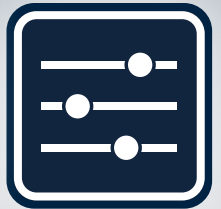


THORN

LIGHTING



CLINICAL AREAS +

PLANT SPACES +

SINGLE BED WARDS +

CORRIDORS & STAIRWELLS +

TREATMENT & CONSULTATION AREAS +

WAITING AREAS +

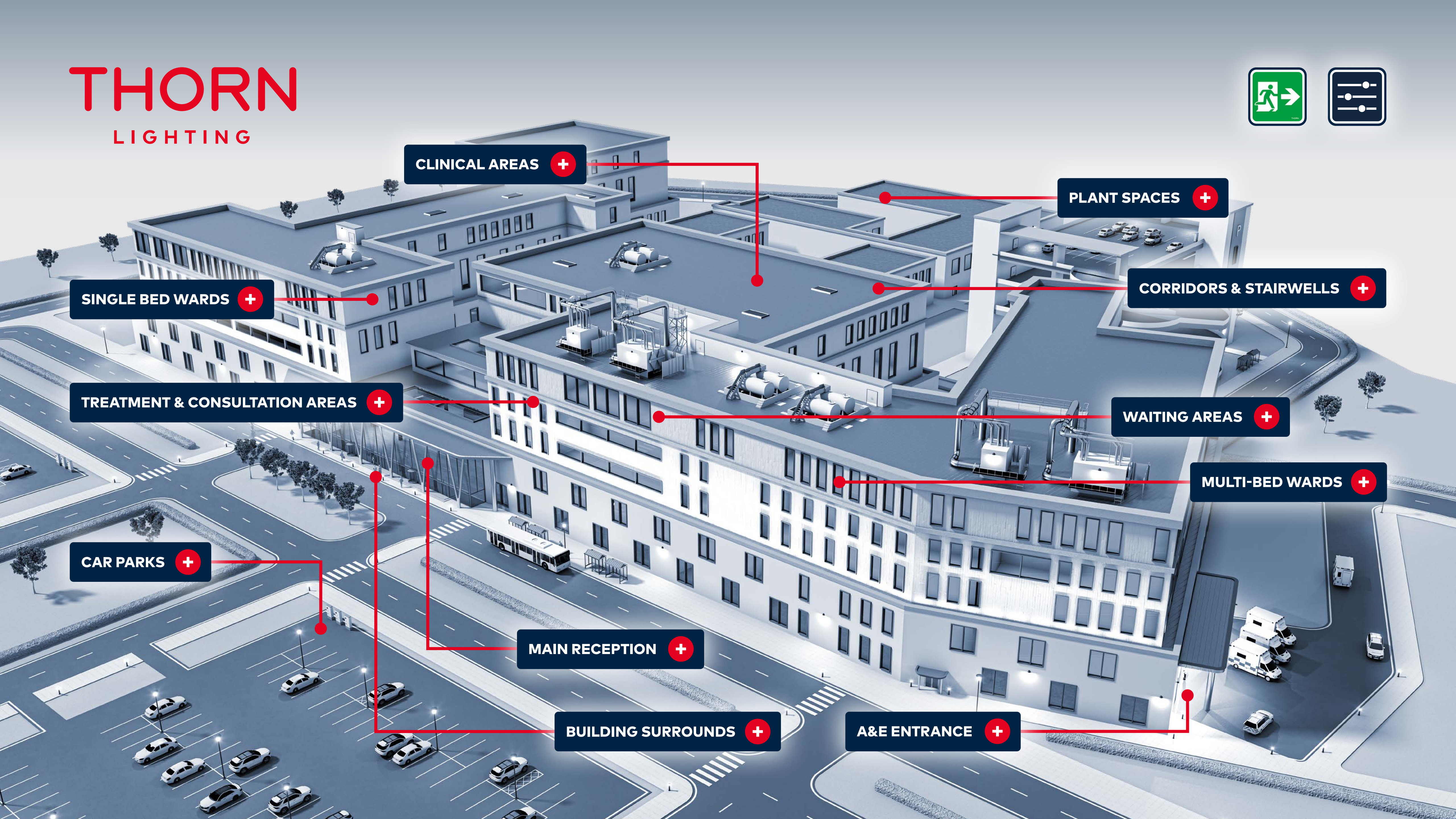
CAR PARKS +

MULTI-BED WARDS +

MAIN RECEPTION +

BUILDING SURROUNDS +

A&E ENTRANCE +





BUILDING SURROUNDS

THE FACE OF THE HOSPITAL

ILLUMINATION - Any space that needs to function effectively, 24 hours a day, seven days a week needs a reliable solution. EN12464-2 provides recommendations to ensure best practice for outdoor illumination. It's important to effectively illuminate all key travel routes for visitors and patients who are entering an unfamiliar environment. Well designed lighting can help make this initial impression less stressful. Technology such as NightTune enables enhanced visitor navigation whilst delivering the right light for the local ecology. The technology also minimises light pollution and excessive light spill whilst lowering the energy consumption of your lighting infrastructure.



