



Lighting for Life

LIGHTING SOLUTIONS
FOR HEALTHCARE
ENVIRONMENTS

caring environments

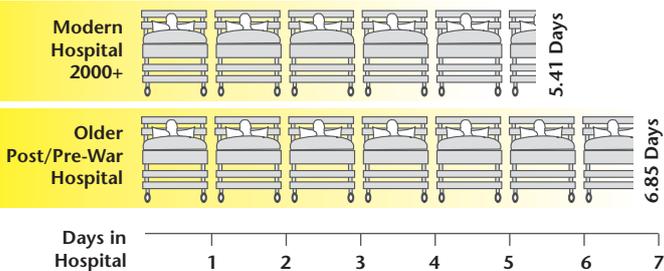


No other physical situation creates such unique lighting demands as a hospital building. Patient comfort and well-being require primary consideration, alongside provision of a good working environment for staff, while energy conservation and lifecycle costs are also of major importance.

PATIENT WELL BEING

Research confirms the direct link between light quality and patient recovery rates. Recent studies by Professor Bryan Lawson and Doctor Michael Phiri of the University of Sheffield and NHS Estates show that an improved ward environment results in a reduction in non-operative patient recovery times of 21%.

With the average cost of in-patient care running at £234 per day, this represents a significant annual saving. From an operational point of view, there are clear consequential benefits in terms of shorter bed occupancy, faster patient turn-round and improved efficiency.



WORKING ENVIRONMENT

Hospital staff need good lighting to perform daily duties effectively, especially with the flexibility that different work areas demand. Lighting also influences comfort and stress levels, and improvements in these contribute to reduced absences and increased productivity.

ENERGY SAVING

The potential for wasted energy in hospitals is higher than in most buildings, with many areas working on a 24/7 basis.

Good lighting design and installation will deliver major long-term energy savings, with corresponding cost benefits.

Lifecycle costs and the 1:5:200* rule

For a typical hospital building, lifecycle costing indicates that for every £1 spent on construction, £5 is required for facilities management and no less than £200 in costs associated with the people who use it. Lighting is a significant factor in this equation, and choosing the right system and equipment can make a dramatic difference to long-term project viability.

Relative Expenditure



HEALTHCARE LIGHTING EXPERTS

To meet all these special requirements requires a special kind of lighting service, based on a deep understanding of the needs of patients, staff and visitors, and a sound grasp of the practicalities of building design and construction.

With extensive experience of lighting hospitals, exceptional lighting design expertise and the ability to provide innovative solutions for every different internal environment, Whitecroft Lighting is perfectly placed to meet those needs.

* Source - The Long-Term Cost of Owning and Using Buildings Evans, Harigott, Haste and Jones, Royal Academy of Engineering, November 1998.

patient consideration

Simple, easy control of lighting levels in wards and nursing stations

KEEPING CONTROL

To cater for varying patient needs and staff activities, wards need to operate in six different lighting modes : resting, reading, examination, night-time, watchlight and emergency.

Whitecroft's individually controlled bedhead units, combined with recessed downlighters, provide the perfect solution to all these different requirements and reduce the need for task lighting.

PATIENT COMFORT

Patient comfort is optimised by eliminating glare and providing soft ambient lighting. Patient control integrated into a nurse call hand set enables patients to modify lighting levels. At the same time, central control allows staff to reset levels for a whole room at the touch of a switch.

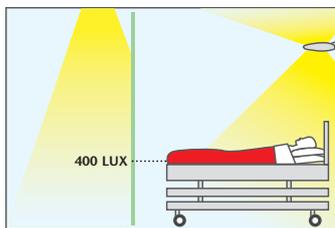
With low positioning and ease of access, the lighting units can also be more easily maintained and cleaned, helping to improve efficiency and control infection.



WARD ILLUMINANCE

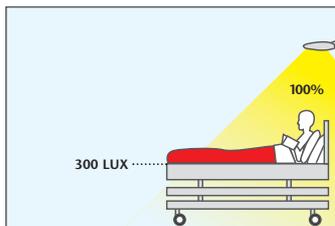
Whitecroft's recommended ward lighting scheme combines bedhead mounted up/downlights with ceiling mounted downlights to give maximum flexibility.

Lighting can be patient controlled to maximise comfort with central override for staff to pre-set configurations.



