



YMCA NORTH SHIELDS

DEXTRA LIGHTING DELIVERS BIG SAVINGS FOR YMCA'S BIG LOTTERY-FUNDED RENOVATION PROJECT

Dextra
LIGHTING

ABOUT THE CLIENT

Dextra Lighting design, manufacture and deliver a complete LED upgrade for the newly-refurbished YMCA building in North Shields, North Tyneside. Using a range of carefully selected LED luminaires, the new lighting system has modernised the premises and cut down energy usage by 54%.



Since 1938, the YMCA North Tyneside building on Church Way has been instrumental in supporting the local community and young people in need. In recognition of its efforts and vital presence in North Shields, the YMCA was awarded a £425,014 grant to modernise the building by Big Lottery Fund, as part of the Reaching Communities programme aimed at improving places that matter most to the community.

For 80 years, the community hub has dedicated itself to increasing the wellbeing of young adults by offering training and education, fitness and leisure facilities and accommodation. The centre is also home to a number of charities offering a variety of specialised support services including: North Tyneside Carers, Tyneside & Northumberland Mind, North Tyneside Council and Adult Learning Alliance.

Dextra Lighting were soon approached by M & E engineering consultants and c2e Project Management, to participate in the redevelopment project, on account of a proven-track record for quality, unrivalled delivery times, bespoke service and a wide range of premium energy-efficient products. A complete lighting upgrade was required to reinvigorate the premises, helping YMCA create a stimulating and welcoming environment for members and visitors to enjoy.

Using the Dextra Lighting's precision engineered, ECA compliant products, manufactured with the latest high-quality LED sources, YMCA was able to complete its vision of creating a financially and environmentally sustainable facility that would serve the community well in the years to come.

THE BRIEF

Dextra Lighting worked closely with the appointed architects and consultants to transform the building into a modern and inclusive community hub. Areas in need of renovation included a large multi-purpose hall, common rooms, kitchens, a lobby and reception, as well as various corridors and stairwells. In addition to improving overall lighting conditions, the luminaires selected for the refit would also have to conform to the building's intended theme and style.

To ensure maximum return on investment, the new lighting design would need to utilise luminaires manufactured with the latest high-quality LED sources to keep energy and maintenance costs to a minimum.



“

“manufactured with the latest high-quality LED sources to keep energy and maintenance costs to a minimum”

THE SOLUTION

Classic LED - Entrance, Corridors and Lobby

As the name suggests, the Classic LED pendant luminaire combines the traditional bell design with today's standard of energy-efficiency and performance. With the latest Philips DLM Twistable LED sources enclosed within an attractive aluminium spun reflector, the suspended luminaire is a popular choice for designs trying to make an architectural statement, whilst offering significant energy savings compared to HID or fluorescent alternatives.

Selected for its characteristic style, subtly blurring the lines between contemporary and vintage aesthetics, the luminaire helped create a unique and even playful atmosphere.

The Classic LED is an ideal choice for low-level general, display or over-counter lighting, but can be used creatively for a variety of applications. From a range of output packages and colour temperatures, the Classic LED was supplied in a 2000 lumen version with 4000k cool-white LED lamps to provide visual clarity and comfort in all areas. Flexible 5 metre suspension cords were provided in black to match the design concept of the interior.



MODLED Suspended / Surface - New Hall & Classroom

Combining energy-efficiency, flexibility and attractive minimalist design

The versatile MODLED linear luminaire was provided in both suspended and surface-mount formats to suit different ceiling types and purposes. Manufactured with the latest Lumileds LEDs and high-transmission panel with up to 93% transmission, the luminaire provides a light output ratio of 85% with excellent diffusion; balancing power with glare control for both high and low level applications.

For high ceilings of over 6m, the MODLED's LM80-verified Lumileds LED chip board presents a great advantage over HID / fluorescent alternatives, as it is guaranteed to offer 90% lumen maintenance over the first 60,000 hours of operation, allowing for simpler maintenance routines. The durability and reliability of this light source will allow the installation to perform as intended for longer and make considerable cuts to the costs and time of routine maintenance at such inconvenient heights.

