakespeare's New Place UK
Lighting Design: Speirs + Major
Photography: James Newton





WHY DO WE LIGHT?

IDENTITY AND EXPERIENCE

We live in a world of global cultures and of great diversity, with a continuing need to develop new local communities that we can identify with.

Lighting within urban design enables and encourages social interaction for the ever changing needs of a community. Providing a sense of place in the hours of darkness thereby increasing accessible spaces at night where people can meet, enjoy and congregate.

A new language of light provides an identity, a persona to the urban space that people can identify and associate with and are proud of. In turn establishing a sense of social responsibility.

Project Title: Clitheroe Castle. UK

WHY DO WE LIGHT?

CELEBRATE COMMUNITY

Creative architectural lighting design creates value by designing a master-plan that encourages social activity.

Making a space attractive creates a relationship between the urban setting and the people that it identifies with - encouraging them to spend more time and more money through increased 'dwell' time in the hours of darkness.

Project Title: Burlington Arcade, UK
Lighting Design: Speirs + Major
Photography: James Newton





WHY DO WE LIGHT?

INTEGRATED AND SEAMLESS

Light shapes our view, our opinion of a space, how we feel and maybe even define whether we will come back again.

Light helps to shape our nocturnal view, bringing our attention to elements of an urban space, highlighting the materials, textures and finishes of the surfaces that are around us.

New technologies have enabled lighting to be considered earlier in the design process allowing for the luminaires to be integrated into the architecture - providing a seamless solution so that by day the urban setting is seen and used in full view, but by night the luminaires and the lit effect brings the open space to life.

Project Title: Oldham Town Hall
Lighting Design: BDP

acdc's 5 WAYS TO LIGHT



GRAZE

The perimeter verticals of a plaza, the plinth of a monument and a low level wall all help to define a space. Lighting from the ground up with a close off set graze will 'ground' the verticals capturing the full height and grandness of the object or facade being lit. A close offset graze picks out the material, the texture and its colour with a gradual drop off of light until it captures the lip at the top of the building, framing the scale, the height, - defining the wow moment. Bringing our eye line up encouraging us to take in the enormity or intimacy of the space, encompassing a feeling of safety and belonging.

KINGS CROSS STATION, UK

StudioFRACTALs strategy of integrating lighting into numerous building elements provided the required balance between functional and accent lighting at Kings Cross Station. This approach allowed the design team to design discrete lighting details into furniture and structural elements producing definition of these forms at night.

acdc worked with StudioFRACTAL to realise their design for this historic piece of architecture. In-ground linear luminaires graze up the façade to reveal the brickwork, connecting the façade to the ground plane at night. With surface mounted linear luminaires employed to subtly and gradually wash light up the façade, fading out as the light travels up.

FLOOD

A monument or piece of art can be the centrepiece to a space. Whether urban or landscape, it represents a significant figure or period of history that deserves recognition. The night time provides an opportunity for it to be revealed in a very different way, with contrast, layers of light that create intensities defining the character and its presence as a centrepiece.

There are often restrictions upon where luminaires can be installed upon an historic monument or piece of artwork and so great care and consideration, as part of a multi-disciplinary design team, should be placed upon how light is applied.

A flood lit method may mean that the luminaires are positioned away from the monument. Using a narrow beam to capture the central feature, with a medium beam to provide a general wash. Placing a smaller fitting from the same family closer up or inside, creating consistency in the colour of the light and luminaire aesthetic appearance - picking out the detail and revealing the character and role in the community of the central figure.

SCOTT'S MONUMENT, UK



KSLD's scheme for the historic Scotts Monument shows it in a completely different way at night. Lighting the architectural features revealed the gothic spire alongside the respectful accent lighting on the figure itself. Great care and attention was given to the fabric of the monument. Being sandstone, KSLD used the existing positions where possible to minimise any additional cable routes and damage made. The design was realised through a series of mockups, with multiple layers of light to reveal the form, the scale, the colour and the character from Scott's books. Low power LED luminaires have been carefully integrated to provide an efficient and easy to maintain solution.

SPOT

ROYAL OPERA HOUSE, UK



Spotlighting provides an opportunity to pick out the detail, to accentuate the finish of a material, and to place more focus on a specific section of a building, a structure or a monument. The positioning of a spotlight should allow it to be seamlessly integrated into the urbanscape so as not to be seen during the day. And then by night, the lit effect makes people stop, look up, and appreciate what is around them, to value their surroundings.

