

Project Brief

Kelly Tarlton's Double T Beam Strengthening



Auckland, NZ
2008



Twenty five years ago Kiwi inventor and marine explorer Kelly Tarlton created an underwater adventure that has become one of New Zealand's best known tourist attractions.

Tarlton found the ideal site for that in redundant storm-water and sewage tanks at Takaparawha Point on Auckland's eastern waterfront.

A 2.4m-diameter tunnel and moving walkway runs for 1.14km, the underwater tunnel was the longest of its kind in the world when built.

Recent Fibrwrap repairs have strengthened cracked double T beams in the tank top. Tyfo® SCH 41 and Tyfo® SHE composite anchors were used to increase shear strength and improve confinement.

Fibrwrap also helps prevent Alkaline-Silica Reaction (ASR) damage because Fibrwrap has much lower water permeability than the concrete structure. This is particularly useful in a corrosive salt water environment especially if the reinforcing steel has low concrete cover.