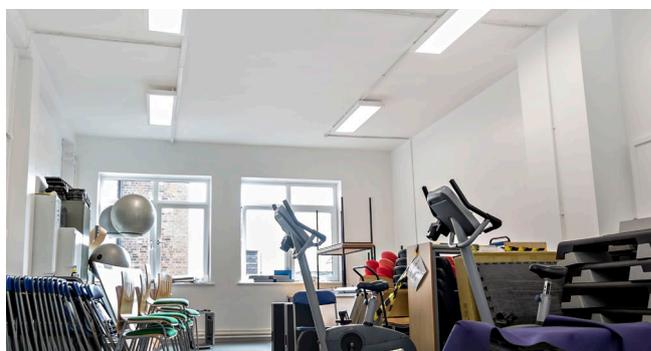
The luminaire can be adapted to suit a variety of designs with a wide selection of customisable options. With output packages ranging from 2334lm to as high as 10948lm, across three body sizes and a choice of colour temperatures, lighting requirements can be accurately met with each installation. BSEN 12464

compliant versions are also available to provide further glare control in areas where monitors are in use and to generally increase visual comfort for users.

For the hall, 3622lm output luminaires in a 1200 x 300mm body size were positioned in a novel, yet effective, zigzag formation, comfortably achieving the CIBSE recommended 500 lux level for a bright and uniformity-lit environment ideal for yoga classes and weight-lifting sessions. In the function room nearby, on the other hand, a 3622lm surface-mounted version provided the desired light levels to accommodate a range of activities.

The broader family of MODLED luminaires offers compatibility with all mainstream digital and analog dimming functions. To meet the hall's needs, Switch Dimming was provided to allow staff to accurately adjust the lighting for different events and activities from a series of wall-switches. For low-energy projects, the luminaire can also be supplied with integral sensor control, offering presence detection and daylight regulation to minimise energy consumption and emissions through the day.

Luminaires were installed with three-hour emergency lighting in accordance with relevant safety regulations. This integral emergency function saves the time, cost and space of installing only standalone emergency units across the premises and is available in self-test or auto-test to suit different monitoring preferences.



zigzag formation, comfortably achieving the CIBSE recommended 500 lux level for a bright and uniformity-lit environment ideal for yoga classes and weight-lifting sessions”

HYDRA LED - Kitchens

Durability, efficiency and low-maintenance solution for more demanding environments

Lighting for kitchen areas needs to comply to strict regulations to ensure safety, hygiene and visual clarity during food preparation. The Hydra LED proved ideal for YMCA's training and service kitchen facilities due its practical and sturdy IP65-rated construction paired with the low-maintenance and premium efficiency of its Lumileds LED source. By combining high-quality LEDs with efficient optic design, the luminaire offers LORs as high as 90% and greatly outperforms fluorescent and HID equivalents at an average of 140lm/w.

Built with durability in mind, its glass reinforced polyester housing, polycarbonate diffuser and steel gear tray make the luminaire ideal for more demanding environments requiring protection from water, dirt and dust ingress as well as light impact (e.g. food preparation, storage and industrial areas). Its long-life and reliable LED chip board also adds to its overall resistance, as unlike HID or fluorescent sources, it runs no risk of shattering and therefore eliminates the hazard of glass dispersing into food being prepared and cooking instruments. The luminaire is not only robust and low-maintenance, but also easy to clean and is supplied with stainless steel clips and screws as standard to ensure tooled access in compliance with regulations.

The highly customisable Hydra LED, is available in a wide selection of output packages ranging between 2085lm to 12,513lm across three different lengths and can be supplied in single or twin bodies, which can be either chain-suspended or mounted on trunking with installation kits provided. These options allow systems to be precisely tailored to suit spaces of different sizes and ceiling heights. At the YMCA, the 300 to 500 Lux recommended for the wash-up and cooking areas respectively, were met using a powerful 5972lm version of the luminaire, mounted on to a trunking system on the ceiling. From a range of options, integral three-hour self-test emergency lighting was provided with this product in accordance with the building's safety regulations.

The luminaire can be customised further with a range of digital or analogue dimming functions that can work alongside standalone sensors from Dexsors Reacta range to maximise energy savings.

To offer a more complete emergency lighting coverage, the efficient, low-maintenance AME LED emergency luminaire was installed in strategic locations across the building. The IP65-rated, self-contained polycarbonate bulkhead is manufactured to BSEN 60598 standards and features a practical hinged gear tray to simplify installation and maintenance. The luminaire is available in maintained or non-maintained three-hour emergency functions, in either self-test or auto-test options to suit the purposes of the application.

FEATURED PRODUCTS



MODLED OFFICE
SURFACE / SUSPENDED



HYDRA LED