It is the control of the light and the lit effect that ensures comfort for those using the space, whether it is by a deep LED recessed position or the integration of a louvre or snoot - thereby minimising the view into the light source and continuing to provide a high output and defined lit effect.

London's Royal Opera House was given a new lease of life following a spectacular programme of refurbishment by architects Stanton Williams. The Grade I listed building has been opened up with StudioFractal providing a comprehensive interior & exterior lighting design scheme bringing people closer to the arts bringing the external space to life for it to be appreciated and loved by all.

Covent Garden's piazza and retail colonnade is decked out with PLAZA spotlights drawing in the crowds, these compact surface-mounted gems dramatically emphasise the building's façade creating shafts of light accentuating the key verticals of the historic facade.



Lighting Design: StudioFractal
Photography: James Newton

GUIDANCE

Integrating light within our urban landscape allows us to define personal space, to define our route and to help with our sense of orientation and direction.

Through a layered approach to lighting design, integrating allows us to open up space, allowing light from others areas to drift in and slowly drop off, for the intensity of a linear line of light to create contrast in our surroundings.

By using an integrated approach we open up the view, using the structures and the landscape that exist to integrate light and not to have to add additional structures to provide the necessary lit effect.

MARINA BAY SANDS, SINGAPORE



The Event Plaza forms part of a large public entertainment space at Singapore's Marina Bay Sands Integrated Resort. It is situated in front of the Retail Development, and links down to Marina Bay Waterfront Promenade.

The lighting design comprised a series of expressed lines of light, arranged to reflect the geometry of the 'circulation'. This solution provides three 'scenarios':

- When relatively empty the linear 'lines of light' emphasise the geometry and provide 'direction', defining the view from the platform across the Bay towards the Cityscape;

- When occupied the illumination of the people provides a sense of spatial definition and 'volume';

People moving through the space provide activity through random and sporadic illumination.

acdc's Vista, a compact linear LED marker light for shallow depth installations provided the optimum specification. The homogenous lit effect of the Vista when installed end to end provides a clean illuminated surface. The flangeless minimal appearance minimises the day time appearance.

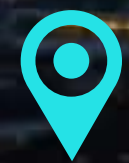
INTEGRATE

The lit effect of the public realm is often defined by light levels and uniformity. It is how we interpret those legislations that will define the look and feel of an urban space - it should not mean a pre prescribed solution of poles and bulkheads.

Through a fully coordinated multi-disciplinary approach to lighting design the luminaire can be part of the building fabric, with integrated details we reveal the texture of a material and use the reflectance to provide an ambient level of light to the space below, whether it is a plaza, steps, or a walkway.

The success of a scheme is determined by the people using it, putting them at the centre of the design; do they feel safe, does it encourage them to spend more time meeting their friends and family, or simply having an evening walk.

A coordinated lighting design ensures a low glare, comfortable, people centred solution that defines the identity and character of an urban space.



TOTTENHAM HOTSPUR STADIUM, UK

As Tottenham Hotspur began their journey to create a world class 120,000m², 62,303 seater stadium they looked no further than member of Zumtobel Group – acdc, to offer a lighting scheme that would capture the heritage of the club whilst creating a symbol for fans and the wider community.

Key to this project is the halo of light - created using 380 pieces of acdc's BLADE RGB Linear luminaires seamlessly integrated into the architecture. The stadium's lighting was considered from the outset of the project – aiming to create an instantly recognisable stadium that would be seen by millions around the world whilst delivering the ultimate in match day and visitor experience. The halo lighting does just this, creating an iconic scene of light visible from a bird eye view able to be broadcast around the world whilst enhancing the guest experience for those within the stadium.

LIGHTING PLAZAS AND LANDSCAPES: WHAT MATTERS?

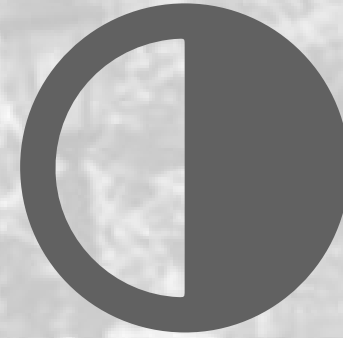
CONTEXT



Whether a plaza or landscape we must consider what the role of the lighting is within its context. Is it providing a centre piece, a meeting point or a route through to a final destination? Consideration must be given to how the surroundings are already lit, assuming they are not already part of the master plan, how can there be a balance ensuring one is not fighting with the other, but instead that they feed into each other.

