

Project Info

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CC CC8™ Batched Rolls

Unknown

Vertical layers

Globe icon Palm Oil Plantation, Selangor, Malaysia

Hard hat icon Concrete Canvas Ltd.

i CC8™ was used in a trial to establish whether CC could be an effective erosion protection measure on an earth-bund on a palm oil plantation.



Completed installation



Trial site located on bank of the Langet river



Pegging the pre-cut layers of CC to the substrate



Hydration of the CC using plant site equipment

In February 2011, Concrete Canvas® GCCM* (CC) was used to protect an earth-berm on a palm oil plantation in Selangor, Malaysia.

The palm oil plantation is situated 2ft below high water and protected by the earth-berm in question, running around the periphery of the plantation. Maintenance of the earth-berm is of paramount importance as it is the sole flood prevention measure protecting the island from flood water and the palms from seawater contamination. Monthly maintenance is conducted on the earth-berm using a combination of measures including regrading, piling, gabion walling and vegetation growth. However, there are still regular breaches and loss of land, and erosion is exacerbated by a number of factors including high tidal flows, strong water currents and wave damage. CC was chosen for a trial installation as an erosion control measure to protect the outside face of the earth-berm in order to reduce maintenance costs, time, and flood risk levels.

The CC was delivered to site in batched rolls of CC8™, unrolled and cut to specific profile length and fixed to the slope using steel pegs. The edges of the CC were then buried in anchor trenches at the crest and toe of the slope and backfilled with soil. Hydration was then given using water from the lake below.

The work was carried out by 6 people from the plantation, with help and guidance from one of Concrete Canvas Ltd's directors, Will Crawford.

*Geosynthetic Cementitious Composite Mat