



# LIGHT THAT ELEVATES EFFICIENCY

LOGISTICS



# LIGHT THAT **ELEVATES EFFICIENCY**

## **WE KNOW LOGISTICS**

Over the past decade, we've seen enormous growth in logistics sites being built and refurbished. With a shift in human behaviour which continues to drive demand in point to point delivery within a very short period of time, logistics sites are increasingly becoming 24/7 operations.

This has lead to a surge in demand for energy efficient solutions from one to one replacements using LED light points all the way through to in-depth control systems designed to maximise energy savings whilst boosting productivity.





# **SUSTAINABLE LOGISTICS**

By creating increasingly sustainable logistics spaces, you are not only making a positive, intentional step forward for the betterment of the planet, but you are also helping to advance our collective sustainability goals.

Our intention is to be your partner of choice and to help you achieve your sustainability ambitions. Both our indoor and outdoor solutions deliver energy and cost-saving opportunities, while having the qualities needed for them to operate in what are often tough or harsh environments. For logistics, this includes products that are easy to maintain, made from durable materials, and built to the highest IK and IP ratings, all backed up with ISO accredited EPDs.







# SUSTAINABLE GEALS

# **UNITED NATIONS SUSTAINABLE DEVELOPMENT ALIGNMENT**



#### **DECENT WORK AND ECONOMIC GROWTH**

In both lighting and logistics industries, innovation has been a significant driving factor in our collective growth. However, it's our people that really enable this. A key element of continuing this growth is to provide safe work environments. This is where light comes in, both in supporting energy consumption, people safety and site security.



#### **CLIMATE ACTION**

Logistical environments can often function around the clock, seven days a week. As such it's essential that the lighting infrastructure reflects real-time demands and saves energy wherever possible. Technologies such as NightTune and BasicDIM can illuminate from outside-in, whilst lowering output, energy consumption and light spill which can benefit local biodiversity and lower the overall electrical load.



#### **PARTNERSHIPS FOR THE GOALS**

One of the biggest challenges in achieving our sustainability aspirations is partnering with the people that understand your vision and best assist you in achieving your goals. Much like us, you'll need a partner of choice for lighting, ensuring that your refurbishment requirements are met and where possible, exceeded.

# LOGISTICS

# **EFFICIENT LIGHTING SOLUTIONS FROM OUTSIDE-IN**

# **BEST PRACTICE**

#### **ENHANCED SITE SECURITY**

As logistics sites increasingly become 24/7 operations, there is a growing requirement to manage site security. This is where your lighting installation can help visibility for security teams and if implemented correctly, can work as a support element for your CCTV system.

#### SAFER SPACES

From goods-in to goods-out and from the main car park to main entrance, lighting can have a significant impact on the wayfinding experience for visitors and employees. Additionally, whilst lighting has a positive impact on site security and colleague safety, we can also balance that need along with the needs of local biodiversity. Our NightTune technology ensures that colour temperature and light output respects local biodiversity.



#### Recommended solutions





# **SECURITY**

## **ENSURING THE SITE'S SAFETY**

#### **DEPENDABLE LIGHTING**

Security entrances are critical areas. It's important that documents, people and goods check out. If the lighting here is poor, then there's a high risk of error.

Good cylindrical illumination in these areas ensures that facial expressions can be far more easily read and enables security checks to better understand non verbal details as well.

Similarly, higher quality light (CRI 80+) can help you better differentiate the colour of identifying features such as vehicle, people and other potential hazards.



#### Products used in the scene:

#### Other recommended products:







# BUILDING SURROUNDS & PATHWAYS

### SAFE AND COMFORTABLE WELCOME

#### **ILLUMINATION**

Logistics buildings are very busy spaces. Staff, colleagues and visitors regularly transition from car park to the building. Goods-in and goods-out staff also regularly engage with delivery and logistics partners in these spaces. As such, it's important that we enhance safety in these areas.

With technology like Variable Light Distribution (VLD), you're able to balance the needs of pedestrians with the needs of moving traffic and your sustainability aspirations utilising one light fixture. With VLD you can control the colour temperature and light levels independently for moving traffic and pedestrian needs.

