

A large, white, stylized letter 'H' is mounted on a dark grey, rectangular architectural element of a modern building's facade. The building has a grid-like pattern of grey panels and large windows with yellow-tinted glass.

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# HEALTH LIGHTING

Hospitals • Clinics • Nursing Homes

# Healthier lighting for healthcare spaces.



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Creating spaces to **heal and to recover**. Discover solutions that adapt to human needs.



# Lighting in healthcare spaces.

As the healthcare industry shifts towards holistic and preventative care to alleviate the demand on services due to an ageing population, more emphasis is being placed on creating high-quality physical environments that promote health and wellbeing.

From aiding sleep/awake cycles to improving mood and supporting everyday comfort levels, the quality of light within a building has a profound effect on occupants.

Innovative LED technology has opened up world of possibilities in the design of modern lighting architecture.

These advances in the lighting industry mean we are now able to design solutions that stimulate the circadian rhythm and trigger biological responses, which impact how people feel and perform at different times of the day. The right light can also impact quality of rest, which supports patient recovery rates.

Cyanosis certification, together with rising standards in Colour Rendering Index (CRI) and Unified Glare Index (UGR), have improved the calibre of lighting in healthcare facilities. Internet of Things (IoT) platforms will provide the next revolution in healthcare lighting, moving away from static artificial light sources and towards dynamic lighting to reflect the natural environment, which aids patient recovery and wellbeing, while improving focus, energy and sleep for staff.

Private health facilities represent 40% of total patient hospitalisations in Australia, which highlights the demand for private facilities to deliver a high-end experience that not only promotes healing but also quality and comfort from start to finish. There has also been a rise in specialist facilities and complexity of services offered in private hospitals, such as intensive care, cardiology, oncology, rehabilitation units, sleep centres, and specialised paediatric services – each with its own specific lighting requirements.

The healthcare segment has been significantly affected by the changes made to the National Construction Code (NCC) Section J6. With the exception of intensive care, all other areas have had a forced reduction of maximum Illumination Power Density between 55-88%. With the current efficacy of LED luminaires, most areas will still be able to maintain a suitable amount of illumination, compared to current standards. However, wards and corridors see an 88% reduction in maximum IPD, to a very low 2.5W/m<sup>2</sup> (previous 13W/m<sup>2</sup>). This puts even greater importance on quality lighting design and product selection for compliance.



# Pierlite in healthcare spaces.

Taking an evidence-based approach, Pierlite is dedicated to engineering advanced healthcare solutions that are sustainable, IoT ready, and are developed for the benefit of occupants and staff.

Along with a comprehensive range of professional lighting systems developed and tested in the Pierlite Innovation Centre, based in Sydney NSW, we have exclusive partnerships with local and global suppliers who specialise in architectural and healthcare lighting. This includes brands such as SIDE, Siteco, Disano and Derungs from Europe.

Our product and lighting design teams can completely tailor solutions to meet the precise needs of each medical facility. Our healthcare lighting range is designed to improve patient outcomes and mitigate risks, such as trips and falls, as well as reduce the spread of infection.

Healthcare-associated infections (HAIs) contribute to additional bed days for patients and increases financial pressure on the healthcare system. With an estimated 200,000 cases of HAIs occurring each year, practical infection control initiatives can assist in reducing this burden. It's why Pierlite's specialist medical lighting is designed with infection control in mind. This range features cleanroom and operating theatre troffers, along with Planet Lighting medical lights that comply with AS/NZ IEC60601-2-41.

The Pierlite range has every area covered, from car parks, walkways and reception areas to general area lighting, patient wards, medical areas, surgical environments, back of house, emergency and exit signs. Each space can be completely customised with a smart lighting control solution that complies to the latest Australian standards and regulations.

Pierlite solutions also include tunable lights that mimic natural variations in sunlight, starting with warm morning tones at sunrise through to a cooler daytime colour spectrum, and then back to a warmer colour range to assist the body to wind down for the night. This tunable white technology can also be adjusted to deliver adequate light for specific functions and procedures when required.