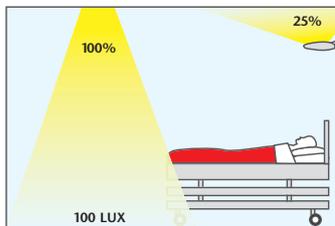
Examination

Medical practices carried out at bed space with curtains drawn.



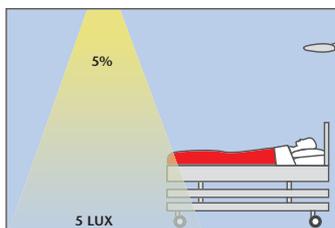
Reading

Directly on the pillow, may be used as an additional source for nursing tasks. If adjustable avoidance of glare to others is essential.



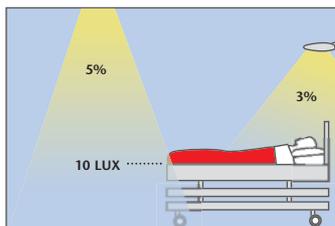
General/Emergency

Centre ward illuminance should be sufficient to enable usual nursing procedures with consideration of overall ambience. Emergency lighting can also be incorporated into the central downlights.



Nightlight

Downlight only, visual acuity low. Illuminance sufficient to allow staff and patients to move around. Should not disturb sleeping patients.



Watchlight

Best practice as LG2 but not listed in BSEN12464:1. Downlight only, continuous observation after main switch off.

PRODUCT GUIDE



Florencia

- Separate switching for both circulation and reading lamps
- Extruded aluminium body
- Optimum mounting height 2m

Lamp options:

2 x 54W T5 / 2 x 55W TC-L

[QuickLink](#) [FLOR](#) [Go](#)



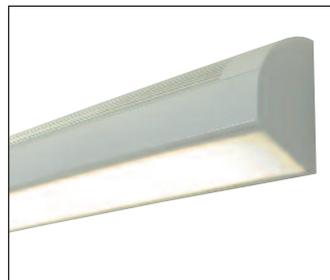
Medilight

- Purpose designed continuous profiled aluminium extrusion
- Recommended mounting height 1.4 to 1.5m

Lamp options:

3 x 54W T5

[QuickLink](#) [MED4](#) [Go](#)



Vigilant

- Separate switching for both circulation and reading lamps
- Extruded aluminium body
- Mounting height 1.5 - 2m

Lamp options:

3 x 54W T5

[QuickLink](#) [VIG](#) [Go](#)



Nightingale

- Day/Night/Emergency lighting from a single unit
- Technical louvre eliminates glare to recumbent patient

Lamp options:

2 x 26W TC-D

[QuickLink](#) [NG24](#) [Go](#)



Surgeon

- Aluminium semi-specular cross blade louvre
- Body eliminates light spill
- 3 pre-set light levels

Lamp options:

1 x 55W TC-L

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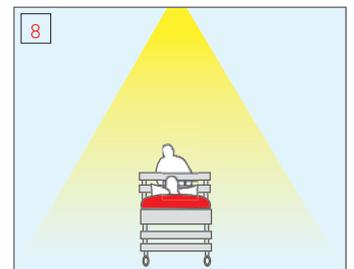
visible improvements

Practical and aesthetic lighting for corridors and hospital streets



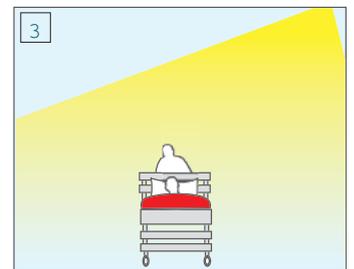
PATIENT COMFORT

For the optimum blend of patient comfort and ease of maintenance, offset asymmetric lighting is Whitecroft's preferred solution to achieve a uniform 200 lux in corridors.



Centrally mounted

This can cause overhead glare and discomfort as patients are moved along hospital streets and corridors.



Offset to the side

Overhead glare is significantly reduced with a recessed luminaire fitted with an asymmetric specular reflector.

IMPROVING EFFICIENCY

Corridors are as important as any other area of a hospital, so the same considerations of patient comfort, staff effectiveness and logistical efficiency apply. Lighting design needs to address all these issues, while the practical demands of cleaning and maintenance also come into play.