#### Products used in the scene:





# GOODS IN & GOODS OUT

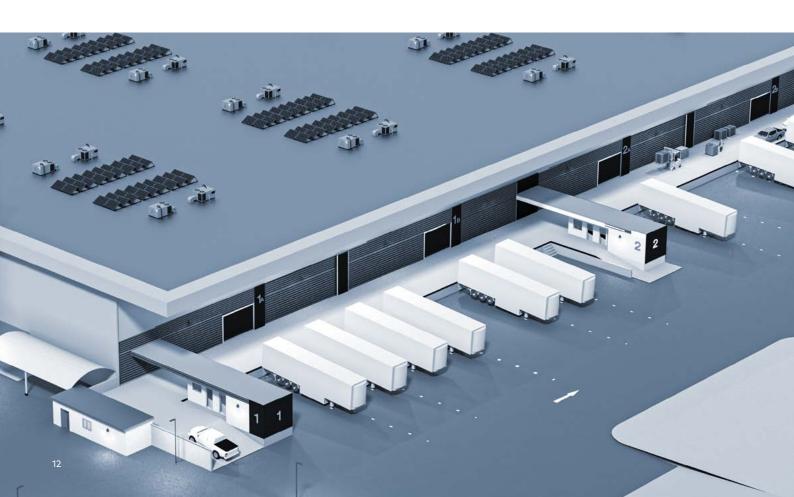
## THE BEGINNING AND END OF THE JOURNEY

#### STREAMLINED EFFICIENCY

Goods in and goods out areas of a logistics facility are extremely busy and often utilised around the clock. Therefore it's very important to balance the correct light levels to help with loading and unloading whilst ensuring that the lighting control system maximises energy efficiency. People working in these spaces need to constantly be able to maximise efficiency across the site and great lighting enables that. It's also important that light spill and energy efficiency is maximised. A simple control system can ensure that these spaces utilise the right light levels at the right time.

#### Products used in the scene:

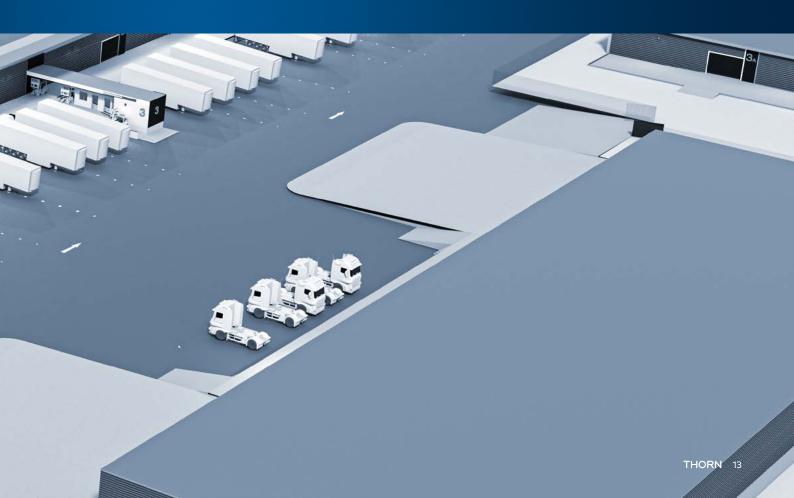






#### HIGHLIGHTING SURROUNDING SPACES

When loading and unloading, it's fairly common for heavy machinery to be required. This represents a potential health and safety challenge. This is where good quality light and strong light levels can help with the safety and wellbeing of colleagues and logistics partners alike. In addition to the loading and unloading element, it's incredibly important to illuminate the roadways. There are often very large vehicles moving around in the same space as much smaller vehicles. Lighting levels must therefore highlight all moving vehicles and people to ensure the site remains safe from entrance to exit.



# HIGH RACK STORAGE

### **GETTING THE OPTICS RIGHT**

#### **HIGH LEVEL LIGHTING**

Storage areas within a logistics site often vary between items picked regularly and slower moving stock items. This means that high rack storage solutions can be extremely popular to ensure that space is optimised.

In these areas, it's important that the lighting solution utilises the right optics to ensure that even in narrow aisles, the lit effect provides excellent, safe light levels for when forklift equipment is required whilst ensuring location and storage signage is clear for all to see.

