



2018
BRMCA Award for
Excellence in
Customer Service
WINNER
CEMEX

CEMEX is the winner for the Northern Line Extension.



The Royal Academy of Arts.



Waterloo International Terminal.

Northern Line Extension

The British Ready-Mixed Concrete Association Award for Excellence in Customer Service recognises ready-mixed concrete companies who provide a high-quality, efficient and professional service. The 2018 winner was presented at The Concrete Society Awards Dinner.

The 2018 winner is CEMEX for the supply of a demanding concrete for the cast-in-situ secondary 250mm-thick lining to vaulted gallery sections. The project client was Transport for London and it was delivered by the Ferrovial Agroman-Laing O'Rourke joint venture, with CEMEX as a concrete supplier and TecoZam as specialist formwork contractor and temporary works designer delivering the in-situ secondary tunnel lining.

It is important to highlight the early strength gains achieved by the concrete to enable the formwork to be struck by TecoZam at ten to 12 hours after placement. Strengths of 10MPa ensured the requirements of the temporary works design were met prior to striking, movement and reset of the travelling formwork. On every pour the complete cycle was achieved within 24 hours.

The ratio of open lifetime to early-age strength performance was exceptional and the specification included steel and polypropylene fibres for hardened concrete performance. Around 12 linear metres of

tunnel were fully lined every 24 hours, an outstanding rate in tunnelling construction. This was only possible with the thorough understanding of the concrete design and performance, as well as the teamwork between the temporary works department and the on-site operator of the formwork system.

Past experience and understanding of the concrete properties allowed CEMEX to develop the material solution, adapted to the project and requirements of the JV, TecoZam and TFL. CEMEX provided excellent service to a central London location, an ability to guarantee a constant supply, as well as tracking the site volume requirements and matching them with the batching plant supply output.

Highly commended

Hanson for Royal Academy of Art extension and link bridge

Key to this project's success was the use of self-compacting concrete to achieve full compaction and high-quality exposed

concrete finish, while placing in narrow walls (150mm) and in deep concrete lifts to minimise construction joints.

Hanson's technical department worked closely with specialist subcontractor Getjar throughout the project to design a durable and reliable concrete, despite the restrictions imposed by the construction process.

Tarmac for Waterloo International Terminal – Wessex Capacity Alliance Suburban 10 Car

For this project, concrete was required to achieve 20MPa in eight hours using a blended cement with no more than 40% CEM I, where the same concrete had to remain live for two hours during delivery. This was achieved using a high-flow concrete, with an accelerating additive added to the mix no more than just 20 minutes before it was pumped 200m.

Final placing and compaction was achieved without the use of poker vibrators. Tarmac worked closely with the project team and the additive supplier to provide the concrete performance required. ■