Whitecroft's experience and expertise are brought to bear fully in these situations, creating innovative solutions that provide the best possible lighting for all types of corridors. In particular, asymmetric distribution helps to reduce glare and create an anxiety-reducing environment, while longitudinal layouts improve

both lighting quality and efficiency.

For ease of maintenance, corridor lighting units are designed to leave ceiling voids clear for services, and can incorporate self-cleaning air-handling features.



Bromley Hospital Kent
winner of the Contract Journal Major PFI Project 2004 Award and Highly Commended at the Building Better Healthcare awards for best design and outstanding sustainability.

“...there is no doubt that your innovative lighting design solutions helped to impress the judges offering not only a better value capital investment, but also much lower energy and maintenance costs during the buildings life cycle. Summing up they commented we had *“provided Bromley with a hospital that is a light and pleasant building that guarantees visitors a high quality healing environment”*”

My congratulations to you and your team.”

Charles Lever C.Eng, FCIBSE Director Building Services,
Taylor Woodrow.

PRODUCT GUIDE



Broadspread Asymmetric

- Asymmetric distribution for offset mounting
- Night light option

Lamp options:

1 x 54W T5
1 x 54W T5 + 1 x 7W TC-S

QuickLink **BASY** Go ▶



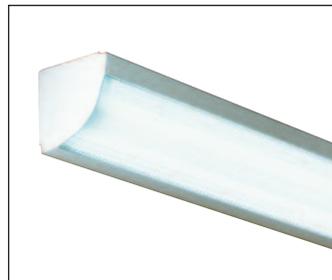
Gibraltar Corridor

- Reeded polycarbonate diffuser optic
- Semi-recessed for improved vertical illumination

Lamp options:

1 x 28/54W T5

QuickLink **GIBY** Go ▶



Radial

- Cornice mounting
- Reeded diffuser optic
- Extruded aluminium body

Lamp options:

1 x 28 - 54W T5

QuickLink **RAD** Go ▶



Life L

- Continuous recessed feature lighting system
- 90° corner option

Lamp options:

1 x 54W TC-L

QuickLink **LIFL** Go ▶

critical solutions

Specialist lighting for theatres, recovery areas and intensive care units



IMPROVED STERILITY

In critical areas and especially within a sterile environment, lighting has to satisfy the twin demands of practical effectiveness and cleanliness.

Whitecroft solutions provide the high lighting levels required for critical work, plus easy control and switching to other levels such as examination, watching or night-time in high dependency units.

The sealed units are specially designed for sterile conditions, protecting against dust and infection.

Room integrity is maintained with IP65 sealed luminaires, which maintain the barrier between the sterile environment and dirty ceiling void. Particles as small as 0.5 microns (200 times smaller than a human hair) are excluded, significantly contributing to the sterility of the operating suite and enhancing infection control.

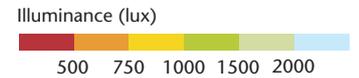
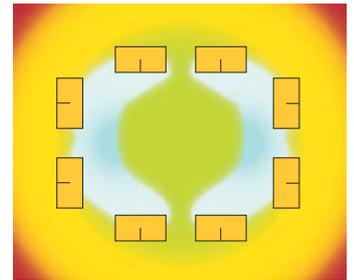
This is further enhanced by the luminaire's easy clean design, leaving no gaps between the ceiling and frame which can harbour bacteria.

MAINTENANCE

Maintenance down time is minimised by the use of long-life lamp technology and rapidly detachable gear trays, and features such as allowing ceiling void access through the luminaire body minimise potential infection ingress points within the sterile area.



Typical Theatre lighting levels utilising DTFN Elite.



PRODUCT GUIDE



DTFN elite

- Sealed to IP65
- Outer frame gasketed to ceiling
- Front/rear access options

Lamp options:

4 x 28W T5
3/4 x 54W T5

[QuickLink](#) [DTTA](#) [Go](#)



HDU

- Sealed to IP65
- Switchable light levels to deliver 10 - 1000 lux illumination

Lamp options:

4 x 55W TC-L

[QuickLink](#) [HDU](#) [Go](#)



Esprit MRI

- Specialist luminaire for MRI scanning rooms
- Only non-ferrous materials are used in the construction

Lamp options:

1 x 75W TH

[QuickLink](#) [EMRI](#) [Go](#)

balanced approach

Combined hospital and office lighting for treatment and consulting rooms



BALANCED APPROACH

Certain areas of hospitals create special lighting demands because they have to serve the combined purposes of treatment or consulting room and office. In addition, LG3 & LG7 compliance issues are raised by the presence of display screens in these locations.

