

# ABI Equipment Limited

## Piling Equipment Specialists

Sales - Hire - Parts and Service - Project Support



ABI Equipment limited was asked to supply specialist equipment consisting of a Delmag RH28 drilling rig, complete with rotary head and Kelly bar, by piling contractor Martello.

The piling works were carried out over a number of weeks between August 2016 and April 2017.

### The Project

The development consists of 26 prestigious private apartments plus an 8 bedroom penthouse on Stanhope Gate adjacent to Hyde Park and Park Lane and managed by the Dorchester Collection. The architecture incorporates a beautiful grade II listed façade and will enable residents to have direct views over Hyde Park.

### Project Features

The project is part of a top down construction for a triple basement structure, requiring a perimeter secant wall, along with plunge columns, to assist the scheme for the wall support, and also to provide support for the upper works.

The Ø750mm Secant wall piles, Ø1500mm bearing piles and Ø1500/1800mm plunge columns were installed with a Delmag RH28 drilling rig, the rig will provide delivery of all aspects of the scheme.

### Mayfair Park Residencies

**Main Contractor:** Erith

**Client:** Clivedale

**Piling Sub contractor:** Martello Piling Limited

**Piling Equipment supplier:** ABI Equipment Limited



### ABI Equipment Limited

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### Project difficulties and restrictions

The Central London site had logistical access restrictions limiting the delivery of plant and materials. This was further complicated by the retention of an existing façade requiring 600mm diameter piled support, in only 3.8m of headroom. The scheme required a Ø750mm secant wall at different platform levels, bearing piles up to Ø1800 x 50m deep with plunge columns to be installed within a tolerance of 1:400.



### Martello

Martello successfully delivered the 12No Ø600mm diameter façade retention piles up to 29m deep, using their specialist limited headroom MP4001 piling rig, installing up to 10m of temporary casing, in just 3.8m of headroom.

### Type of Piling

In total 233No Ø750mm secant piles (117No x up to 16m female & 116No x up to 37.5m male piles) were constructed utilising Ø850mm segmental casings.

In addition, the Delmag RH28 rig installed:

- 6No bearing piles x Ø1500mm up to 41m long;
- 21No columns Ø1500mm up to 47m long;
- 2No plunge columns Ø1800mm up to 50m long;
- 17No tension piles Ø900mm up to 50m long;

The ground conditions were gravel over clay turning to very stiff London blue clay.

Martello Operations Supervisor Nial Simmonds commented "The Delmag rig proved to be perfect for the job being robust and reliable, easy and quick to assemble and I particularly liked the parallelogram enabling the mast to adjust to reach pile positions without having to track or spragg when operating "side saddle".



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