



THE RANGE, SLOUGH

STAFF AT THE RANGE LEFT IMPRESSED BY THE IMPACT OF DEXRETAIL'S MODERN LED LIGHTING UPGRADE ON THE LOOK, ENERGY-EFFICIENCY AND SUSTAINABILITY OF ITS BRAND-NEW HOME, DIY AND GARDEN STORE IN SLOUGH.

ABOUT THE CLIENT

With over 120 stores nationwide, The Range has come a long way from opening its first superstore at the Sugar Mill Business Park in Plymouth in 1989. Going from strength to strength, the privately owned company has recently been ranked 54th in Insider's TOP 100 list, with award-winning founder Chris Dawson now setting his sights on the international market. Recently, Mr. Dawson's entrepreneurial spirit has also driven the brand to expand into new market territories including property, manufacturing, waste management, shop-fitting and financial management.

With the company always looking for ways to increase profitability and improve customer experience, the refurbishment works for the new store aimed to enhance the retail environment whilst driving down operating costs. Environmental sustainability was also a top priority, with store development plans and procurement policy geared towards improving the building's carbon footprint. With lighting playing a central role in all these areas, Russell Kateley, Facilities Manager at The Range, contacted Dexretail to provide an attractive low-energy solution for the entire store using its extensive range of precision-engineered LED products.



WHY DEXRETAIL?

Dexretail was handpicked amongst competitors due to its vast manufacturing and design capabilities combined with a comprehensive and direct approach to service. This allowed The Range to take full advantage of the many perks of Dextra's Total Service including:

- Wide range of energy-efficient products for both internal and external applications
- Customised LED cards to enhance payback rate of installations
- Direct contact with Key Account Manager and internal administration staff
- Fast and flexible delivery
- All-inclusive project management service covering on-site surveying, emergency lighting design, CAD design drawings, preparation of energy reports and ROI calculations, all the way through to commissioning
- Upon request, Dextra Group subsidiary – Dexreco, offers complete disposal and recycling of obsolete lighting equipment according to WEEE regulations

THE BRIEF

The challenge of designing successful store lighting is to provide solutions that showcase products and act as effective branding tools, whilst incurring minimal installation, energy and maintenance costs. Using a vast selection of state-of-the-art products and a modern approach to design, Dexretail were required to design an installation that would maximise the energy efficiency and low-maintenance benefits of LED technology, as well as help The Range project an image of quality and trustworthiness.

The Range needed effective LED replacements for the store's existing fluorescent lighting to significantly improve its financial and environmental sustainability and help create a vibrant and brightly-lit shopping environment. A varied selection of customised products was required to illuminate both front and back of house areas and mezzanine, featuring high and low-level ceilings. External lighting was to be provided around the perimeter of the building, outdoor garden centre and yard, with fully compliant emergency lighting installed in all areas.



“The entire senior team have commented on the improvement over the conventional lighting.”

THE SOLUTION

Main Store lighting – The Sky-Light LED suspended high-level luminaire.

The Sky-Light LED range is engineered to offer retailers the perfect balance between aesthetic appeal and energy efficiency. Available in a higher band of lumen packages of up to 34,500lm in either 4ft or 5ft body sizes, this high-level luminaire combines the latest Lumileds LEDs with an advanced high-transmission diffuser, delivering impressive light output ratios of up to 82% with wide distributions.

To fulfil The Range's specifications, the Sky-Light's high-efficiency LED chip board was modified to provide a custom 25,500lm version, this enabled us to achieve the optimal coverage with the most efficient luminaire spacings which reduced the overall payback of the project. The bespoke luminaire now operates at a highly efficient average of 140 luminaire-lumens per watt (Llm/w), greatly outperforming HID or T5 store lighting equivalents.

The Sky-Light's robust steel construction is powder-painted in an attractive white gloss finish. Customised polycarbonate end caps can be supplied in 7 different colours to match colour branding schemes. The luminaire's unique waveform diffuser not only adds to the contemporary minimalism of its design but also ensures that the LED chip source is not visible to customers below, giving an evenly lit appearance from all angles across the store.

The luminaire will bring faster returns of investment to The Range not only through the energy-efficiency, reliability and low maintenance of its high-quality LED sources but also by minimising the costs of installation. Delivered fully assembled and ready to install, with a practical back flap for simplified wiring access, the Sky-Light LED allowed The Range's technicians to carry out the installation both quickly and easily on high ceilings. Prewired leads of choice can also be provided upon request to reduce installation times further.

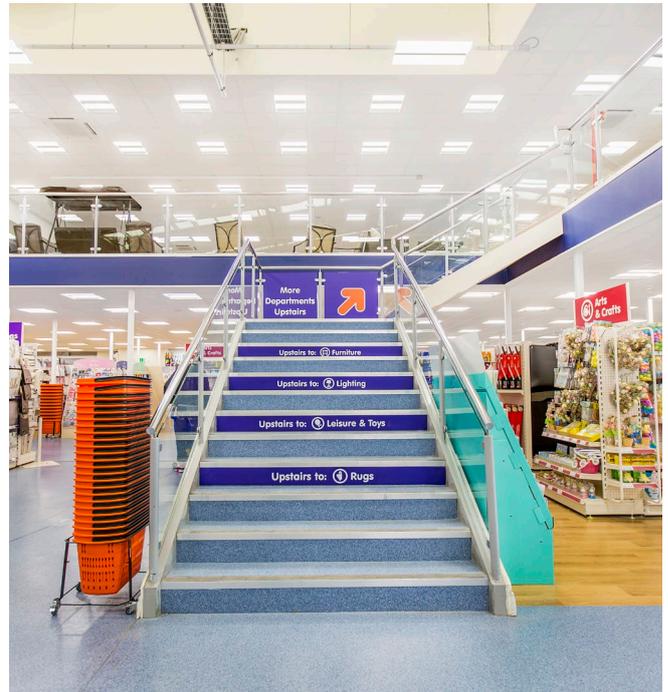


THE SOLUTION

Mezzanine – The Arcus LED recessed luminaire.