VOLUPTU



THOR BOLLARD



PIAZZA



CAR PARKS

LIGHTING FROM THE OUTSIDE-IN

COMFORTABLE WELCOME - As well as guiding visitors to the specific areas they're trying to efficiently locate, the hospital is a workplace to the heroes that work there. A nightshift may start or end in darkness. By intelligently illuminating areas such as car parks and the wider building surround you'll be supporting staff, patients and visitors' safety and the CCTV infrastructure through improved facial recognition. Technology such as Variable Light Distribution (VLD) can also enable your light points to deliver two benefits at once. Through optical innovation the walkways can be lit with a warmer light tone and a lower light output whilst offering a different lit effect for road traffic.



AERIE



AQUAFORCE PRO



FORCELED



FLOW

CAR PARKS





MAIN RECEPTION

SUPPORT HUB OF THE HOSPITAL

WARM WELCOME - The main entrance doesn't just offer visitors a first impression, it's an opportunity to instill a reaffirmation point for staff. It helps to offer confidence in the service. It aids navigation for both able and disabled members of our society at a time when they may require stress alleviation. The lighting here should aim to remove excessive bright spots. In this space patients, visitors and staff may be present and their first impressions of the facility starts at the main entrance, and their experience of the lighting here will need to be considered.



GLACIER II



NOVALINE STYLE



CHALICE



OMEGA PRO 2

MAIN RECEPTION





CORRIDORS & STAIRWELLS

THE MAIN ARTERIAL ROUTES

LIGHTING THE WAY - Corridors and stairways are high traffic spaces with an extremely broad range of people frequenting the space. In alliance with EN 124564-1, it's essential we light these spaces mindfully. A uniform lit effect in these areas ensures that recumbent patients don't experience a variant of stroboscopic lighting effects whilst travelling the roadway. Another important element here is cylindrical illumination for security support and facial recognition. Cylindrical illumination helps remove harsh shadowing, which can hinder the recognition of people within this space. Additionally, EN 12464-1 lists two different illumination levels for patient corridors. Generally speaking, we should be targeting between 100- 200 lux during the day and 50 lux at night.



EQUALINE



COLLEGE



BETA 3



NOVALINE STYLE

THORN

LIGHTING

SINGLE BED WARDS



SINGLE BED WARDS

LIGHTING THE ROAD TO RECOVERY

COMFORT AND LIGHTING CONTROLS - Lighting in wards should take into account peoples potential unfamiliarity of a new environment as well as reducing visual discomfort. Discomfort glare should be modeled to ensure the value is UGR 19 or less. Lighting control can also help patients and staff manage their personal lighting levels. Individualised lighting control offers improved user experience of a space as well as enhancing energy saving potential. Personalised control allows people to optimise the lighting levels for their specific needs. Additionally, installing a control solution that responds to natural light levels can further enable enhanced energy saving opportunities for your general lighting whilst maintaining good light levels.



CAVELL



EQUALINE



OMEGA PRO 2



CHALICE



MULTI-BED WARDS

LIGHTING THE ROAD TO RECOVERY

NIGHTLIGHTING AND CLEANLINESS - Nightlighting has a variety of benefits - patients often require low level lighting (especially psych or childrens wards) as a comforting factor without disturbing others. Where patients are ambulant, light should aid safe passage to/from their bed to a bathroom e.g. with no or minimal disruption to other patients. Staff also benefit from nightlighting as it enables them to discreetly carry out their ward rounds and check up on patients at night as the patient will likely be asleep. Luminaires installed in clinical areas will be subject to regular cleaning. It is therefore essential that luminaires can withstand the corrosive effects of cleaning materials used in these environments.



CAVELL



OMEGA PRO 2



CHALICE



COLLEGE



WAITING AREAS

SUPPORTING PATIENT EXPERIENCE

COMFORTABLE ILLUMINATION - The psychology of waiting is always a tricky one to manage – especially when discomfort levels are high. It's important to ensure cylindrical illumination levels are high and enable clear facial recognition so that the staff members supporting patients and family are clearly visible and the points of communication are enhanced as much as possible. Low glare solutions are key here too so that comfort is further enhanced.



CHALICE



EQUALINE



NOVALINE STYLE



A&E ENTRANCE

LIGHTING FOR EMERGENCIES

LIGHTING PERFORMANCE AND ESSENTIAL GUIDANCE - Good light levels for A&E entrances are essential and EN 12464-2 helps us understand the specificities around best practice for illuminating external environments. Providing good lighting in these critical spaces aids support for paramedics at a crucial point in patient care. Good communication is key in these spaces and good light levels can support communication during the transfer of patient care.



