

CASE STUDY

SCREWPILING, TESCO OSTERLEY

Project: Mezzanine floor for Tesco

Location: Osterley, West London

Client: Kier Group

Project Overview

In order for Tesco to maximise their floor space they wanted to install a TFF (Twin Floor Trading) mezzanine at their Osterley store. The mezzanine was to carry the valuable non-food products and travelators would be installed to provide access to the second floor.

We were contracted to carry out the load bearing piling works and cast in-situ pile caps to support the new structure. The store remained operational throughout the build and we worked through the night to avoid the day time customers. We still had to maintain excellent health & safety practices as the store was still a live environment with night staff working their shifts around the site.



Because the piling was taking place within an existing building, in restricted access conditions we devised a screwpile solution. These are the only vibration-less displacement piles available. They didn't affect the building and they could be installed within the restricted access conditions of the site (3.5m headroom).

Result

Due to the nature of the project and the site we provided our client with a really flexible approach, changing the schedule at short notice. The programme was phased and ran over three months.

Areas within the floor slab were removed and we worked within these exact spaces to install the piles and pile caps. We installed five pile caps per night, with three to four piles per cap depending on point load requirements. The installation was fast and this was due in part to having no wet trays involved in the installation of the piles.

Technical information

We installed double helix screwpiles at 200mm and 250mm diameter. There were 88 No point loads with an average of 3 No piles each, totalling 260 No piles.

Rig used: Adapted mini excavator

