Specifications for Structure Design & Components

Modular System Structures include:
CONICAL SERIES HYPER SERIES
INVERTED SERIES

TECHNICAL INFORMATION

Design

The structures have been designed in accordance with the principles of structural mechanics to resist loading in accordance with the Building Code of Australia and the relevant Australian Standards listed below:
Structural Design Actions
AS/NZS 1170.0 - General Principles.
AS/NZS 1170.1 - Permanent, Imposed and other Actions.
AS/NZS 1170.2 - Wind Actions.
AS 4100 - Steel Structures.
AS 3600 - Concrete Structures.
AS1170.4 - Earthquake Loads

Standards for Steelwork & Workmanship

The following Australian Standard Codes apply to materials and workmanship:
AS 1163 - Welded and seamless steel hollow sections for general structural purposes.
AS 3679 - Grade 250, Hot rolled structural steel sections.
AS 3578 - Structural steels, ordinary weldable grades.
AS 1554/SP - S.A.A. Structural steel welding code.
AS 1796 - Certification of welders & welding supervisors.
AS 1650 - Hot-dipped galvanised coatings on ferrous articles.
AS 1595 - Cold rolled steel strip.
AS 1397 - Galvanised steel strip.
AS 1450 - Steel tubes for mechanical purposes.

Components

The tensile membrane is fabricated from UV-stabilised, architectural-grade PVDF-coated white polyester fabric. The finish is low maintenance, pollution resistant and rot free.

The structure employs mild steel tubular steel components, complying with the above codes, finished with a white, two pack paint system, applied in three coats.

The membrane edge cables are 1x19 construction, galvanised wire rope with stainless steel fittings.

The membrane tensioning system uses double grade 'S' bow shackles.

Top hat is aluminium with white polyester powder coat.