



Emirates Air line Cable Car

London, UK

CUSTOMER

Mace

SECTOR

Transport

DATE

2012

PRODUCTS

- Conbextra UW

THE PROJECT

This complex project involved stretching 50-millimetre steel cables more than one kilometre between steel towers 96 metres high. The cables carry 34 cabins, each capable of carrying 10 passengers, and provide a low-emission, quick, direct and fully accessible link connecting the Greenwich Peninsula and the O2 with the Royal Victoria Docks and the ExCeL.

THE SOLUTION

Instead of building the coffer dam the contractor drove 1.8m diameter piles into the river bed. Fosroc's Conbextra UW was specified for use when grouting in the concrete piles, particularly where tidal constraints were found and the application was required to be carried out in very wet conditions or underwater. Conbextra UW is able to be poured under water and effectively displaces water when it is cast. The material expands to ensure any shrinkage is compensated, and it will not lose cement due to 'wash-out'.

The use of Conbextra UW enabled a very high quality of concrete to be cast, obtaining the desired architectural finish. Once the piles were in place the initial skirt of the tower was set onto them almost immediately, meaning the early age compressive strength of Conbextra UW was another critical requirement.

THE BENEFITS

Initially the proposed construction method and programme meant that the cable car would not be operational until the end of the summer. Fosroc's Conbextra UW was an integral part of the success of the piling technique adopted. This approach to the project took 6 weeks off the completion time of the project. This helped ensure that the project finished well ahead of schedule and was in place to assist in the logistics of staging the London 2012 Olympic Games.

Conbextra UW has exceptional strength, durability and will provide support to the towers for decades to come. The Emirates Airline London Cable Car is not only a popular tourist attraction, it provides key infrastructure to London's transport needs.



Base of piles cast in Conbextra UW



Piles supporting the main towers