CLINICAL AREAS



CLINICAL AREAS

ILLUMINATION FOR CRITICAL PROCEDURES

Clinical spaces, from operating theatres to all clean room environments and recovery facilities are high priority areas. The lighting solutions here must offer higher than average illumination performance for staff as they deliver critical care for their patients. There are four key elements that need to be considered in order to offer the optimal level of support for clinicians in these spaces:

- 01 Colour quality needs to be high – ideally above CRI 90.
- 02 Ingress protection needs to be IP65 from the front and IP54 from behind, except for recovery rooms or wards where the ingress protection can be reduced to IP20.
- 03 Discomfort glare is also important and should achieve UGR 19.
- 04 These solutions must be easy to clean. They must be able to handle regular cleaning cycles and withstand the corrosion properties from cleaning agents.



DUOPROOF 2



PLANT SPACES & BACK OF HOUSE

SUPPORTING CORE SPACES

LIGHTING PERFORMANCE - Very often it's the spaces that aren't frequented by patients that enables the resilience of the hospital to be maintained. In these spaces, it's essential for the lighting infrastructure to meet and exceed durability requirements. It's important that light levels here enable tasks to be undertaken safely. Some of these spaces are also infrequently frequented, which means a simple lighting control solution can help maximise energy savings.



AQUAFORCE PRO



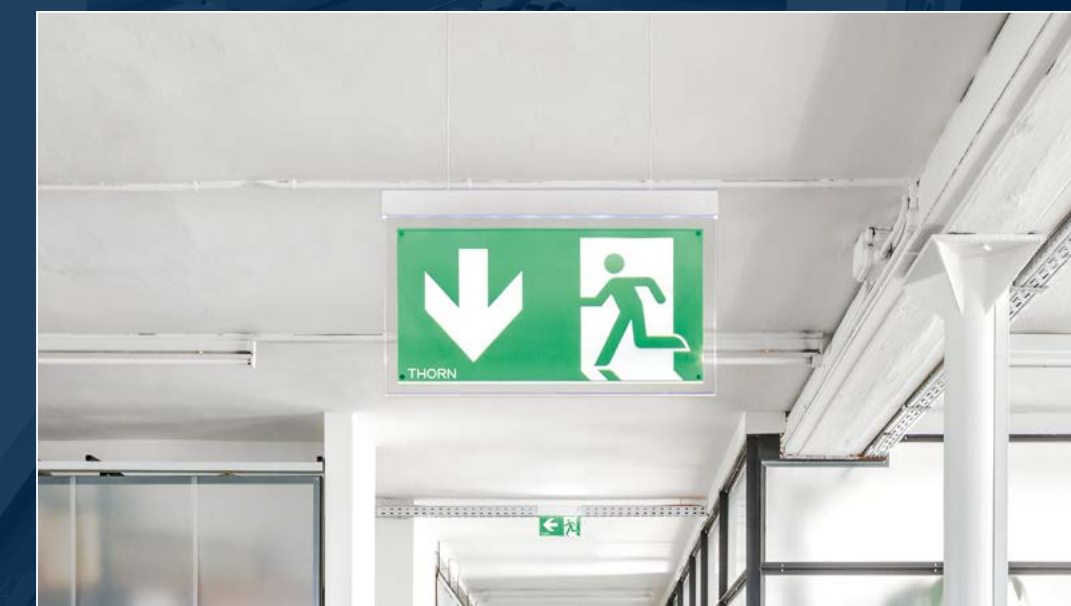
FORCELED



ESCORT



KATONA



EMERGENCY

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 guarantee of an optimal emergency lighting solution.



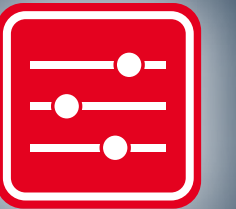
VOYAGER FIT



VOYAGER STAR



VOYAGER SIGMA



CONTROLS - INDOOR

WIRED LIGHTING CONTROLS

If you have a wired control solution in place already, then a simple upgrade can enable a world of features to enhance teaching. Control groups of lighting fixtures to reflect the learning activity, maximise energy savings through daylight mirrored dimming and connect to a simple switch for flexible and simple scene switching.

WHY GO WIRELESS?

Simply put, controlling your fixtures should not only be realistically accessible to those with an existing wireless infrastructure in place. Here at Thorn, our controls experts and BasicDIM solution can enable luminaire zoning, Variable Colour Temperature, daylight dimming and intelligent presence detection without the need for additional cable runs.



CONTROLS - OUTDOOR

INTELLIGENCE, SIMPLIFIED?

Enhanced energy savings is 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 MovU 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 enhanced light levels.

When linked to our NightTune technology, you 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 the local ecology.

TREATMENT & CONSULTATION AREAS



TREATMENT & CONSULTATION AREAS

LIGHTING FOR DIAGNOSIS & CARE

ILLUMINATING NON-VERBAL COMMUNICATION - In treatment and consultation areas, complex and detailed verbal and non-verbal communication takes place between clinicians and patients. Good quality lighting therefore plays a significant role in the diagnosis process, supporting non-verbal communication through good lighting design, with appropriate levels of task illuminance, cylindrical illuminance and discomfort glare control. A Colour Rendering Index (CRI) of 90 or above is recommended in EN 12464-1.



OMEGA PRO 2



IQ WAVE SP



DUOPROOF 2



COLLEGE