

CONTAINMENT



In October 2018, Concrete Canvas GCCB* (CC Hydro) was used to provide containment at the Airside of Emirates Flight Training Academy EFTA in DWC Al Maktoum International Airport in Dubai, UAE.

Use of a reinforced concrete slab was considered, but CC Hydro (CCH) was chosen due to its reduced installation time, lower costs, and design life of 50 years. It's ability to contain the AvGas was also a major contributing factor in the decision to use the GCCB (see our Chemical Resistance and Hydrocarbon Impermeability Testing documents for more information).

The works were carried out by ROUSSE and FOQSCO.

In preparation for the installation, existing paving interlocks were removed and the site excavated to a depth of 200mm. Once the substrate was cleared and levelled using an excavator and grader, the CCH was laid transversely and cut using basic hand tools. A track welder and hot air gun were used to thermally weld the material layers together, and the joints tested by performing an air pressure test.

The CCH was fixed at the four edges before hydration was carried out for one hour. The material was then rehydrated two hours later, for a further two hours to ensure sufficient saturation in the prevalent dry conditions. The same process was repeated the following day.

*Geosynthetic Cementitious Composite Barrier





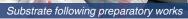






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Unrolling CCH to cut material to required length prior to works





Mechanical thermal welding



Thermal welding using hot air gun and roller











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Once the CCH material had set, the original paving was reinstalled along with a slope curb stone around the perimeter after backfilling and compacting of the anchor trenches.

Air BP and EFTA were pleased with the resistance to AvGas that CCH provides and are confident that it will meet their requirements for the containment facility. They were also impressed by the installation and have said they will look to specify CC materials again in the future.