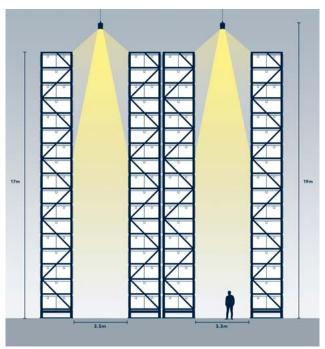








HIPAK





# **MEZZANINE & LOW** RACK STORAGE

### SUPPORTING PRODUCTIVITY

#### STREAMLINED EFFICIENCY

Light does more than just help people see. It has a significant effect on the comfort, alertness and mood of workers. The product picking process comes with a risk of mis-picking and poor lighting can enhance this risk and can also increase the number of accidents across the site.

Making sure that you're getting the right light level, the correct light quality and maximising energy saving potential for a specific project can have a significant impact on the wellbeing of staff and visitors and the site's sustainability credentials.

#### Products used in the scene:



#### Other recommended products:





# PACKING AREAS

## LIGHTING FOR THE ROAD AHEAD

#### **ENHANCING TASK LIGHTING**

Packaging areas are busy with high levels of activity. As well as workers moving around this space, there can be vehicles, pallet trucks and forklift trucks entering and exiting the area frequently. Therefore, it's essential that the lighting infrastructure meets and exceeds durability requirements. It's important that light levels here enable tasks to be undertaken safely. These spaces often do not require regular illumination and in order to enhance your energy management aspirations, we'd recommend one of our simple, intelligent control solutions.

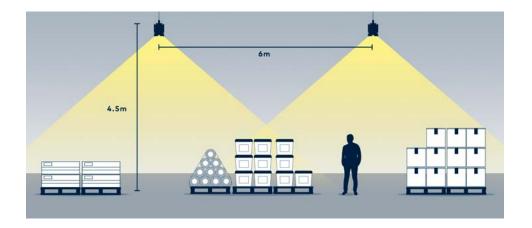
#### Products used in the scene:









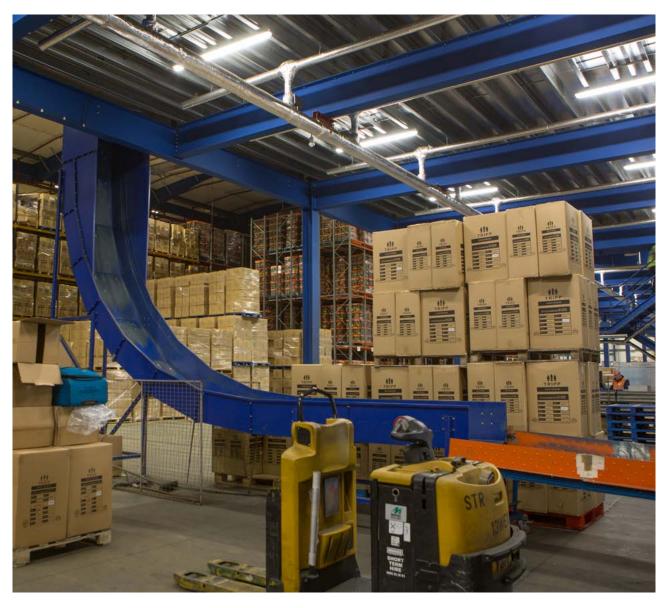


## **DESPATCH AREAS**

These can vary in usage from large tasks with low visual difficulty to technical, intricate tasks with high visual difficulty. Hazards such as forklift trucks must be highlighted. Aquaforce Pro battens with a medium bean or wide beam optic, will allow for modular working areas, with high luminous flux but low perceived glare.