Consider whether the lighting is being designed to increase the dwell time of an open public plaza, inviting them to spend time by creating pockets of light. Is an area for personal space being created or is it a about a route through and maybe a more uniform lit effect is required to define the route.

CONTRAST



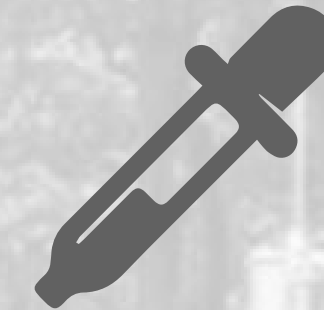
The acdc 5 methods of application will help to determine the level of contrast that can be created within a public urban landscape. Consider the perimeter, the central features, and the interlinking spaces between them and how they can be differentiated using layers of light.

The perimeter defines the space, the vertical, the back ground to our view. Consideration should be given as to how we can pick out the architecture with miniature spotlights or integrate linear luminaires to provide a graze lit effect fading off to the top.

The central features may be an amphitheatre, a raised landscape space with perimeter seating, or a key monument providing a centre piece to the square. The key to defining these features is how are people interacting with them and how do we control the light to ensure visual comfort - possibly creating height and depth to the space. These features are often greater or of equal brightness to the perimeter to define them within their context a creating a focal point.

The way the interlinking spaces are lit will help to define the other layers. By considering how the reflected light from the architecture adds to these areas, or integrated lighting within the seating can help to define the route and further ambient levels.

COLOUR



Whilst on special occasions coloured and dynamic lighting is used for façade lighting, the use and application of coloured light is limited within a plaza and landscape space. That said it is often the case that different tones of white light are used to provide differentiation of space and materials.

Colour is not only limited to the light, it is the colour of the area or feature being lit as well as its material and finish which should be considered. How we can the light emphasise it whilst bringing out the warmth, the texture, or the coolness and mirrored qualities.

A combination of warm and cool tones of white light are often used in architectural lighting to create contrast between red brick and white surfaces - the same is used in landscape architecture to create a contrast between the horizontal cool greys and the warmth of an historical façade. It can also be the case that warm and cool tones are used to create contrast between the central features and interlinking spaces to define routes and views.

CONTROL



The use of an external space evolves over the day and into the evening. The people using the space changes as do their needs of the space and landscape around them - the control of the light plays a critical part in the evolution over the day and into the night, securing a sense of identity and also safety.

Control can help the focus of an area evolve so that we begin to use a space differently over the evening. As we expect in our own offices, control can ensure light becomes more personal and more responsive to the needs of groups and individuals.

The lighting of monuments and pieces of art often integrate a more dynamic lit effect that may reflect a moment in time. Whether a significant colour to a time of day - careful consideration should be given to the location of the controls and how all other layers of light respond to that dynamic lit effect - how can it be the focus for the time of it being dynamic, are other layers on 100% or temporarily dimmed to a lower safe level.

LIGHTING PLAZAS AND LANDSCAPES: WHAT MATTERS?

GLOBAL

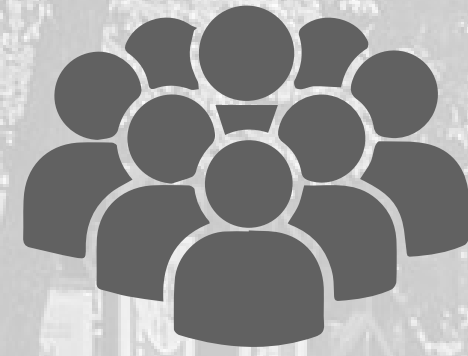


The location of the project is obviously critical to the type of luminaires specified in regards to the external ambient conditions. Making sure that they are suitable for extreme hot or cold conditions whilst also considering their placement in relation to their context.

A scheme must be for the long term and so consideration for all seasons and all uses must be a part of the design. For example if there are sand storms or falling leaves in the autumn then is the design of luminaire or accessories applied going to collect this and therefore reduce, if not eliminate the lit effect. Can accessories be integrated? Or a design to allow it to flow through?

