

**pets  
at home**

# Southern Distribution Centre

**Duration:** 6 months  
**Location:** Northampton  
**Contract:** £753,000.

**Project:**  
The Pets at Home project was introduced in March and finished late October. This job included several different electrical installations, of which totalled to just over £750,000.

**Installation List:**

- Incoming mains supply
- 500kva generator via the incomer, c/w changeover panel
- Low voltage distribution
- Lighting/ EM lighting and protection
- Fire Alarm and Security system
- Office rearrangements, telecommunications and data
- Earthing and bonding
- 200A busbar for battery charging
- Car park barrier and rubber curb installation
- Supplying another plot (plot 310/ security kiosk).

The distribution centre already had an **existing main incoming supply** of which no changes or modifications were made to. This served an electrical sub-station and the supply consisted of 1200A TP&N supply, sitting adjacent to a generator which feeds an automatic changeover panel in the plant area of the warehouse, and supports the site.



We replaced some of the original features with the switchboard which fed various distribution boards to the office, warehouse and sub main to the gatehouse; cable containment to 400mm wide tray and a new cubicle MCCB stack to feed the new circuits and provide five spare ways at 200A TP&N.

**New TP&N distribution boards** were installed to accommodate the warehouse lighting and small power, the office air conditioning, the kitchen area and the warehouse offices as well as outgoing supplies to the battery chargers, Plot 310 and the sprinkler pump house. All outgoing sub main cables are steel wired armoured which were routed on a new cable tray system.

The **office lighting** mainly consists of 600x600mm modular fittings mounted in the suspended ceiling grid fed from a system of modular wiring and plug-in marshalling boxes. Integral emergency battery packs provide an **EM lighting scheme**, which can be regularly tested via the EM test key switches. As part of the fit out, contract cellular offices were introduced and the existing lighting, including the PIR movement sensors, have been repositioned to suit.

**Fluorescent high bay luminaires** were introduced to the warehouse, which was designed to comply with the average requirements for warehouse lighting of 150lux. The low profile fittings are **energy saving** with **dimnable ballasts and sensors** (integrated light and presence detectors), and consist of the **latest T5 technology**.

Installation of the **Fire Alarm System** initially required the removal of the original Gent Vigilon 2 loop addressable closed protocol fire alarm panel together with the removal of all previously existing closed protocol smoke detectors. The replacement Fire Alarm Panel situated in the Main Reception is a **Cooper DF61002 open protocol analogue addressable system**; replacement optical smoke detectors have been installed throughout the offices.

In regards to **Plot 310**, the Waste Management building, although self contained with its own main switch panel, is fed from a 400A TPN MCCB in the new cubicle extension of the main building switch board.

The lighting installation is much the same as the main warehouse with intelligent light fittings suspended from 25A lighting bus bar trunking and the General small power and power to specific items of the plant are fed from the local distribution board within the toilet pod.

...Did you know?

Pets at home add 25+ stores to their chain every YEAR!!