#### Products used in the scene:





# **OFFICE SPACES**

### COMFORTABLE WORKING ENVIRONMENTS

## **KEY CONSIDERATIONS**

01 PERFORMANCE

CRI 80 or higher helps to ensure good light quality for colleagues and visitors and good vertical uniformity helps improve facial recognition and communication 02 COMFORT

Help towards low glare and better comfort as a whole across the space by using products rated UGR19 or less

03 CONTROL

Make sure you're controlling the lights correctly with an intelligent control system that optimises energy consumption throughout the building

#### Products used in the scene:



#### Other recommended products:





OMEGA PRO 2

**IQ BEAM** 



# PLANT ROOMS

## **RELIABLE SOLUTIONS IN CRITICAL SPACES**

#### **SUPPORTING CORE SPACES**

A plant room is essential in keeping the rest of a logistics centre operating smoothly. There, many types of utilities are controlled, from boilers to generators and other significant machinery. While these spaces are not used by vast numbers of people at all times, adequate and well designed lighting is essential here because

when the space does need to be used, for example by engineers, adequate visibility is needed to ensure the smooth and safe operation of tools, machinery and other necessary equipment. However, to increase energy savings and improve efficiency, a controls solution could be used to provide light only when it is needed.

#### Products used in the scene:

#### Other recommended products:









**ESCORT** 



**AQUAFORCE** 



# LIGHTING CONTROL SOLUTIONS

## **RIGHT LIGHT, RIGHT TIME**

#### **CONTROLS - OUTDOOR**

Enhanced energy savings are just one of many benefits to installing affordable lighting controls. However at Thorn, we continually aim to deliver the best of both worlds. PIR systems like UrbaSens Detect mean that you can balance your energy saving targets with security illumination. By maintaining a lower level light output through the night, you exponentially lower energy consumption whilst still aiding CCTV through required light levels. NightTune technology can make automatic adjustments to the level of light emitted by a light fitting, as well as its colour temperature, to suit the exact time of night and level of traffic. Perfectly balancing your need for light with the needs of local ecology.

UrbaSens Detect – integrated PIR system providing autonomous pedestrian, bicycle and traffic sensitive illumination. Providing the balance between energy reduction and security. Ideal for refurbishment projects. UrbaSens Sentinel – Autonomous motion detection and increased energy savings whilst supporting NightTune & Variable Light Distribution.

NightTune – a sustainable solution, adjusting both colour temperature and output to protect the nocturnal environment, wildlife and promoting human wellbeing without compromising safety.

Variable Light Distribution – taking NightTune technology to the next level by integrating different optics within the same luminaire to ensure pedestrians, cycle paths and roadways are visually identifiable and correctly lit.

#### **CONTROLS - INDOOR**

Even though there are significant energy savings to be had by upgrading from old lighting technology to more energy efficient LED solutions – there's the potential to reduce energy consumption by a further 33% by implementing and utilising intelligent controls.

When those controls are wireless, you can connect all light points via a mesh network, which means it's possible to use existing cabling infrastructure and still benefit from the energy savings that come from ensuring that spaces are only fully illuminated when natural light levels are low and when fewer people frequent an area.



# EMERGENCY LIGHTING

### **A SAFE WAY OUT**

Our Voyager range of emergency luminaires are designed, manufactured and tested to meet the latest European standards regarding safety and electromagnetic compatibility.

The purpose of emergency lighting is to allow people to make their way safely out of buildings in the event of an emergency, for example during a black out. Emergency safety lighting and illuminated exit signage ensures able bodied people can safely evacuate a building to a place of safety. In these situations, lighting can save lives and keep people calm.

It goes without saying that emergency lighting must comply with all relevant rules and regulations. But the best emergency lighting goes further, incorporating flexible luminaires with ease of installation and maintenance, long life and energy efficiency. Thorn's 90+ years of experience and reputation for quality are your quarantee of an optimal emergency lighting solution.

All emergency lighting should be specified and designed in accordance with local and/or national regulations

EN 60598-1 EN 60598-2-2 ISO7010

LED emergency luminaires Graphical symbols. Safety colours and safety signs. Registered safety signs.



