Lighting connection & control solutions for
Schools, universities & Education

MADE IN BRITAIN®

Lighting connection & control solutions for schools & universities

According to the Carbon Trust, lighting accounts for 20-25% of the total energy used in schools. The use of automatic lighting controls can save as much as 40% of electricity consumption when compared to manual switching. We offer a wide variety of options including occupancy, absence, daylight linking, corridor hold,

Features & Benefits

- Simple plug-in system reduces on-site installation time.
- Energy-efficient.
- Easy maintenance.
- Easy to reconfigure or upgrade system.
- No specialist commissioning required.

Why use flex7

Because the flex7 System simply plugs together installation time, not to mention future maintenance, is dramatically reduced.

We offer numerous energy efficient and functional lighting solutions for schools and universities. Our 25+ years of experience in the sector means we can provide you with a lighting scheme that does exactly what you need it to do.

MADE IN BRITAIN

Speed of installation and ease of maintenance is central to all flex7 products

System Overview

Made up of multi-outlet lighting distribution boxes, single socket outlets, plugs, prewired leads and plug-in control devices, flex7's portfolio of products is the UK's most comprehensive connection & control system for non-domestic lighting applications. Speed of installation and ease of maintenance is central to all flex7 products by virtue of the reduced number of on-site terminations required when compared to similar systems.

Sector specific solutions

Whether you want Tamper-Resistant Sensor Heads, separate switching for whiteboard lights, lights held on in corridors, daylight linking, or something more bespoke get in touch to discuss your project.

Easy Maintenance

Once the system is in place maintenance is not a problem. Luminaires and controls can be isolated by simply unplugging them individually, rather than turning off power to the whole circuit. If a product needs to be replaced or upgraded, simply unplug and replace.

Easy To Reconfigure

Once the system is in place if there's a change in requirements it's not a problem. Its plug-together nature means that you can easily add more luminaires, upgrade to dimming control or reconfigure an entire area with minimal disruption to users.

flex7 Education Projects

Pool Street West, UCLE Campus

Aberdeen Uni Science Hub

Homerton College, Cambridge Uni

Chapel Hill Primary, Basildon

Moss Bury Primary, Stevenage

Daneshill Secondary, Hook

Corridors and circulation areas

Occupancy Sensing - auto on / auto off

Save energy by turning lights on automatically when someone enters a room/area, and turning off again once the room/area has been empty for a set period of time. Occupancy sensors are a hygienic and practical solution for areas with high footfall, especially those with multiple users who might not know the location of switches.

Corridor Hold

Corridor Hold Units from flex7 will hold lights on in a corridor or circulation area if any adjacent rooms are occupied. This is often a requirement for health and safety, or security reasons.

Occupancy With Set-Back Light Level

Ideal for use in corridors, regulating (dimmable) luminaires turn on when someone enters the area, but once vacated the luminaires dim to a lower light level for a further period of time before turning off completely.

Timeclock

Used to hold lights controlled by occupancy sensors on for preset time periods during the day; typically corridors and circulation areas. For example, during normal school hours, luminaires in the appropriate areas would be held on, and revert back to occupancy control at all other times.

Classrooms

Absence Sensing - manual on / auto off

Ideal for use in classrooms, lights need to be turned on manually at a switch on the wall, but will turn off again automatically once the room is vacated. This option offers greater potential for energy saving than occupancy control alone, as lights will only be turned on when needed.

