

flex connectors

FLEX7™ APPLICATIONS

Hospitals & Healthcare



Why Use flex7™?

The flex7™ System can offer numerous energy efficient and functional lighting solutions for your hospital or healthcare building. We have a range of products that is ideal for installation in healthcare buildings, and our experience in the sector means we can provide you with a lighting scheme perfectly suited to your needs.

- Energy-efficient
- Easy maintenance
- Simple to reconfigure or upgrade system
- Essential/non-essential supply solution

Save Time, Save Energy, Save Money

Considerations for lighting in healthcare projects:

Lighting requirements in hospitals are more complex than most buildings, because of the diverse range of user requirements and the fact that parts of the building are in use 24/7. Lighting typically accounts for up to 40% of the total energy load of a hospital. Significant cost savings can be made by switching to energy efficient lighting controls.

Cut installation time by up to 50% and reduce requirements for skilled labour by using flex7 lighting connection products, which simply plug-together on site.



All areas

■ Simple Maintenance

Once our lighting connection and control system is installed, it is easy to maintain. The system simply plugs together, so parts can easily be changed/updated - just unplug and replace. Our controls are also available with an integrated emergency test option.

■ LSHF cable to BS EN 50525-3-11

All of our prewired leads are available in LSHF cable. LSHF (not to be confused with LSF) is now recommended for use in all public buildings due to the safety implications of using PVC or LSF cable, in the event of a fire.

■ Essential/Non-essential Supply

We have a simple solution for installations requiring an essential and a non-essential supply such as hospitals: The flex7 eZeBox® Dual Supply Range makes it possible to supply power to two groups of luminaires via one connection unit, each separately supplied by its own protective device at the distribution board. A control device can be plugged into either side of the eZeBox to provide independent control of each group of luminaires. The desired supply split point is factory configured to order.

■ Single Control device to control Essential and Non-essential Supply.

When light fittings are DSI or DALI it is possible to share the digital signal between the essential and non-essential circuits, and control them both using a single controller plugged into an eZeBox Dual Supply Unit. This simple solution means that only one control device and PIR and/or dimming switch is required rather than two, resulting in significant cost savings. It is suitable for hospitals and other buildings where DSI or DALI luminaires are employed in conjunction with essential and non-essential power supplies.

■ Protected Extra Low Voltage

All of our lighting controls operate at PELV, which means that switch drop cables can be set at any depth in the wall, and won't require extra protection. This makes them a cost effective way of complying with IET 17th edition wiring regulations.

■ Easy connection option for centralised emergency luminaire monitoring system

The flex7 2-Pole Auxiliary Adaptor Unit provides a point of termination for the fixed wiring of a 3rd party's 2-wire centralised emergency luminaire monitoring system.

■ Integrated emergency test

Our lighting controls are available with integrated emergency test. When using our lighting control device there is no need for separate switches for each circuit or phase, as they can easily be networked together. This means that a single key switch can test emergency luminaires across multiple circuits or phases. AOur lighting controls operate at protected extra low voltage, so the voltage at the test switch will operate at below 50V. This avoids scenarios where multiple key switches are grouped in a centralised, multi-gang enclosure with the potential for 415V to be present, which requires extra labelling as per regulation 514.10.1 of BS 7671

Corridors and circulation areas

■ Corridor Hold

Corridor Hold Units from flex7™ will hold lights on in a corridor or circulation area if any of the rooms linked to it are occupied. This is often a requirement for health and safety or security reasons.

■ 2-Stage Dimming Control

Luminaires in corridors can be programmed to dim down to 50% when a corridor has been empty for a set period of time. After a further period of time lights will turn off completely.

■ Timeclock

The unit is designed to hold lights controlled by sensors ON for pre-set time periods during the day. A typical installation would involve holding certain lights ON in a building - often those in corridors and circulation areas - during normal working hours, allowing them to revert back to occupancy control at all other times.



Wards

■ Daylight Linking Sensors

In hospital wards, which are occupied 24/7, and therefore cannot benefit from occupancy or absence control, daylight harvesting controls offer a great opportunity for energy-saving. Daylight linking sensors save energy by switching lights off / dimming lights down in a room if there is adequate natural light. The controls are programmed to maintain a constant light level, so that lights will turn on again as it gets dark outside. Graduated daylight dimming options are available, which mean that lights further away from the windows will have a brighter offset.



WCs, cleaning cupboards etc.

■ Occupancy Sensing

Occupancy sensors are ideal for use in areas such as WCs, stairwells and storage areas that are frequently unoccupied. Lights turn on automatically when someone enters a room, and turn off again once the room has been empty for a set period of time.



Staffrooms and offices

■ Absence Sensing

Ideal for use in staffrooms and offices, lights need to be turned on manually at switch on the wall, but will turn off again automatically once the room is vacant. This option offers greater potential for energy saving, as lights will only be turned on when needed.

■ Daylight Linking Sensors

Usually incorporating absence or occupancy detection, daylight linking sensors save energy by switching lights off/dimming lights down in a room if there is adequate natural light. The controls are programmed to maintain a constant light level, so that lights will turn on again as it gets dark outside. Graduated daylight dimming options are available, which mean that lights further away from the windows will have a brighter offset.



Past projects

Flex Connectors have over 18 years of experience in the healthcare sector. Our Projects Department can help design your lighting layout, advise you on your requirements, and also offer the option to organise project packing on a room-by-room or circuit-by-circuit basis.



Bicester Community Hospital



Aldershot Centre for Health



Kettering General Hospital



Neonatal Unit, University Hospital of Wales, Cardiff



National Blood Transfusion Service Headquarters, Edinburgh



Neath Port Talbot Hospital