

CASE STUDY: BUILDING MATERIALS

CEEQUAL WINNING PROJECT USES VOLTEX

PROJECT: Kings Cross Redevelopment Package 4

LOCATION: Kings Cross Station, London

PRODUCTS: Voltex, Vorseal 250, Voltex Granules
Bentoseal

BACKGROUND: A tanking material was required by AJ Morrisroe, for the project being undertaken by Network Rail with Waterman Civils, Pascall & Watson, and Taylor Woodrow.

CHALLENGE: The material and the manufacturer had to demonstrate environmental awareness to assist the project in achieving an excellent environmental assessment.

The tanking material had to succeed where the specified competition fell short in the following categories: all weather installation; self-healing and self-sealing capabilities; one product application and mechanical, rather than chemical bond to the concrete.

It also had to meet the competition with regard to the specified requirements of BS8102 1990 Grade 4.

Due to the copious amount of contiguous piles in the basement, a material was required that could be applied directly to the piles. The customer did not want to backblind the piles to create a smooth surface for the competitors material.

SOLUTION: The solution was 8000m² of Voltex - a highly effective waterproofing composite of high strength geotextile and 4.88 kg of sodium bentonite per square metre. The high swelling, low permeable sodium bentonite is encapsulated between a non-woven and woven geotextile. A patented needle-punch process interlocks the geotextiles together forming an extremely strong composite that maintains the equal coverage of bentonite, as well as protects it from inclement weather and construction-related damage. Once backfilled, Voltex hydrates and forms a monolithic waterproofing membrane. Voltex contains zero VOC, can be installed in almost any weather conditions to green concrete, and most importantly, has proven effective on both new and remedial waterproofing projects worldwide.

RESULT: Aided by CETCO holding both ISO 14001 & 9001, and the properties of Voltex, the project achieved its CEEQUAL award and scored above 75%, receiving a rating of Excellent.

For a free consultation for your next project, call a CETCO Waterproofing expert at +44 151 606 5900.



King's Cross Package 4 is a £28 million project which involves the design, construction, testing and commissioning of a 10 metre deep basement to house a plant room and service yard which will accommodate services such as waste disposal and deliveries. As part of a CEEQUAL assessment earlier this year, the project scored above 75% and subsequently received a rating of Excellent. The Civil Engineering Environmental Quality and Assessment Scheme (CEEQUAL) is an awards scheme which rewards exemplary environmental quality on civil engineering projects.

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