Daylight Linking Sensors - maintain optimum lighting level

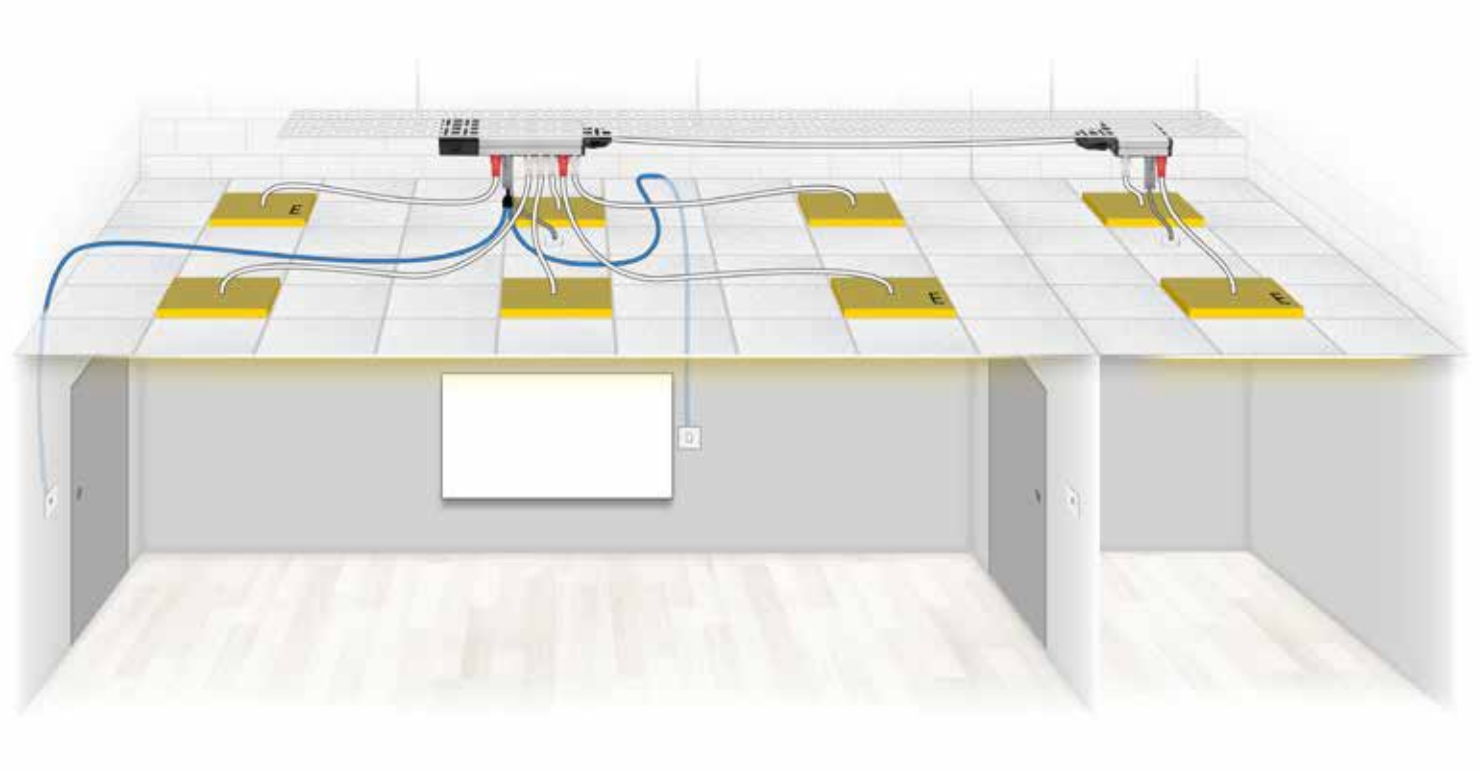
Usually incorporating absence or occupancy control, daylight linking sensors save energy by dimming lights down if there is adequate natural light. The controls are set to maintain a constant light level, so that luminaires automatically adjust their output in relation to the daylight coming through the windows.

Independent switching of whiteboard or projector lights

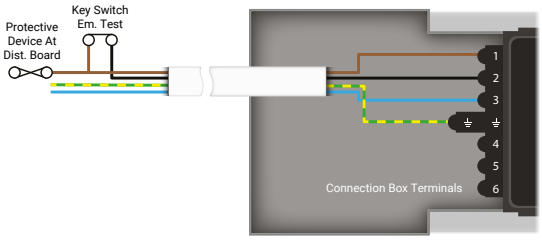
flex7 controls allow the luminaire(s) adjacent to an interactive whiteboard to be controlled in 2 ways. Generally they operate in line with the row/group of luminaires they belong to; switching on/off and dimming as expected. When the whiteboard is being used however, the designated luminaire(s) can be independently switched off to reduce glare, making it easier for the students and teacher to see the content. Once the whiteboard session has ended, the luminaire(s) can be switched on again by the teacher, or simply left if the classroom is to be vacated. Operation of the whiteboard luminaire(s) does not affect any of the other luminaires in its row/group and, if part of an absence/occupancy system will revert to its default state once the room is vacated at the end of the lesson.