If a fitting is in the ground consider how and if people will walk over them. Is it in a position where access equipment will need to drive over it, and therefore is it suitable for this application?

PEOPLE



A plaza or a landscape is designed for and is used by people. To encourage them to use it, to meet friends and family, to spend time, to enjoy and feel safe, it is all about them - and they must be at the centre of the design.

A scheme and it's design should embrace people. Consider their movements and how light can aid their journey. It should be a low glare solution for visual comfort, with integrated light where possible to define certain areas.

Create areas that encourage people to come together in the hours of darkness – those personal pockets of light.

INSTALLATION

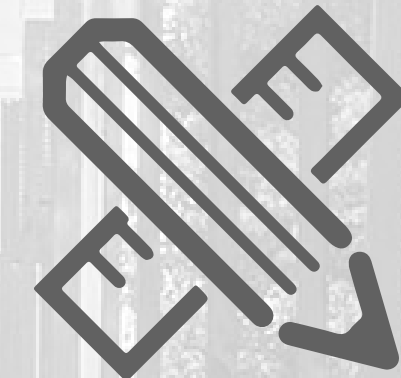


Lighting design is about the detail. To execute it the contractor must invest their time and passion into the project as well. Completing that influencing chain from lighting designer to landscape architect, to contractor, installer and to end user is all important – getting everyone's invested interest.

The position and visual impact of the luminaires should be carefully considered and coordinated as part of a multi-disciplinary design approach - to ensure that all luminaires are accessible and maintained. It is not necessarily the luminaires that will detract from the overall impression of the space but the cabling or drivers and junction boxes that can be seen to detract from the complete installation. Consider the lighting and everything that comes with it to ensure that it is integrated into the architecture.

A full maintenance program should be integrated to ensure the safe access and maintenance of all luminaires and cabling. This should include a regular cleaning program of all the luminaires to ensure that the lit effect is maintained.

CUSTOM



Every project is different, requiring a new solution to create a new identity. There will be times when a project needs something a little bit different, you might even think – if only that product had a different LED colour or optic size or colour finish to achieve the desired lit effect.

acdc's promise is to create those amazing experiences with light, not just for the people who are amazed by the lit effect but for the people behind the project – the designers, consultants, architects, installers and contractors, and therefore a custom solution is the right option.

GRAZE - PRODUCTS TO USE, BLADE

LINEAR LUMINAIRES THAT CHANGE THE WAY WE SEE BUILDINGS AND STRUCTURES AT NIGHT

CLEAN BEAM DESIGN

FAST INSTALLATION

COMPLETE GLARE CONTROL

Using one linear optic which runs consistently across the length of the product, BLADE eliminates scalloping.



BLADE LRI

[WATCH THE VIDEO](#)

[SPEC ME](#)



Regent Bridge, UK
Lighting Design: FOTO-MA
Photography: © Stuart Armitt

FLOOD - PRODUCTS TO USE, FUSION

INTELLIGENT, OUTDOOR LIGHTING POWERHOUSES

POWERFUL AND EFFICIENT
INTELLIGENT CONTROLS
MULTIPLE OUTPUTS

Simple minimalist design to seamlessly blend within the architecture. FUSION is hard as nails. Constructed die cast, corrosion resistant aluminium and finished in a specialist corrosion resistant powder coat paint.

