



HOLY CROSS SIXTH-FORM COLLEGE

LIGHTING UPGRADE HELPS TOP
SIXTH-FORM COLLEGE TRANSFORM
NEW LIBRARY INTO FUTURE-PROOF
FACILITY.

Dextra
LIGHTING

ABOUT THE CLIENT

Staff and Students at Holy Cross College are extremely pleased with the results of Dextra Lighting's modern solution for their renovated state-of-the-art library and classroom facilities.



Holy Cross Sixth-Form College and University Centre in Bury, Greater Manchester, offers A-Level education and a selection of Undergraduate courses to a large student base of 2,200. It has been ranked as one of the best colleges in the UK for their excellent staff and teaching facilities, with students consistently performing above the national average. Rated outstanding in its last OFSTED inspection in all performance categories, the college continues to strive to provide the best possible facilities for its students and staff.

In recent years, the college has made considerable investments into improving its facilities, with the latest project being the major expansion and upgrade of its library. Like the rest of its estate, the standard of the new library's interior design was set high, aiming to achieve a fresh, modern aesthetic whilst providing all the core requirements of a university-style library. Holy Cross took on board staff and student feedback concerning the need for more individual and group study areas, and incorporated ideas for more comfortable and functional furniture, improved lighting, and layout tailored to the students' needs.

Lighting was to play a key role in creating a stimulating, open and welcoming learning environment, whilst generating substantial returns for the college through cutting electricity bills and improving its ranking in the Carbon Reduction Commitment Table. Upon the strong recommendation of DDA Building Services and Consultant Engineers, Dextra Lighting were selected for the project, to provide a unique, attractive and sustainable solution for the college. Over many years, DDA's experienced and highly qualified team of Low Carbon Consultants and Assessors have specified Dextra Lighting's precision-engineered products to provide quality, reliability and future-proof efficiency for its diverse clientele. Following the procurement phase, local contractors, Performance Electrical Ltd, carried out the installation.

THE BRIEF

To carry out the brief, Dextra Lighting needed to design, manufacture and deliver a bespoke system for the open plan library with classrooms separated by glass walls. New lighting was also needed for circulation areas and stairwells throughout the building. Given full design responsibility for the project, Dextra's design team proposed a highly varied selection of luminaires to mirror the library's contemporary style, layout, and unconventional ceiling.

The installation would also need to ensure visual comfort for prolonged hours of study and support the use of computer monitors by minimising glare and providing a uniform light distribution. With energy-efficiency in mind, the design was based on products using the latest LEDs and high-efficiency T5 lamps, whose performance is enhanced by Dextra Lighting's advanced optic designs. Efficient, low-maintenance emergency lighting was to be provided in accordance to the buildings safety regulations.



THE SOLUTION

Primary Lighting – The MODLED Surface / Suspended

The attractive slimline luminaire was suspended from the highest point of the ceiling in a continuous run stretching across the main open plan area of the library. The suspended system has a striking presence and its appealing minimalist design harmonises well with the library's decor. But beyond aesthetic appeal, the MODLED Suspended uses the latest Lumileds LEDs and advanced optics with 93% transmission to deliver similar or greater performance than fluorescent equivalents whilst operating at an impressive average of 113 luminaire-lumens per circuit-watt (Llm/w).

The versatile luminaire can be installed individually, joined into multiple run configurations, or be surface mounted onto different ceiling types, to suit the architectural design of the building. The continuous run option, however, allows for a more a creative approach for lighting designers to explore. A total of 50, 1200mm luminaires formed a U-shaped run covering the entire area, joined at the corners by 90 degree blind units. Supplied in a 5000lm option from a range of outputs as high 13,600lm (across three body sizes), the luminaires were suspended 3 meters from the ceiling, with the length and the width of the run calculated to achieve the desired light intensity and balanced distribution, whilst complementing other nearby lighting. A wide range of dimming functions, sensors and emergency options are also available with this product, offering increased flexibility to tailor each installation to the client's specific requirements.



THE SOLUTION

Accent Lighting – The Gyro-Light LED Recessed Gimbal Luminaire

As support for the main lighting, 40 Gyro-Light LED luminaires were fitted at the lower section of the angled ceiling, boosting light levels around the edges of the hall, whilst also providing a more focused light for the individual desk areas and computer stations. The luminaire's attractive steel housing with powder painted white front surround (also available in black) and high-quality die-cast aluminium heads, offer both durability and an appealing contemporary touch to the interior.