Where patients may be examined or treated on a couch, attention must be paid to controlling discomforting glare.

A well-designed and balanced combination of bed and recessed lighting is therefore required, with the flexibility to allow for different configurations of furniture and equipment.

Whitecroft's experience and design skills will ensure that the best possible solution is achieved in every conceivable situation, cost-effectively and with full regard to all current regulations.

PRODUCT GUIDE



Softcell 3

- Unique aerofoil design
- LG7 compliant

Lamp options:

3/4 x 14W T5
3/4 x 24W T5



Vivant

- Glare control with living louvre
- Profilers for enhanced wall illumination

Lamp options:

2 x 24W T5
4 x 14W T5



Cascade

- Gull wing reflectors
- Single or twin cell louvre
- Micro perforated diffuser

Lamp options:

4 x 14W / 2 x 24W T5
1/2 x 40/55W TC-L

QuickLink **SOF3** Go

QuickLink **VIV** Go

QuickLink **CSD** Go

welcoming environments

Welcoming, reassuring lighting for reception and communal areas



ENHANCING PATIENT EXPERIENCE

Good lighting enhances patients' experience in every area of a hospital, from the moment of arrival until final departure. The need to maintain a feeling of safety and security is crucial to that experience, especially in areas with easy public access and significant people movement.

Whitecroft lighting solutions help to create a sense of well-being and comfort through sympathetic design and use of warm lamp colours. For patients, staff and visitors, security is further ensured by well-planned installations that eliminate dark corners and illuminate unoccupied areas.

PRODUCT GUIDE



Life P

- Illuminated images for architectural feature
- Flexible configurations

Lamp options:
2 x 36W TC-L

[QuickLink](#) [LIFP](#) [Go](#)



Mirage Feature

- Lamps horizontally mounted
- Etched or feature glass

Lamp options:
1/2 x 13/18W TC-D

[QuickLink](#) [MDA](#) [Go](#)



Glide

- Individual or continuous mounting options
- 20% upward light distribution

Lamp options:
1/2 x 35/54W T5

[QuickLink](#) [GLIW](#) [Go](#)

better by design

Providing expertise in specialist areas

REDUCING ENERGY CONSUMPTION

Energy consumption is a prime concern in the running of any healthcare environment, whilst providing the right lighting levels for both patient and staff is critical to the day to day operation. Getting the balance right can only be achieved by the use of sophisticated lighting controls.

EFFICIENT CONTROL

Major energy savings can be made by implementing hospital-wide control systems, giving facility managers the power of computer controlled switching and monitoring.

Whitecroft's lighting control systems can help to avoid lighting un-used spaces, dim lighting for night-time activities, test emergency lighting systems and monitor such elements as lamp life and outages. Monthly and annual reporting in accordance with BS5266 /EN1838:1999 is handled automatically, saving valuable time and cost.

At ward level, lighting controls empower patients by allowing them to take ownership of their surroundings, tailoring their environment to suit their individual requirements, whether that be for reading, rest or relaxation.

EMERGENCY LIGHTING

Adequate emergency lighting in spaces occupied by the public is an essential health and safety requirement. Not to compromise the aesthetic of the space the majority of Whitecroft Lighting healthcare luminaires can be converted for emergency operation.

With the new European standard EN50172 the regular testing of the emergency lighting system will be even more critical. Our Comet central reporting emergency test system will ensure system integrity while minimising ongoing operational expenditure.

PRODUCT GUIDE



Command Remote

- Absence detection
- Daylight linking
- Long/short range detection
- Programmable features

[QuickLink](#) [COMR](#) [Go](#)



CPDM

- Intelligent power distribution module
- Reduced installation times
- Simple re-allocation of luminaires to switches

[QuickLink](#) [CPDM](#) [Go](#)





MENTAL HEALTH APPLICATIONS

The primary objective in any mental health application is to minimise the risk of patient self-harm. All Whitecroft luminaires for these specialist areas feature anti-ligature design with tamperproof fixings. Robust construction is essential to withstand the rigours of these applications.