WATCH THE VIDEO

SPEC ME



Clitheroe Castle, UK

SPOT - PRODUCTS TO USE, PLAZA S

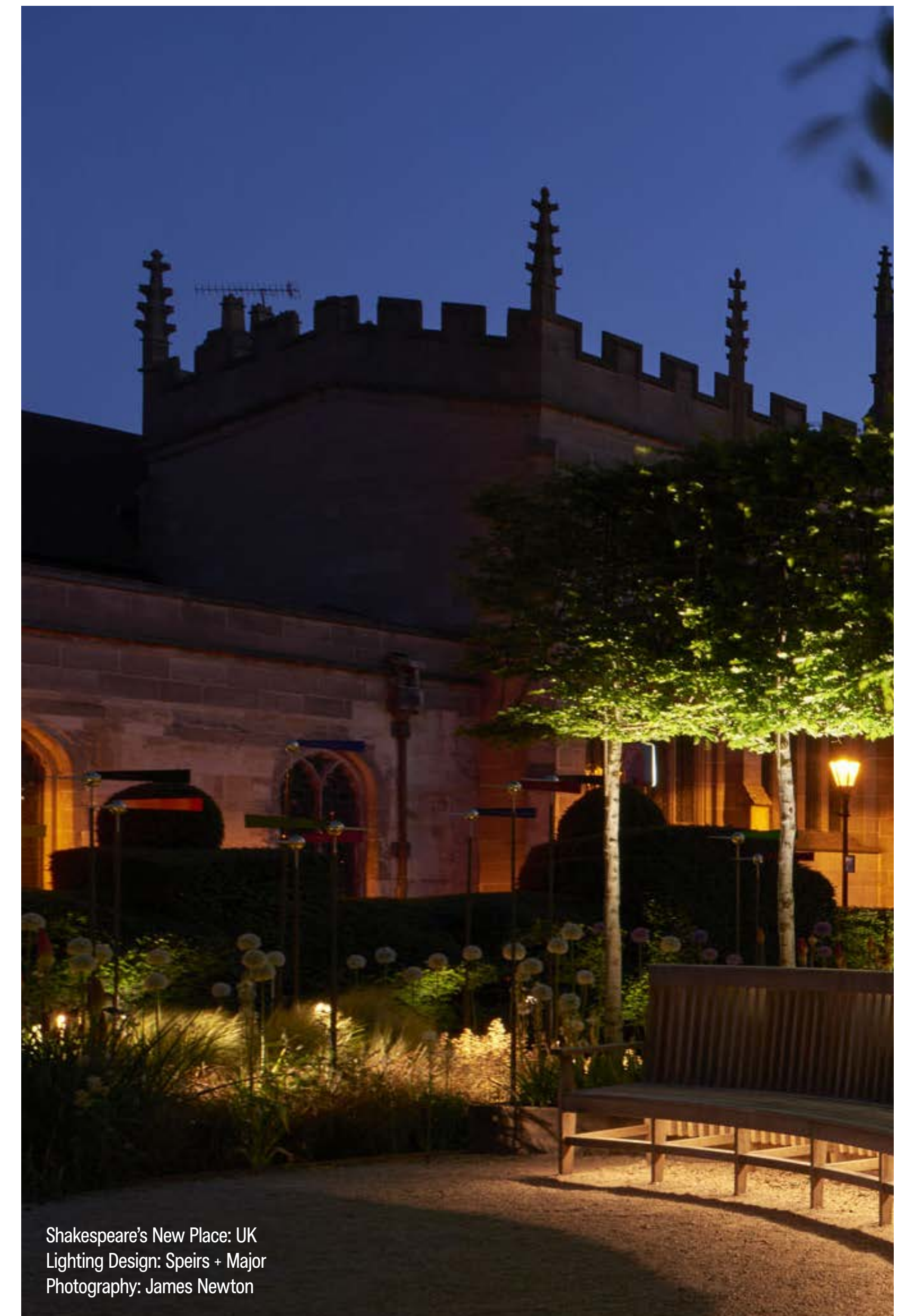
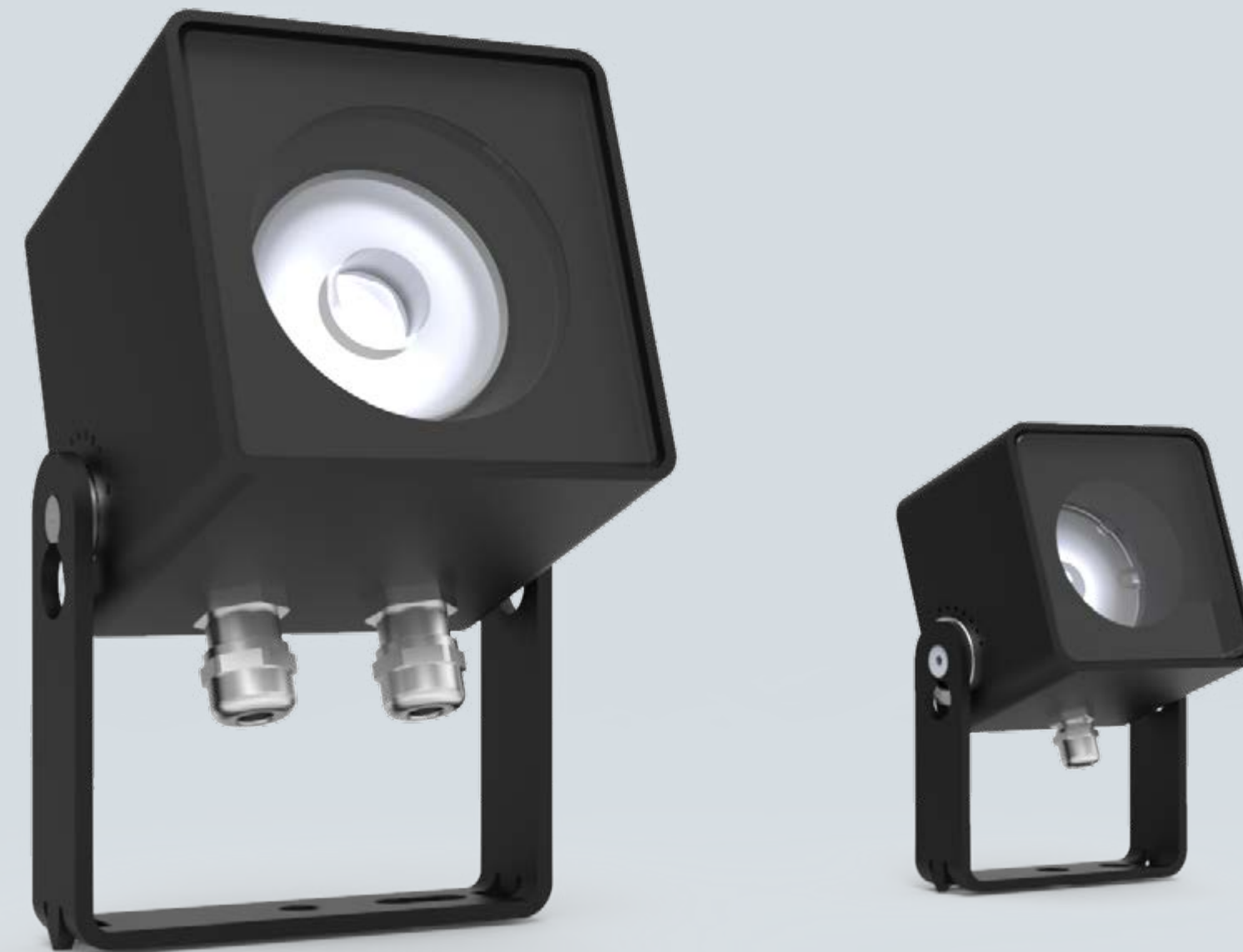
POCKET SIZED POWERHOUSES

