



PORTH COMMUNITY
SCHOOL

ABOUT THE CLIENT

Porth Community School is located in the county borough of Rhondda Cynon Taf, Wales. The school was formed in 1973 by the amalgamation of two leading grammar schools, Porth County Girls and Porth County Boys, along with the amalgamation of the Secondary Modern Schools of Llwyncelyn, Trealaw and Ynyshir.

The school is run by Rhondda Cynon Taf County Borough Council (RCTCBC). The county borough was created in 1996 following the abolition of the county of Mid Glamorgan. RCTCBC was formed by the merger of the former Mid Glamorgan.

The school was identified to having a poor energy rating from an initial Dextra Lighting survey back in 2018. Since that summer we have been upgrading the school in stages to fully refurbish the lighting, controls, emergency lighting and external lighting to more energy efficient LED solutions.



THE SOLUTION

Dextra is a valued supplier of Rhondda Cynon Taf County Borough Council because of its ability to offer the best quality lighting for their different estates throughout the county. For this project, Dextra worked with Lloyd Electrical and Joshua Bradley, RCTCBC Electrical Engineer delivering energy conservation projects as part of the Council's commitment to Net Zero. The Dextra Lighting and Dexreco brands were used to provide the lighting solutions and old luminaire recycling on this project.

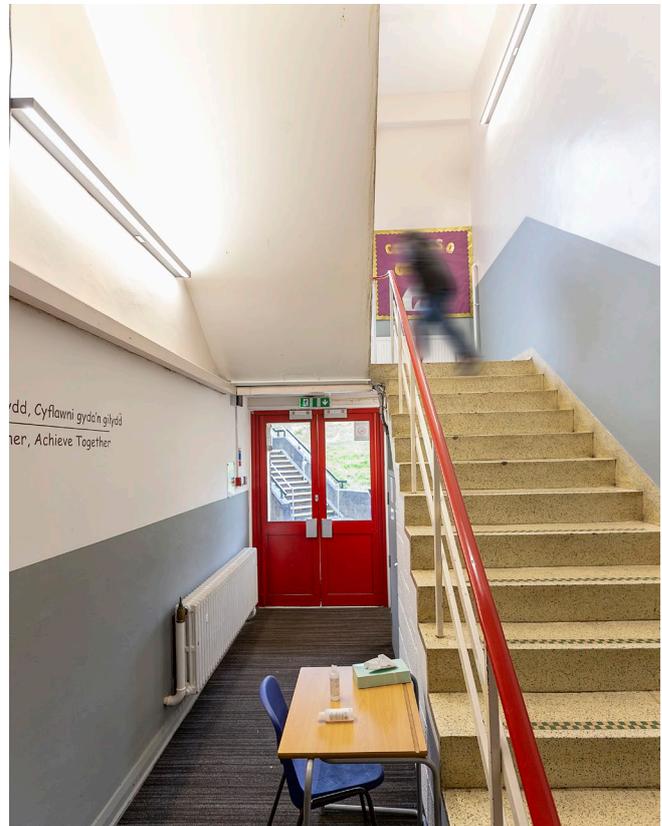
Five blocks in the school were identified for completion including the exterior fittings and Dextra utilised its full catalogue of products with some slightly adapted options, to complete the project. This project was subject to challenging COVID19 conditions but was still completed on time and within budget, including reaching the target of a 45% reduction in energy costs compared to the existing lighting.

Dextra's Rubini Recessed 600x600 was made before its actual product launch for this project and they were supplied alongside the bespoke Black Planum Bi-Directional Wall mounted fittings. As part of the project, Dexreco recycled more than 400 fittings, lamps and batteries.

One of the products used on the project, was the Amenity Decorative Halo LED.

The Amenity Decorative Halo is available in 1500, 2000, 3000 and 4000 lumen variants and can be offered with a range of emergency, dimming and sensor options. Constructed from injection moulded polycarbonate, with a high transmission diffuser and housing, the Amenity Decorative is also available with a range of ring attachments in white, brass and chrome.

Also used was the Planum, which is a slim line aesthetically attractive, wall-mounted, bi-directional luminaire which is ideally suited to reception areas, corridors, stairways and applications where installation of ceiling mounted luminaires is impractical.