**VOYAGER SQUARE** 



**VOYAGER SOLID** 



**VOYAGER ONE** 

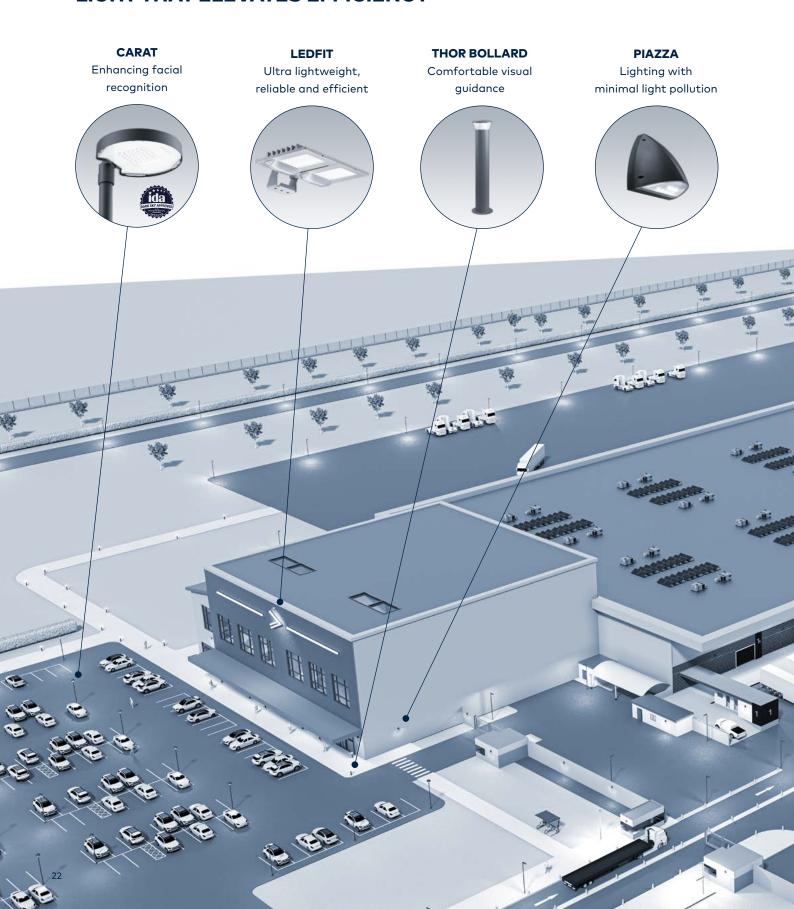


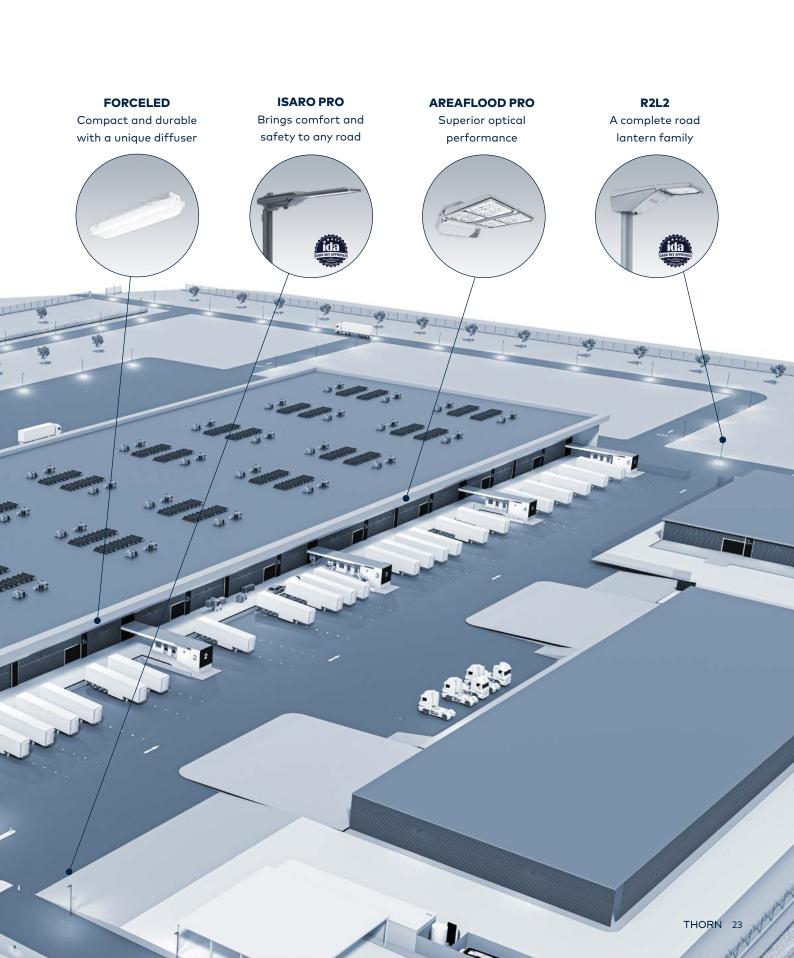




# OUTDOOR LIGHTING SOLUTIONS

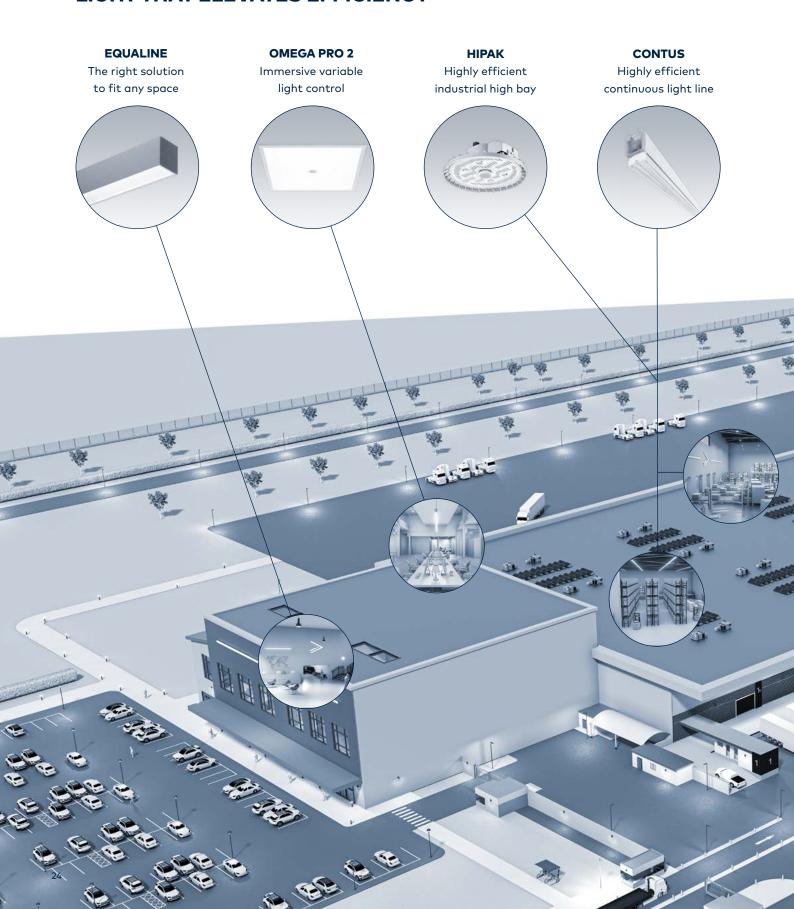
## LIGHT THAT ELEVATES EFFICIENCY

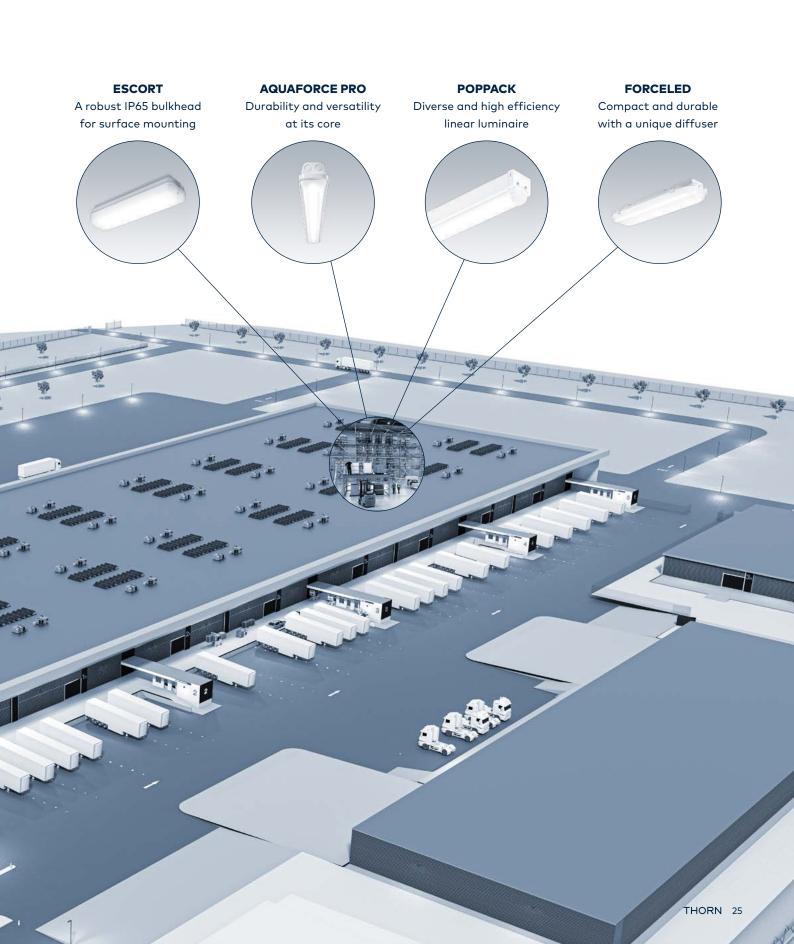




# INDOOR LIGHTING SOLUTIONS

## LIGHT THAT ELEVATES EFFICIENCY





# THE BENEFITS

#### OF WORKING WITH THORN

## 01

#### **OVER 90 YEARS' EXPERIENCE**

Yes, we really have passed the 90-year mark! Thorn has had nearly a century to develop its unique knowledge and expertise. And the best part is that we can build on this knowhow to make sure that we are always ahead of the game with the latest technology, the most reliable services and a price that works for everyone.



#### ELECTROMAGNETIC COMPATIBILITY (EMC) TESTING LABORATORY

## 02

# CONSTANT RESEARCH AND INNOVATION

Thorn has been at the forefront of lighting technology for decades, and continues to push the boundaries. Our investment in R&D and innovation aims to bring customers the very best performance, thanks to the latest advanced engineering in light and electronics, with in-house development.

