

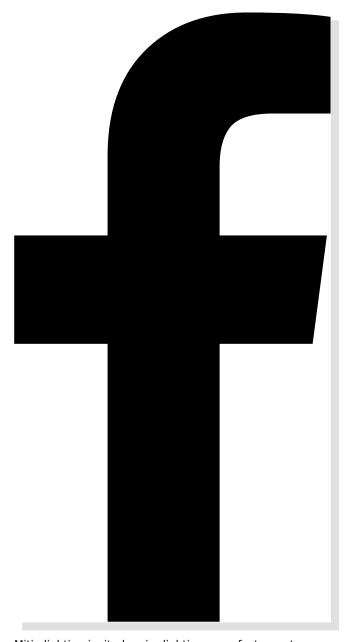
One Angel Square, Manchester





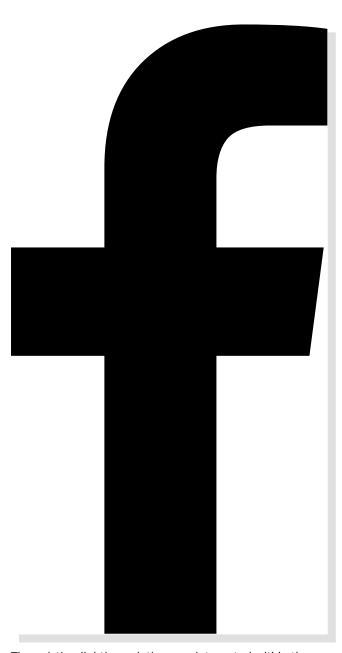
One Angel Square, Manchester, is head office to the Cooperative Group. Standing 72.5 metres tall, the building forms the centrepiece of the Angel Meadows area of Manchester city centre.

One Angel Square is one of the most sustainable large buildings in Europe and is built to a BREEAM 'Outstanding' rating. It is powered by a biodiesel cogeneration plant using rapeseed oil to provide electricity and heat. The structure makes use of natural resources, maximising passive solar gain for heat and using natural ventilation through its double-skin facade, adiabatic cooling, rainwater harvesting, greywater recycling and waste heat recycling.



Mitie lighting invited major lighting manufacturers to tender for the project, which required a complete overhaul of the lighting systems. Dextra were successful in winning this project, primarily due to the potential return on investment. This was achieved through maximising energy efficiencies whilst minimising installation time and cost.

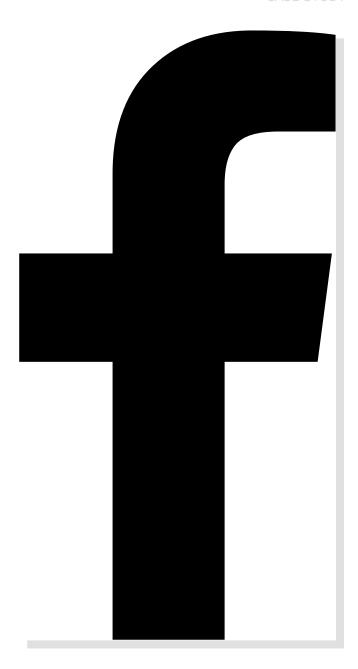
Mitie Lighting the principal contractor devised a bespoke solution so that installation could be achieved with minimal disturbance to the working office so that productivity wasn't affected during the project.



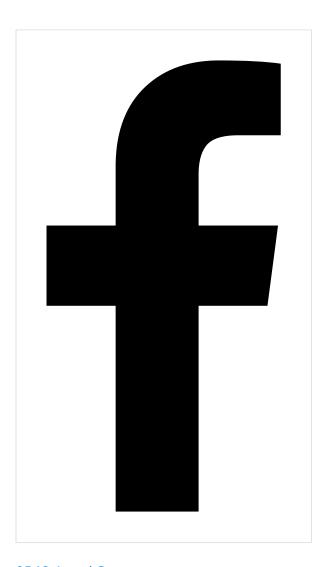
The existing lighting solution was integrated within the chill beam system, to avoid the cost of changing the infrastructure, a bespoke lighting system was designed and manufactured exclusively for the project. The solution was a bi-directional luminaire, which effectively retained the existing aesthetics and atmosphere in the office space.

The Dextra luminaires were supplied with DALI drivers compatible with the existing controls system to keep cost and time of installation to a minimum.

An impressive energy reduction of 65% was achieved across 1,870 fittings over two floors. The long-term plan is to expand this solution across the remaining floors, replacing 7,117 bespoke fittings in total.



THE PRODUCTS



## 0548 Angel Square

The existing lighting solution was integrated within the chill beam system, to avoid the cost of changing the infrastructure, a bespoke lighting system was designed and manufactured exclusively for the project. The solution was a bi-directional luminaire, which effectively retained the existing aesthetics and atmosphere in the office space and ensured that lux levels, uniformity and glare compliance were all maintained. Our custom gear tray design reused the maximum of the existing infrastructure and allowed the customer to retain their central battery system, standalone controls system and cabling therefore minimising cost, installation time and prevent wastage and unnecessary embodied carbon. Our solution incorporated plug and socket connectors enabling quick and simple replacement where needed for both maintenance and future upgrades, whilst also using state of the art components providing 100,000 hour driver lifetime and lumen depreciation as low as 20% over 90,000 operating hours minimising future

## One Angel Square, Manchester

CASE STUDY

maintenance across the estate.

**EXPLORE PRODUCT RANGE** 

## **GALLERY**