THE SOLUTION

Dextra's Prosport LED is ideal for any sporting type application offering high quality lighting-up to 38,584 luminaire lumens output allowing the scheme to be designed to give optimum light levels and uniformity whilst offering excellent energy efficiency and low maintenance compared to fluorescent and HID sources. The Prosport LED is IK10 rated and manufactured with steel housing, injection moulded polycarbonate end caps and a curved clear polycarbonate diffuser ensuring that the luminaire is robust, durable and able to withstand ball strikes from most sports whilst eliminating the risk of shattered lamps which can occur with fluorescent or HID luminaires.

Chosen for its wide range of lumen outputs, the popular Graduate LED is suited for use in schools and also hospitals. Available in 600mm, 1200mm and 1500mm variants, the Graduate LED is suitable for installation on conduit, surface mounting or suspension and can be offered with integral microwave sensors for additional energy savings.

Elsewhere on the project, the BTEC was used to provide a premium quality downlight with high quality LEDs and drivers, as well as excellent efficiency.

Dextra's Capo LED was also introduced to combine efficiency with form. The Capo provides an architectural solution in suspended applications for both ambient and accent lighting. With anodised spun rear housing, translucent collar available in a range of colours and opal refractor the Capo LED provides a decorative and attractive installation that can also be tailored to suit any corporate theme.

The Capo LED is supplied with a highly efficient chip on board source providing similar lumens to 70w HID sources whilst typically consuming half the energy and eliminating the need to replace lamps ensuring significant operating cost reduction compared to HID alternatives.

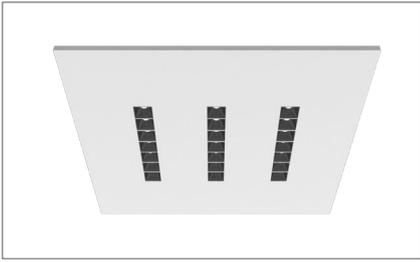
Also used on the project was the Rubix Suspended Bi-Directional. This luminaire utilises the same optic design as the recessed and surface family the Rubix Suspended Bi-Directional offers glare compliance to BSEN12464 and UGR19 or below ensuring it can be used in applications such as offices and classrooms. In common with other members of the Rubix family, the optic frame is available in a range of colours and the housing can be supplied in either white or black allowing the appearance to be tailored to suit any corporate theme. With bi-directional output as standard the

Rubix Suspended Bi-Directional ensures that both the working area and the ceiling is effectively lit providing an attractive space. A balanced design also allows for a two point suspension that is both discreet and quick to install.

Finally, the Hydra LED and EPK LED were the other two products chosen to combine both efficiency and design as part of the refurbishment.



FEATURED PRODUCTS



RUBINI RECESSED MODULAR

Overview: Where lighting must be both discreet and attractive, the Rubini Recessed Modular provides the optimum solution with its small form factor combined with a modern and attractive cellular design.



AMENITY DECORATIVE HALO LED

Overview: The Dextra Amenity Decorative LED Halo combine all of the aesthetic appeal of the standard Amenity Decorative range with a soft halo effect.



CAPO LED

Overview: Combining efficiency with form the Capo LED provides an architectural solution in suspended applications for both ambient and accent lighting.



RUBIX SUSPENDED BI-DIRECTIONAL

Overview: To complement the recessed and surface range of Rubix luminaires the Rubix Suspended Bi-Directional has now been launched in the Dextra Lighting range.



HYDRA LED

Overview: An LED IP65 rated weather-proof batten luminaire made from high quality injection moulded GRP.



ECOPAK LED

Overview: The Ecopak LED offers increased energy efficiency and low maintenance of an LED source giving greater return on investment.

FEATURED PRODUCTS



PLANUM

Overview: Slim line aesthetically attractive, wall mounted, bi directional luminaire.



PROSPORT LED

Overview: The ProSport LED is made with steel housing, injection moulded polycarbonate end caps and a clear polycarbonate diffuser ensuring the ability to withstand ball strikes from most sports.



BTEC

Overview: The BTEC Downlight is ideal for customers who need a premium quality downlight with high quality LEDs and drivers as well as excellent efficiency for a rapid return on investment.



GRADUATE LED

Overview: The Graduate LED is a mainstay of the Dextra range and has been extensively used in schools and hospitals nationwide.