

Case Study – Textile Architecture

Brigidine College Inverted Conical

Project: Brigidine College Quadrangle

Location: St Ives Sydney, NSW Australia

Date completed: March 2007

Fabric: Ferrari® 1002 PVC Preconstraint® (White)

Size: 700m²

Design: Shade to Order

Manufacture: Shade to Order

Installation: Shade to Order



A quadrangle is totally transformed using this massive inverted conical canopy comprising 6 conical structures. The structure is completely free standing and independent, transferring no loads to existing buildings in close proximity. Water drains through the columns and into an underground stormwater system.

Innovative design allowed the structure to overlap existing 2 storey building roof lines and the canteen area to give excellent all weather protection. Site access restrictions presented further challenges which were overcome by clever management and the use of mini cranes.

Lighting reflected up onto the fabric skin gives a soft, even glow is also part of the scope of works. Power enclosures at the columns with lockable trap doors were also included.

The use of one continuous membrane skin presents many challenges to the specialist; design and installation are far more complicated. The effort is worthwhile as the result gives much better performance than attempting to link separate structures together and install flashings which always ultimately leak and fail.