POCKET SIZED
HIGH OUTPUT
CLEAN BEAM DESIGN

Incredibly small to blend seamlessly within the architecture. PLAZA S3x and S7x are finished in a specialist corrosion resistant powder coat paint to suit the demands of an exterior lighting project - ensuring longevity of the product.

WATCH THE VIDEO

SPEC ME



Shakespeare's New Place: UK
Lighting Design: Speirs + Major
Photography: James Newton

INTEGRATED - PRODUCTS TO USE, FINO FLEX

IP67 FLEXIBLE LIGHTING SYSTEM

20M RUN LENGTHS

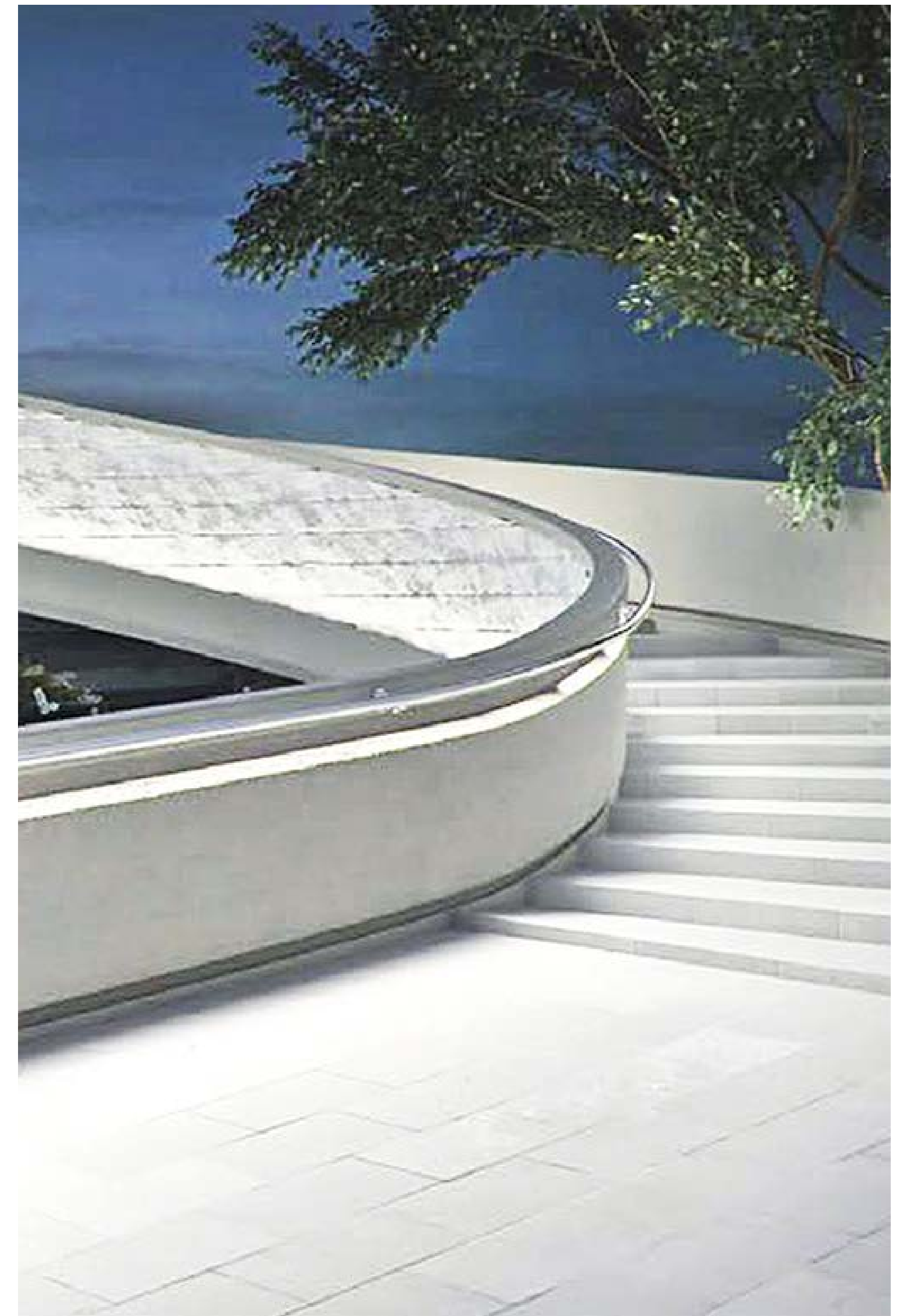
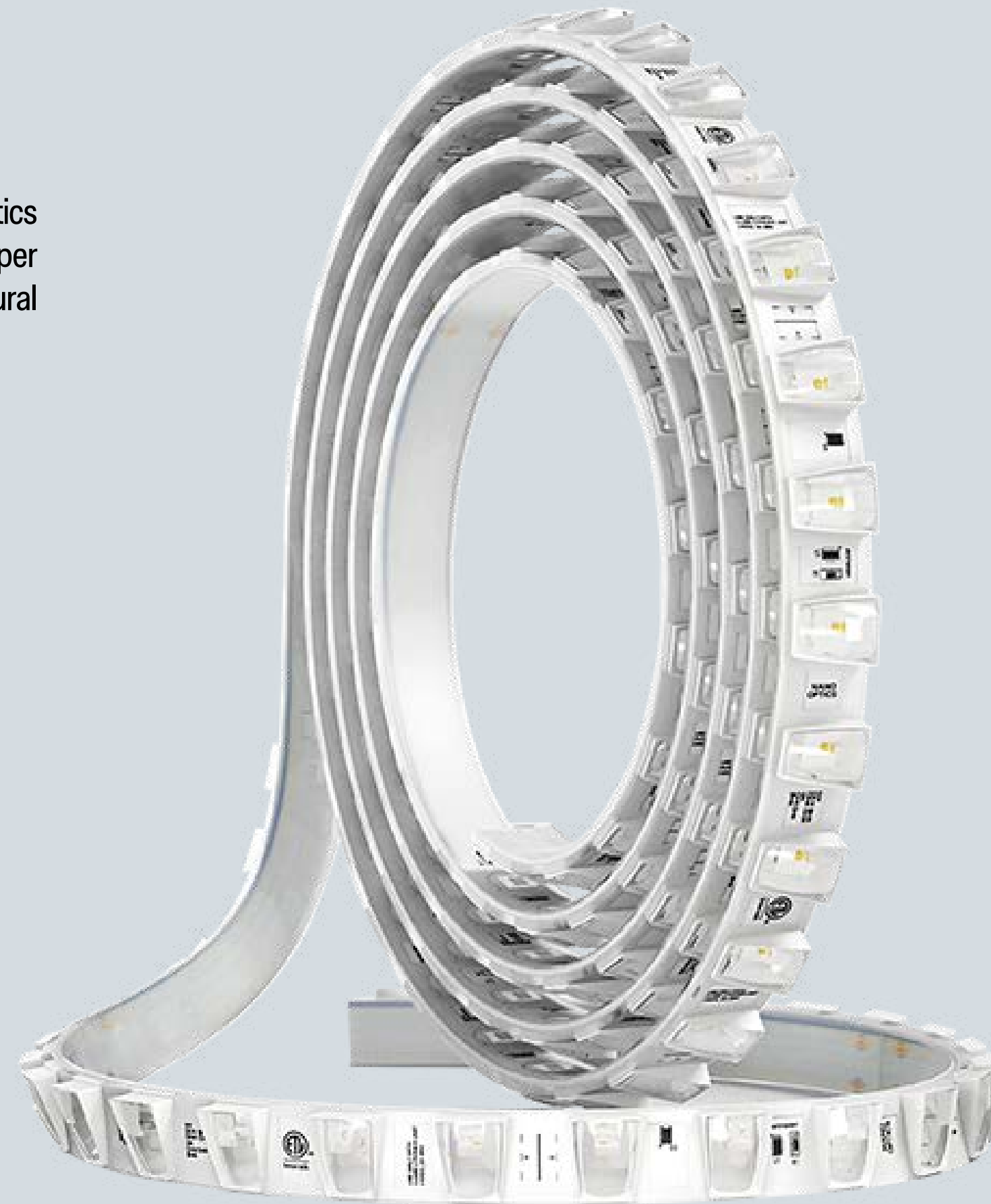
CHOICE OF OPTICS