Typical classroom layout

2 separate spaces requiring individual control; absence for classroom; occupancy for store cupboard



Wiring Connection



A flex7 Tap-off Box is plugged into the original Lighting Distribution Box via a Tap-off Lead. They share the same supply, but require separate flex7 Control Modules.

Control of the classroom luminaires, including those by the whiteboard is via a flex7 plug-in Sensor Head and Switches, both operating at PELV.

The luminaires are manually switched on at the door with a short pulse of the switch. They remain on whilst movement is sensed. The luminaire above the whiteboard can be independently switched off or on again using the switch next to it. This doesn't affect the other classroom luminaires. After the room is vacated the luminaires switch off when the timeout period has elapsed.

Control of Store Cupboard luminaires is via a flex7 plug-in Sensor Head operating at PELV. The luminaires are automatically switched on when movement is sensed. Once vacated the luminaires switch off when the timeout period has elapsed.

Note: emergency luminaires are tested via a hard-wired 230V key switch, often located in close proximity to the distribution board.

WCs, cleaning cupboards etc.

Occupancy Sensing - auto on / auto off

Save energy by turning lights on automatically when someone enters a room/area, and turning off again once the room/area has been empty for a set period of time. Occupancy sensors are also ideal for use in stairwells, corridors, circulation areas and similar that are occupied infrequently.

Staffrooms and offices

Absence Sensing - manual on / auto off

Ideal for use in staffrooms, offices and other spaces used primarily by staff, lights need to be turned on manually at a switch on the wall, but will turn off again automatically once the room is vacant. This option offers greater potential for energy saving than occupancy control alone, as lights will only be turned on when needed.

Daylight Linking Sensors - maintain optimum lighting level

Usually incorporating absence or occupancy control, daylight linking sensors save energy by switching lights off / dimming lights down if there is adequate natural light. The controls are set to maintain a constant light level, so that luminaires automatically adjust their output in relation to the daylight coming through the windows.

Lighting Distribution Boxes

A tough anodised aluminium body, V0 rated mouldings and unique patented internal contact system combine to make flex7 lighting distribution boxes the most robust products of their kind, both mechanically and electrically. With 7 contacts as standard they are equally suited to non-dimming & dimming applications. The modular design makes modification easy should room/area requirements change in the future. Options include single group control, 2 group control, and 2 circuit (same phase) control.

Control Devices

Our controls plug directly into a flex7 socket outlet, meaning on-site termination of lighting controls can be completely eliminated. All devices operate at Protected Extra Low Voltage (PELV) so there will only be 5V or 12V present wherever flex7 lighting controls are installed, rather than the usual 230V, even at the light switch. The type of luminaire control possible with our products is comprehensive and includes: Occupancy and Absence control (with or without daylight harvesting), manual switching and/or regulating (dimming), Scene recall, Emergency luminaire test, Corridor hold, and Time control.

Plug & Sockets

Manufactured using V0 rated material, all flex7 plugs & sockets utilise our standard interface. They're available in 4 colours for identification purposes with a choice of 3-7 (incl.) contacts.

Prewired Products

Using flex7 prewired products ensures any installation will be achieved in the shortest time possible. All of our prewired, fully tested leads are built using Low Smoke Halogen Free (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. CPR compliance has been mandatory in the UK since July 2017. flex7 prewired leads' CPR rating is amongst the most stringent in our sector making it suitable for any educational environment.

Tel: 0208 580 1066 Email: info@flex7.co.uk www.flex7.co.uk A flex connectors Company