The Arcus LED brought a unique aesthetic to The Range's modern retail environment with its attractive gull wing steel housing and extruded diffusers. The recessed luminaire was supplied with Fastfix cabling to facilitate the installation process, saving The Range both time and money. A total of 476, 4400 lumen Arcus LED luminaires, were provided to improve the vertical and horizontal illuminance on both levels of the mezzanine, creating a comfortable atmosphere for customers whilst displaying all products effectively.

The Arcus LED was selected not only for its aesthetic appeal but for its versatility and efficiency. Using the latest Lumileds LEDs with efficient optic design, the luminaire is set to bring substantial energy savings for The Range by offering LORs as high as 81% in outputs of up to 8800lm, whilst cutting energy consumption by at least 50% compared to fluorescent equivalents. Available in 600mm x 600mm or 1200mm x 600mm body sizes, with single or twin diffuser options, as well as a wide range of dimming and emergency functions, the Arcus LED allows installations to be tailored to the aesthetic and performance requirements of each application. The luminaire also offers compliance to ECA and L2 standards.



“All the LED luminaires featured in this project are compatible with a wide range of sensors and dimming controls to maximise energy savings”

THE SOLUTION

External Lighting – OPUS LED floodlight.

The OPUS 2 LED floodlight provided a highly efficient solution for the building's external areas. Manufactured using Lumileds LEDs, the luminaire offers drastic reductions in energy and maintenance costs compared to the existing HID lighting, whilst delivering LORs as high as 85% and a superior light quality.

For the outdoor garden centre and yard, a small 3000-lumen version was chosen to welcome customers into the store, whilst providing optimal light levels for shoppers to comfortably browse through The Range's product displays. Around the perimeter of the building, however, a larger 10,200lm high-output version was installed, complete with an asymmetric lens for a more efficient distribution, offering compliance to Zone 2 external lighting regulations. The OPUS 2's higher lumen packages also include a constant lumen output function, gradually increasing the power load over the luminaire's lifetime to offset any lumen depreciation during the first 50,000 hours of operation. This feature ensures that the luminaire will perform as effectively as when it was first installed, requiring minimal maintenance throughout its entire lifespan.

The OPUS 2 LED range is designed to withstand the rigours of the outdoors, with its high-quality die-cast aluminium construction and toughened glass cover offering IP65 protection and resistance to arduous weather conditions. With its wide range of lumen outputs, body sizes and reflector options, the highly versatile OPUS 2 luminaire can be tailored to suit most external applications.

Emergency Lighting.

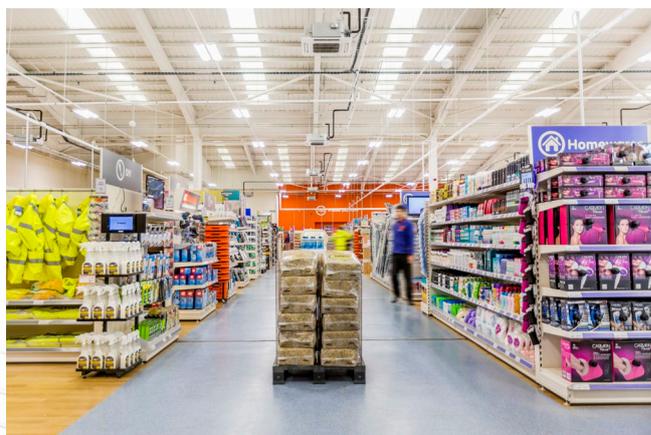
To support the integral three-hour emergency lighting offered with most featured luminaires, the standalone, IP65 rated AME LED bulkhead was installed in areas requiring maintained emergency lighting, whilst the efficient and low-maintenance EXI LED provided emergency exit signage across the entire building.

All the LED luminaires featured in this project are compatible with a wide range of sensors and dimming controls to maximise energy savings and improve the overall sustainability of retail outlets. A comprehensive warranty was also offered with all of Dextrail's LED products, giving The Range additional peace of mind.

Feedback.

"Just wanted to say how impressed everyone in the company has been with the look of our new store in Slough, with the Dextra LED lighting installed. The entire senior team have commented on the improvement over the conventional lighting, and our fit out team have also commented how easy they have been to install. I would like to take this opportunity to thank everyone at Dextra for their hard work, and dedication to achieving such an outstanding result."

Russell Kateley, Facilities Manager at The Range.



FEATURED PRODUCTS



SKY-LIGHT LED



ARCUS



ECOPAK LED



PROTEC LED



HYDRA LED



OPUS 2 LED