



ICONIC SPORTING VENUE PROVES A WINNER

TITLE	Westlake Girls High School Sports Facility
DESCRIPTION	Tension membrane structure for netball and tennis courts
LOCATION	Auckland, New Zealand
COMPLETED IN	2012
FABRIC AREA	3500m ²
FABRIC TYPE	Ferrari 1002T2 / ETFE
ARCHITECT/CLIENT	Creative Spaces / Westlake Girls High School

WESTLAKE GIRLS HIGH SCHOOL SPORTS FACILITY AUCKLAND, NEW ZEALAND

The challenge – create a continuous canopy for netball and tennis courts on difficult ground conditions, without disrupting the school's academic calendar

Westlake Girls High School on Auckland's North Shore has a reputation for high achievement. With a strategic focus on encouraging personal best, the school wanted to enable increased use of their netball and tennis courts by adding an all-weather canopy. The vision called for full light between each netball court with more shade for on-court players.

In any school environment, student safety and continuity of learning are paramount. A well-managed, short construction period was essential. The project was also challenged by unusually bad weather and the discovery of inconsistent ground conditions.

Our solution – innovative design concepts, disciplined execution and collaborative problem-solving

Structurflex was responsible for all structural engineering, as well as the supply, fabrication and installation of all components. Working with architects Creative Spaces, Structurflex developed fabric connection details that satisfied the architect's vision while ensuring a weathertight solution. This included the design and manufacture of a custom guttering system.

The architect's vision for conveying intense natural light between the courts was effectively achieved by combining PVC coated membrane with ETFE foil. The contrast between translucency characteristics of the materials ensures a pattern of comfortable shading and full natural light.

Controlled, systematic and efficient implementation enabled Structurflex to meet the short construction timeframe. Collaborating with ASPEC Construction, the main contractor, Structurflex engineers were able to resolve ground condition challenges to the foundations without adjusting the project completion date.

The new sporting venue has been highly praised by students, visiting players, teachers, parents, the local community and even motorists on the adjacent motorway. Even more importantly, with the courts in use day and night in any weather, more people are rediscovering their personal best.

IAA Outstanding Achievement Award – 2013

