

Product Pozament Compensation Grout
Client Crossrail
Location London
Date of completion October 2016

THE CHALLENGE

Crossrail is one of the iconic UK infrastructure projects of recent years. However, given the unprecedented level of belowground engineering involved, coupled with the vast area of central London the line would be servicing, ensuring any activity did not adversely affect any aboveground infrastructure was a key challenge faced by Crossrail contractors BBMV (Balfour Beatty Morgan Vinci).

Many of the buildings located above or near to the Crossrail route were fitted with movement sensors, which detect even the smallest of movements caused by belowground engineering works. Compensation grout is then applied to corresponding injection points if any movement is detected.

However, due to the sheer scale and depth of the construction, the original specification compensation grout used in the Bond Street and Finsbury Park areas struggled to keep up with the requirements on site, quickly losing fluidity due to pressure filtration, and ultimately blocking the lines to the substrate as a result.

To rectify the situation, and ensure the Crossrail project could continue unhindered, BBMV turned to Tarmac's Pozament team to provide a grout solution that could be fluid and live for longer, without compromising on vital strength.

OUR SOLUTION

Following a series of extensive lab and in-situ testing, Pozament created a bespoke formula of compensation grout tailored to the exacting performance characteristics demanded by the Crossrail project.

When pumped from the surface to the substrate, via a grouting gallery, the Pozament compensation grout remained live in the lines for over 45 minutes, only gelling and setting once it passed beyond the injection point. This ensured that the vital jacking action was provided, while leaving the busy streets of built-up London undisturbed and adequately supported above ground.

Throughout the project's duration to date, Tarmac's Pozament team has supplied over 4,000 tonnes of low strength high purity grout, which was deployed through 1,800 individual injection points. Pozament's ability to create a bespoke compensation grout, which delivered the compressive strength levels required without setting too early, ensured the project was able to remain in line with original timescales.

For more details contact enquires@tarmac.com or call 0800 1 218 218