

3663 case study



Greener warehouse builds

3663's flagship depot for sustainability opened on track in August 2009 as the largest and most environmentally friendly depot within the 3663 wholesale estate.

The 120,000 square ft site is located in Paddock Wood, Kent in the South East of England. The depot is fully multi temperature and was developed at this location for the ability to consolidate facilities from three nearby 3663 sites that had restrictions on their longevity due to expiration of leases, land lock and high maintenance costs.

The total capacity to serve customers from the new square footage is in the region of a 22% increase and will provide great flexibility and a platform for coping with expansion for the 2012 Olympics and beyond.

The development which cost in the region of £13 million has a host of sustainable design features including:-

- High efficiency lighting within the warehouse - lamps are fitted with PIR movement detectors which switch them on only when staff are working below.
- Warehouse roof lights provide 60% of the daylight, thereby reducing power consumption.
- Sensors switch the lights off completely when there is sufficient daylight available.
- Voltage Optimisation Equipment reduces any excess voltage in the power supply, which would be an unnecessary waste. Evidence shows this waste could be as high as 13%.
- Solar power panels pre-heat office hot water requirements.
- Photovoltaic panels provide some of the electricity for battery charging.
- Sun pipes are used to bring daylight into the top floor offices without unnecessary heat, reducing the dependence on artificial lighting.
- Acoustic screening has been included within the build
- 20,000 tonnes of existing, on-site concrete material has been used in the sub-base below the new floor and car park.
- The car park has been surfaced using recycled aggregates.
- A rainwater harvesting recycles water which is used to flush office toilets and in the truck vehicle wash facilities.
- 13% of on site electricity will be generated from on-site renewable sources.
- All grid electricity is supplied from renewable sources which can include biomass, hydropower, landfill gas, solar wave and tidal power.

The construction and development of the site progressed well and was delivered on time and on budget. The operational team were able to implement learning's from previous developments to ensure the design provided the both the optimum layout and full range of facilities required for a site focused on the delivery of the future.