QUICK, SINGLE PERSON INSTALL

A pencil thin flexible IP67 strip with integrated optics that packs a mean punch with 1667 lumens per metre. For use in internal and external architectural environments in 80 and 90CRI.

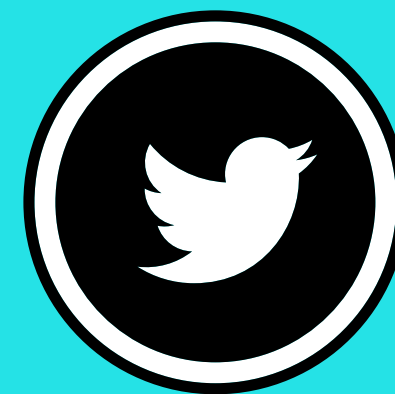
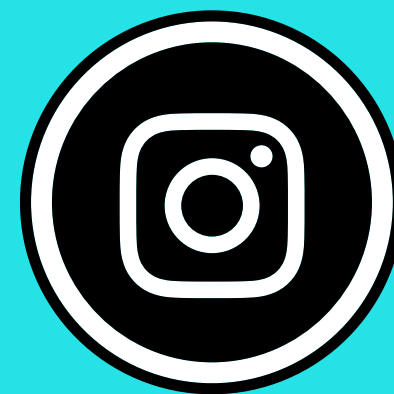
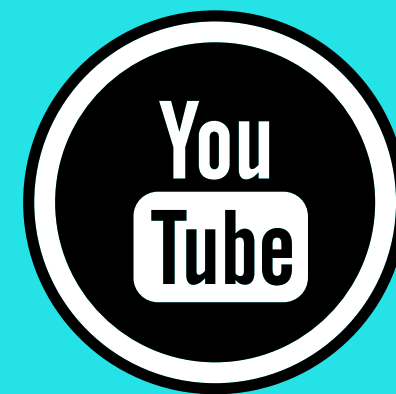
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