## Lighting the way.



### Next-generation solutions for today.

Just as natural light changes throughout the day, so too should the lighting within a space.

It's why our products and systems are engineered to provide greater flexibility and control over lighting across an entire network - and switching lights on and off is just the beginning.

The digital age and the IoT allows us to create fully connected solutions with the ability to adapt to new technology as it emerges. Our range of sensor-ready luminaires are designed to operate in a stand alone environment or seamlessly integrate with building management systems for complete control and visibility within a facility.

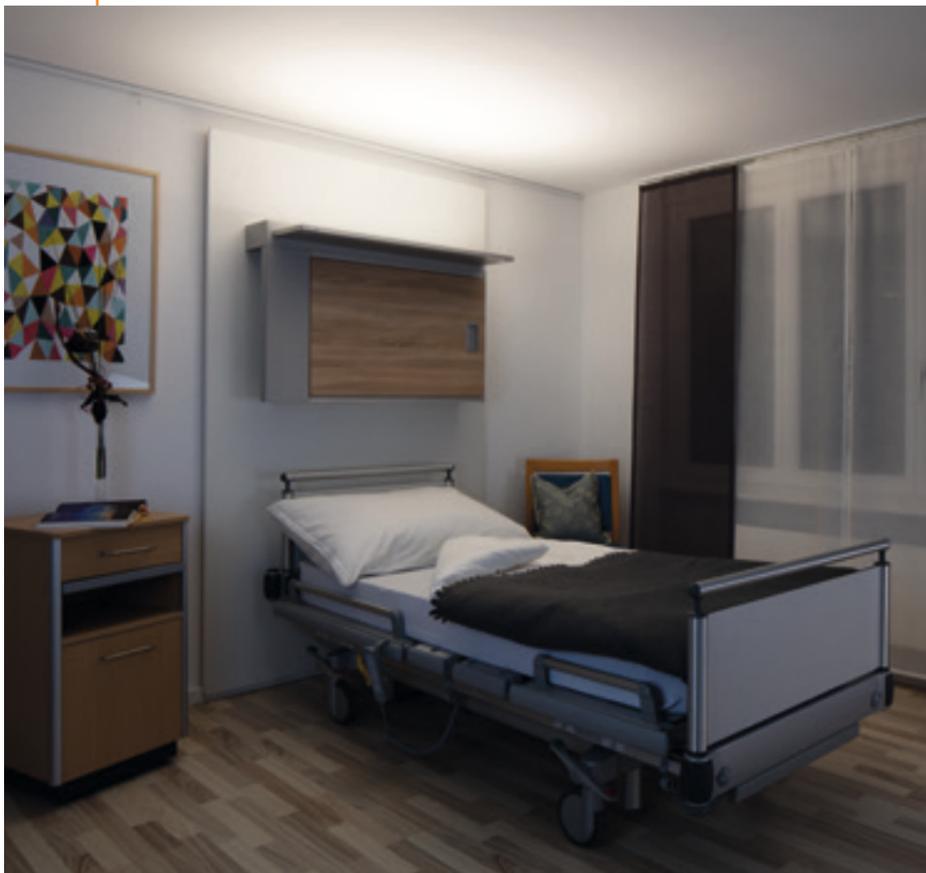
Pierlite is focused on creating smarter lighting solutions for hospital, aged care and healthcare environments.

### RAPIX lighting control system

Unlike 'one size-fits-all' competitive offerings, our RAPIX Lighting Control System is a DALI and Ethernet based system that is well suited to healthcare facilities. The RAPIX Lighting Control System strips away layers of complexity to greatly accelerate the design, installation and commissioning of lighting control. It has the ability to work with any DALI fitting, regardless of the manufacturer.

# Safe environments for better health outcomes.

An extensive product portfolio with options  
for better safety across the board.



In the health sector, patient care and safety is paramount.

From providing accurate illumination for medical procedures to influencing mental alertness, lighting a dramatic impact on safety in hospitals and aged care facilities.

