

Chai Wan Fresh Water Reservoir, Hong Kong

In Feb 2003, the maintenance work of Chai Wan Fresh Water Service Reservoir commenced. A self-compacting concrete was designed in which a Super Plasticizer additive is added and no vibration is required. However, the result was not satisfactory, the concrete surface was full of large and small blow holes and not dense enough. Accordingly, Formtex[®] was introduced to solve the problem.



Figure 1: The construction site of Water Service Reservoir

Process

A trial was carried out in Mar 2003 to verify the effect of Formtex[®] CPF liner. The result was very obvious and impressive. The number of blowholes was greatly reduced and a dense concrete surface was achieved.

Follow-up

In view of the outstanding performance of Formtex[®] that improved the quality of the concrete surface, Formtex[®] was used in the casting of all the remaining concrete.



Figure 2. A trial for installation of Formtex[®] (middle)



Figure 3. Concrete surface achieved with Formtex[®] (Left) and without Formtex[®] (Right)