Flexibility is at the core of this range, with a choice of either single, twin, triple or quadruple head configurations, allowing the Gyro-Light to offer lumen outputs between 2800lm and 12,000lm. Each recessed luminaire head is also capable of pivoting and rotating to direct the lighting in the desired location. As most of the library's items of furniture such as shelving, chairs, and desks can be moved to

adjust to a new layout, the Gyro-Light can accommodate such future rearrangements, ensuring that light is always angled where it is most needed. LED technology has allowed this range to be offered with either Switch Dimming or DALI dimming function, whilst both LED and CDM-T variant can also be provided with 3000k or 4000k colour temperature to suit the application. Both the Gyro-Light and Modled Suspended were installed with Switch Dimming to allow staff to adjust the lighting according to their needs.

The Gyro-Light is suitable for pull-up installation and can be fitted quickly and cost-effectively by being delivered fully assembled and ready to install, and can be supplied with prewired leads of choice to facilitate installation further.



Stairwells & Circulation Areas – Discalo LED & Modled Curve

The Discalo LED offered a highly efficient, low-maintenance solution for the stairs leading up to the library, adding a modern decorative touch with its white halo effect (also available in blue). The luminaire is available in lumen outputs of 1500, 2000 and 3000 to match the performance of 28w 2D, 38w 2D or Circular T5 models respectively, whilst offering reductions in energy consumption of at least 50%.

To add to these energy savings, the luminaire can be supplied with integral microwave sensors for presence detection and a bright out function. The sensor can also be provided in either an on / off mode or bi-level dimming function, to dim the LEDs to a minimum of 10% to offer a continuous background lighting for health and safety requirements and reassure pedestrians. In addition to the low-maintenance benefits of LED, the Discalo's rear diffuser can be removed using a twist lock action, giving easy access for both servicing and installation.

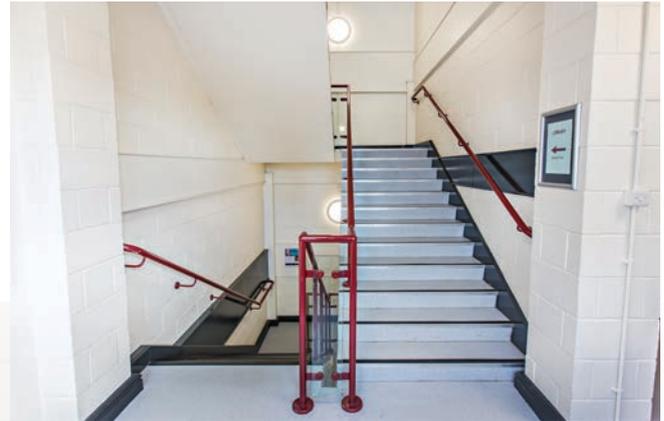
For the circulation areas surrounding the library itself, the Modled Curve offered all the efficiency of Dextra's popular Modled range, with the addition of a visually appealing curved diffuser, enhancing the light distribution onto the corridor walls and ceiling for an attractively lit environment. By combining its high-transmission optic panels with the latest Lumileds LEDs, the luminaire offers high LORs whilst operating at an efficient 116 Llm/w. The Modled Curve is available in a wide range of lumen outputs between 3500lm to 9000lm across two body sizes, with the lower band of outputs complying to BSEN 12464 glare limitations where required. All outputs are available with HFR, DALI, DSI and Switch dimming function and number of emergency functions.

THE SOLUTION

Classrooms / Meeting Rooms – SVX Recessed T5 luminaire

The SVX has long been the DDA's preferred fitting of choice for this type of application. The high-performance T5 luminaire's innovative optic design features a translucent extruded polycarbonate wing and Dextra's unique AWB closed-back louvre blades to maximise efficiency and provide a modern and attractive appearance. These optics can be customised from LG3 louvres to offer specular or semi-specular finishes with compliance to BSEN 12464 glare limitations, or as specified for the library's classrooms, in a TPA microprism panel for a controlled distribution and excellent transmission. All optics feature an easy-access mechanism for maintenance and sensor installation. The SVX is offered with a number of other options including, single to triple lamp configurations (using high-output or high-efficiency T5 lamps), compatibility with all mainstream dimming protocols, emergency functions, suitability for lay-in or pull-up installation, as well as an integral minihead sensor offering presence detection, daylight regulation, and remote control function.

In addition to integral 3-hour emergency lighting provided with most luminaires featured in this project, the highly efficient and low-maintenance HBE LED 4w emergency exit luminaire was also installed where required, complementing the modern decor with its attractive aluminium housing and "hanging blade" fire-retardant acrylic panel with screen printed legends.



FEATURED PRODUCTS



SVX



MODLED SURFACE /
SUSPENDED



MODLED CURVE



GYRO-LIGHT



DISCALO LED