When lighting is inadequate, it can lead not only to trips and falls, but to fatigue and physical discomfort. Factors such as glare, uneven light distribution, overly illuminated spaces or low light levels cause the eyes to strain and lose focus.

Using the latest technology, Pierlite develops best in class optics with a high colour rendering index (CRI) and an optimal unified glare rating (UGR). This provides superior light output for the most accurate colour distinction and low glare for improved focus. This is critical for tasks that require a high level of precision such as surgery, administering medication and detecting cyanosis.

For aged care and dementia patients, who spend much of their time indoors, dynamic LED lighting solutions can be used to promote a calm and comfortable atmosphere and maintain alertness, reducing the likelihood of incidents or injury.

When it comes to safety, the quality of light is just as important as its reliability. Each is rigorously tested in the Pierlite in-house innovation centre and testing lab to maintain effectiveness over many years. This process ensures our products not only meet but exceed AS and NZ standards in all healthcare settings.

# Creating energy efficient solutions.

At Pierlite, we're focused on next-generation lighting – and looking after future generations with energy efficient solutions that don't compromise on effectiveness.

Rising energy costs and recent changes to the Australian National Construction Code (Section J6) has led to increasing interest in achieving compliance to sustainability standards, such as NABERS, GreenStar and WELL.

Pierlite assists health care facilities to adhere to these guidelines by offering an extensive range of products that can be tailored to create an energy efficient lighting solution for any hospital or aged care setting.

By integrating efficient LED luminaires with sensors and lighting control systems, a facility can reduce energy consumption by 50% without compromising on quality or reliability.

Pierlite's in-house innovation centre, incorporates engineering, testing, performance and photometry to ensure the efficiency of our products.

Using the latest manufacturing technology and enforcing stringent quality standards, Pierlite develops efficient luminaires that integrate smart control and IoT technology. It ensures our lighting solutions are reliable, fit for purpose and engineered to last. The benefits of which also offer considerable savings for healthcare facilities of all sizes by reducing both energy consumption and replacement costs.

To further support the specific requirements of lighting in different settings such as healthcare, Pierlite is looking to the future with modular lighting solutions, such as our Momentum modular fitting with design-on-demand capability. It gives electrical engineers the convenience to design individual light fittings according to the needs of each space. This includes the ability to tune down the artificial light source when natural sunlight is available or at different times of the day – resulting in reduced power consumption.

Focusing on future-proof solutions, Pierlite combines the latest LED technology and modular manufacturing techniques to reduce wastage and actively improve energy efficiency to create more effective and sustainable healthcare facilities.

## Public health facilities

Developing efficient and cost-effective solutions to support better patient outcomes in public health.

## Private health facilities

Premium medical and architectural lighting solutions to create a high-end experience for patients and staff.

## Aged care facilities

Smart and durable light fittings designed to enhance the environment of aged care facilities to improve comfort, safety and wellbeing.



VICTORIAN COMPREHENSIVE CANCER CENTRE



# Pierlite in public health facilities.

Efficiency, cost and effectiveness interplay when it comes to delivering public health lighting solutions.



From patient wards to emergency rooms and operating theatres, as well as general areas, such as waiting rooms, car parks and building exteriors, Pierlite can tailor a complete and cost-effective solution to enhance any space.

Savings in public health areas can be realised with intelligent lighting design. Pierlite's team of experienced designers can create lighting solutions that use high lumen outputs and make the most of the available light, which can decrease the number of luminaires required and save on installation costs.



GOSFORD HOSPITAL

For non-treatment areas, incorporating occupancy detection and daylight sensing ensures there is adequate lighting when required but, when a space is empty, the lights automatically switch off or dim to reduce energy consumption. This can be especially helpful in multiple-occupancy spaces.

Pierlite offers a comprehensive and cost-effective range of compliant lighting solutions to meet energy efficiency targets and adhere to revisions, which aim to reduce energy consumption in new buildings.

With a proud heritage of over 70 years in Australia, we stand by the reliability of our products and offer warranties that give our customers peace of mind.