By basing the design of these products on standard luminaires an institutional feel is avoided which can have positive effects. In mental health units within hospitals the same luminaires can be used throughout the building creating architectural harmony. An attractive lit environment can also aid recovery times.

Whitecroft luminaires comply not only with Health Technical Memorandum No. 35, but also with all the relevant BSEN & CIBSE codes.

PRODUCT GUIDE



Horizon AL

- Flush wall or ceiling mounting
- Tamper proof fixings

Lamp options:

28-38W 2D T5 / 55W 2D

QuickLink

HAL

Go



Mirage AL

- 5mm polycarbonate cover
- Technical louvre option
- Tamper proof fixings

Lamp options:

2 x 18/26W TC-D

QuickLink

MDAL

Go



DTFN elite

- Sealed to IP65
- Outer frame gasketed to ceiling
- Tamper proof fixings

Lamp options:

4 x 28W T5 / 3/4 x 54W T5

QuickLink

DTTA

Go

lighting the way

Tailored exterior lighting for security and efficiency

CREATING THE RIGHT ENVIRONMENT

A prime concern with all hospitals is the safety and security of occupiers and visitors. Where there are likely to be personal anxieties associated with any visit, there is a further need to create a warm, caring environment.

Thoughtfully designed lighting of approach ways, entrances and

exteriors goes a long way to meeting these objectives, and at Whitecroft Lighting we have extensive experience in meeting the most exacting requirements, both of design and installation.

We cover every detail in making buildings pleasant to enter, taking particular care to ensure that

approach roads and signs are well lit without glare, to allow easy access for emergency vehicles.

We also incorporate special features such as vandal-resistant equipment and light-sensitive luminaires for areas with limited people movement, to minimise maintenance and running costs.



PRODUCT GUIDE



Mistral Road

- For approach roads & car parks
- IP66 protection
- 6-12m mounting heights

Lamp options:

150-400W SON-T
150-400W CDM-TT/HQI-T

QuickLink **ROAD** Go ▶



Sirocco Discus

- For car parks & walkways
- IP55 protection
- 2.5-4m mounting heights

Lamp options:

1 x 70W HQI-E
1 x 100W HQI-E

QuickLink **DISC** Go ▶



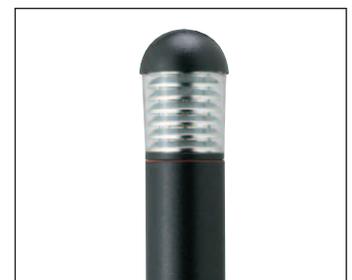
Centurion

- For walkways & security
- IP55 protection
- Wall mounting

Lamp options:

1 x 28W 2D
1 x 38W 2D

QuickLink **CEN350** Go ▶



Broadwalk Bollard

- For walkways & security
- IP55 protection
- Vandal resistant

Lamp options:

70W SON-E / HQI-E
42W TC-T

QuickLink **BRK** Go ▶

expert assistance



WORKING IN PARTNERSHIP

At Whitecroft, we believe in working in partnership with our customers. Our specialist hospital lighting team offer a range of services to help you through the design and specification process. Lighting engineers and designers will work with you to plan schemes using the latest computer aided design techniques, which enable lifelike 3D computer simulations showing accurate lighting levels and the effect different surface finishes have on the overall lit environment.

Just one illustration of our commitment is our healthcare lighting suite, where our lighting

specialists can demonstrate different luminaire types and control systems in a unique hospital environment within our Manchester headquarters.



Lighting solutions for typical healthcare environments including wards, hospital streets and consulting rooms can be demonstrated here.

PROJECT MANAGEMENT

Whitecroft employ a dedicated project management team specifically to look after healthcare projects. Their specialist knowledge and experience ensures the highest level of service throughout the project cycle, from consultation and lighting design, through specification and manufacturing, to handover and installation. This commitment further illustrates Whitecroft's unique approach to healthcare lighting.

Whitecroft Lighting are experts in the provision of total lighting solutions for both business and the public sector. We believe that our continued success will come from our investment in products and people, our commitment to design excellence and the development of lighting expertise.

Whitecroft Lighting - Lighting for Life



Lighting for Life

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