## 03

#### **EXTENSIVE TESTING AND CERTIFICATION**

Thorn's products undergo demanding tests for compliance, safety and performance. With Thorn, you can be sure that your lighting product does what it says it will do, meets all relevant standards and regulations, and comes with a guarantee of quality and safety.

## 04



# ENVIRONMENTAL PRODUCT DECLARATION (EPD)

At Thorn we provide EPDs as a standard service. The EPD for each specific product details its impact on the environment throughout its lifecycle. The EPDs are based on ENISO 14025 and EN 15804. The information given by an EPD is relevant not only for environmental certifications such as LEED, BREEAM or ÖGNI. EPDs form the data basis for an environmental building assessment.

## 05

#### **BEST-IN-CLASS OPTICS**

Thorn's product range benefits from our class-leading optical systems. They offer several precision light distributions to fulfil various requirements, with excellent uniformity and glare control.



## 06

# QUALITY FROM THORN'S SPENNYMOOR FACTORY

Thorn's products go through intensive quality manufacturing, assuring the best processes to develop better products all the way. In addition, we are one of the first companies in the UK to be certified to ISO 14001 – the standard for environmental management. In addition, we have successfully been recommended for certification to ISO 50001:2018 for energy management. Our factory at Spennymoor in the UK has achieved a reduction of approximately 25% in significant energy uses and 14% in electricity use compared to the previous year.

## 07

# FIVE YEAR GUARANTEE

All Thorn products carry a five year guarantee.

5 YEAR GUARANTEE

## 08

#### **ZUMTOBEL GROUP MEMBER**

The Zumtobel Group is an international lighting group and a leading supplier of innovative lighting solutions, lighting components and associated services. With its core brands, Zumtobel, Thorn and Tridonic, the Group offers its customers around the world a comprehensive portfolio of products and services.

# GET IN TOUCH

www.thornlighting.com/contact