# Pierlite in private health facilities.

Surgeries, specialist services, and exclusive medical practices can use building design elements such as lighting to provide a premium patient experience and aid recovery.



Together with indoor air quality and thermal comfort, lighting plays a significant role in wellness within each healthcare setting. It's important to balance the practicalities of illumination with a high-end experience for those who invest in private medical services.

Lighting has the power to enhance a patient's comfort levels from the moment they enter the car park through to general areas such as receptions, corridors and waiting rooms. This also includes creating safe and secure spaces with reliable, high quality emergency and exit lighting.

A well-designed lighting solution can support the high level of care provided in a private health setting. Pierlite incorporates technological advancements that have become essential in high-end healthcare lighting, including CRI90, UGR19 or better, and cyanosis certification. The right light makes for a more comfortable experience for occupants by reducing glare, as well as enhancing the environment for medical staff to perform their duties.

A smart, connected lighting control systems that mimics natural variations in sunlight is fast becoming a key component of a first-class facility. Advances in technology enable us to provide solutions that incorporate tunable white, which mimics natural light to respect circadian rhythm and encourage rest and recovery. Pierlite's capability also extends to solutions that work seamlessly with Building Management Systems (BMS).

No matter the size or requirements of the private health facility, Pierlite tailors lighting solutions to enhance building architecture, maximise energy efficiency and create just the right atmosphere to dramatically improve the way staff and patients experience the space.

# Pierlite in aged care health facilities.

As we continue to see the effects of an ageing population, more demand is being placed on high-quality aged care.

Designing facilities to improve the overall experience for both residents and staff has become a priority for the aged care industry. There is also a trend to create high-end spaces that provide an oasis for residents who are increasingly seeking comfort and quality in their twilight years.

With a large portfolio of lighting solutions, Pierlite can provide quality lighting in all areas of aged care facilities including residential spaces, general areas, car parks and building exteriors.

Where residents may have decreased vision and an increased sensitivity to glare, ensuring the safety of a facility with the right light is crucial. Suitable lighting also aids visibility in an emergency or for the accurate dispensing and administration of medications.

Incorporating quality, human-centric lighting that fits the needs of the space can help to stabilise moods, reduce anxiety, promote better sleep and encourage social activities – leading to a better quality of life. Pierlite achieves this with tunable white solutions that mimic natural variations in sunlight within a space.

A variety of user-controlled lighting settings means the light can be adjusted to suit the mood and intended use of the space, which is particularly beneficial in multi-purpose rooms and common areas that may be used for a variety of activities. Additionally, occupancy and light sensors can switch off or reduce light output when the space is not in use, providing significant long-term savings by improving energy efficiency across the facility.

Putting wellbeing and safety at the forefront, we provide lighting solutions for every budget, to ensure optimal performance, reliability and efficiency day in and day out.



## Pierlite Recommended Products

Visit [www.glg.lighting](http://www.glg.lighting) or search for the products on your preferred search engine.



<b>Wards &amp; Examination Lighting</b>			
	PLANET LIGHTING FLEX LED	PLANET LIGHTING ULED	
	PLANET LIGHTING PHANTOM	PLANET LIGHTING OVERBED LIGHT	PIERLITE DLED9
	SIDE JOGGER	DOT DOWNLIGHTS	DERUNGS ZERA RANGE
	PIERLITE LITELUX DOWNLIGHT	PIERLITE ECO PANEL	PIERLITE EMERGENCY & EXIT RANGE

<b>General Area Lighting</b>			
	PIERLITE ECO PANEL	PIERLITE MOMENTUM	
	PIERLITE EMERGENCY RANGE	PIERLITE EXIT RANGE	PIERLITE PENDANTS
	DISANO EXTERNAL RANGE	SIDE BOLLARD RANGE	SIDE REEF GARDEN LIGHTING
		<b>Surgical Area Lighting</b>	
	SIDE OLODUM IN GROUND LIGHTING		
PIERLITE LAB LED GEN 2	PIERLITE OPERATING THEATRE	PLANET LIGHTING RANGE	



[www.glg.lighting](http://www.glg.lighting)

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