

Project Info



15 / 11 / 12



CC5™ Bulk Rolls



25,500m²



Transverse layers



Undisclosed, UK



Trant Construction Ltd.



CC5™ was installed as protective liner to clay bunds to prevent weathering erosion, provide weed suppression and protect against animal damage.



Completed installation in the UK

In November 2012, Concrete Canvas® GCCM* (CC) was used to line refurbished secondary containment bunds at a Marine Terminal Facility in the UK. The bunds surrounded a series of tank farms storing hydrocarbons as part of the larger onshore facility. CC provides hard armour weathering protection of bunds, acts as an effective weed suppressant, protects against animal damage and provides additional levels of containment and fire protection. The works were carried out by Trant Construction Ltd, with a scheduled completion date of July 2013.

The CC was supplied in staggered deliveries to minimise on-site storage and provide flexibility to the programme of works according to weather conditions. Following refurbishment of the clay bunds, bulk rolls of CC5™ were dispensed from a spreader beam mounted from a 13T tracked excavator. Each bulk roll was positioned at the crest of the bund, before unrolling the required length across the width of the bund, before being cut to length using utility knives. Subsequent layers were overlapped by 100mm. Once each section of bund had been lined, the CC was hydrated.

Following hydration, the overlapped edge was folded back on itself by 50mm and CT1 sealant applied along the length. The CC edge was then folded back and screwed in position with an auto-fed collated screw driver. The sealant created an impermeable joint whilst the screws provided a mechanical bond between overlapped CC layers. Each layer was anchor trenched at the inside and outside edges of the bund. 24 hours after hydration, the CC had set to 80% strength and was able to be trafficked as works continued on installing kerb work and drainage details on the inside of the bund.

*Geosynthetic Cementitious Composite Mat





Bunds on the site were heavily vegetated prior to works



The bunds were excavated to prepare them for installation



Preparation/ grading of the clay bund



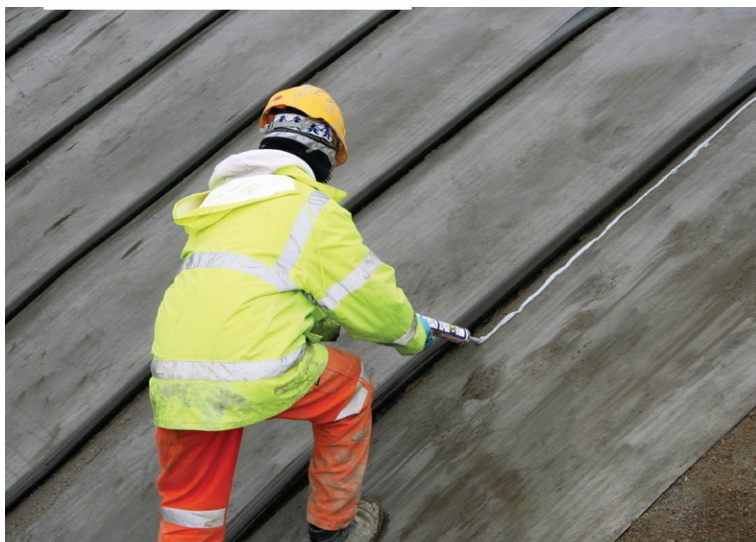
The graded bund ready for installation



Transverse layup of bulk roll CC5 from spreader beam



Hydration of CC from on site mains water supply



Adhesive sealing of 100mm overlapped joints using CT1



Joining of adjacent layers using 30mm autofed screws



CC easily accommodated existing pipework



CC can easily be fitted around corner details of bunds



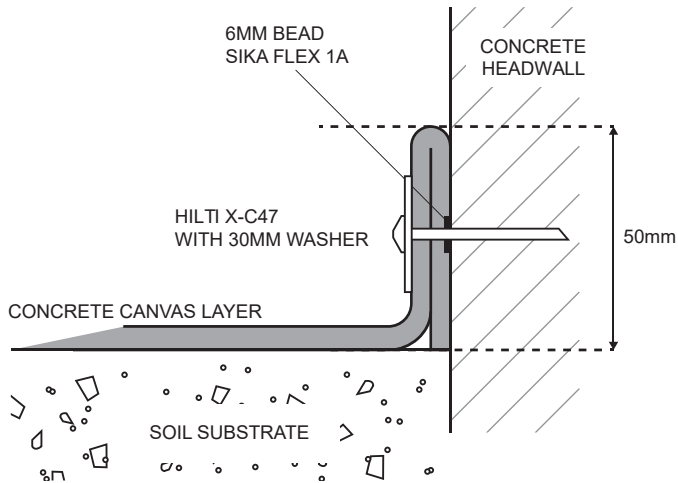
Completed section



CC termination at a headwall

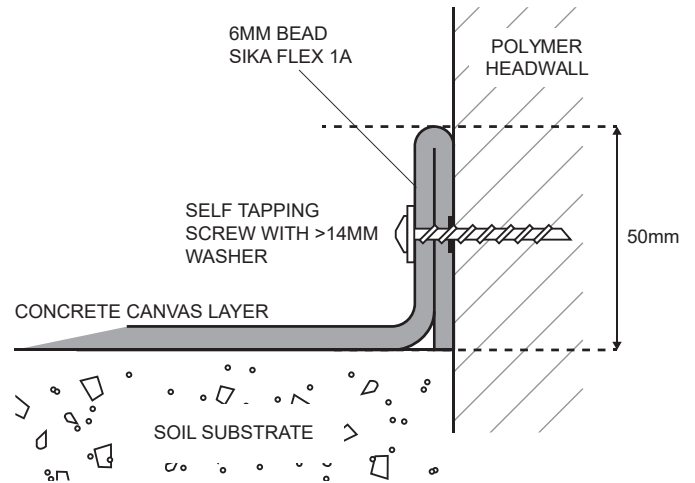
TERMINATION OF CONCRETE CANVAS TO CONCRETE OR POLYMER HEADWALL

TERMINATION OF CONCRETE CANVAS TO CONCRETE HEADWALL / BUTTRESS



NOT TO SCALE

TERMINATION OF CONCRETE CANVAS TO POLYMER HEADWALL / BUTTRESS



NOT TO SCALE

Headwall termination technical proposal



Headwall termination detail



An completed section of bund next to two storage tanks



An overview of the site and completed installation