10.12.10 Case Study : Goldhanger, Maldon, Essex

In December 2010, Concrete Canvas (CC) was trialled to inhibit weed growth beneath a set of steel seawall steps. The steps provide Environment Agency (EA) operatives safe access up/down their seawall embankments to structures such as sluices and pumping stations. The steps have an open tread mesh which allowed grass to grow up from beneath, meaning that additional maintenance was required to keep them clear from obstructions.

The grass and vegetation below the steps could not be removed using strimming equipment and herbicides were discounted as many of the seawalls that the stairs gave access to were environmentally designated sites (SSSI, RAMSAR, SPA, SAC etc.) and had nearby water. The decision was reached that the best way to prevent grass growth was to suppress the area beneath the stair access. A layer of geotextile or filter Canvas was considered but it was thought that this would degrade in UV and wouldn't provide a long term solution. CC4 was chosen instead for its durability and protection from weathering and UV degradation. The Canvas was installed quickly, by removing several of the step treads and unrolling a 10sqm batched roll down the embankment. This was advantageous as the steps did not have to be fully removed, which saved on time and did not require plant equipment. The EA were also able to take advantage of the borrow dyke ditch behind the seawall to collect water for hydrating the CC.

The project was considered a success and plans are being considered to apply Concrete Canvas to a number of other seawall step sites.