

Providing Solutions since 1966.

Specialty Structures & Installations was founded to assist architects, developers and General Contractors in selecting the best products for their projects.

We have a working relationship with many suppliers of different kinds of structural systems, made of every possible material.

We are here to provide solutions.

Bernd Rennebeck +1 407 492 4523

www.spstin.com



Visit us.





in partnership with







Introduction





- Installation for USA projects
- Project management & coordination for USA projects



- Tensile membrane design, engineering analysis, & fabrication
- Architectural steel design, engineering analysis, & fabrication
- Project management & coordination for non USA projects

Company Profile



Multimedia Engineering is an architecture and engineering company whose work centres on the design and construction of innovative lightweight architecture and specialised structural systems.

We are an 'Archi-Engineering' firm with an international team of architects, engineers and computer experts with its principal office in Singapore and four other offices overseas.

ADAS® is our company brand for our Tensile Membrane, ETFE Skylight, Structural Systems, SMART Greenhouse, and many other products and services that we offer.



- Trade Mark No. T1106956G
 - **Trade Mark ADAS®**









Automatic Design and Analysis of Structures















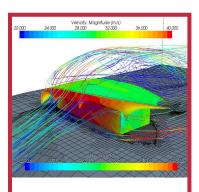






Our Services





ADVANCED ANALYSIS

Solar analysis

Shading & glare

Thermal comfort

Computational Fluid Dynamics (CFD)

Rainwater analysis

DESIGN

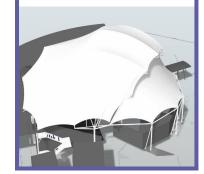
Conceptual design

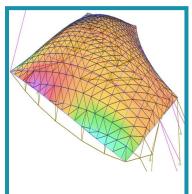
Form-finding & aesthetics

Detail designs

Design for performance

Visualisations





ENGINEERING

Structure & load analysis

Membrane pre-stress analysis

Steelwork analysis

International Code compliance

FABRICATION

Fabrication model

Material procurement

Membrane fabrication & cutting patterns

Architectural & structural steelwork

Connection details





INSTALLATION

Logistics planning

Site measurements & mobilisation

Site preparation

Installation of supporting frame

Membrane tensioning & installation



Inspection

Re-tensioning of membrane

Repair work

Cleaning

Replacement of membrane & accessories



Comprehensive Design & Engineering Solutions for Specialised Systems



35 YEARS OF DESIGN AND ENGINEERING 700+ PROJECTS ACROSS 17 COUNTRIES

OVER 1,000,000ft² BUILT IN THE PAST 3 YEARS

OUR PRODUCTS



ADAS®Architectural Steel

We custom design, engineer, and fabricate our own structural steel for each project.

This allows us to achieve freeform shapes and also eases the installation process with proprietary connection details.

















ADAS® Spaceframe

Spaceframe structural systems provide an aesthetic, costeffective, lightweight solution to large span structures. Our own proprietary engineering design software, combined with our modern manufacturing facility enables us to undertake spaceframe structures of any form and magnitude.















ADAS® Tensile Membrane

With a wide range of low maintenance, durable fabrics, the possibilities offered by tensile membranes are very wide. We can offer our clients many solutions for one single project to suit their budget and aesthetic requirements.

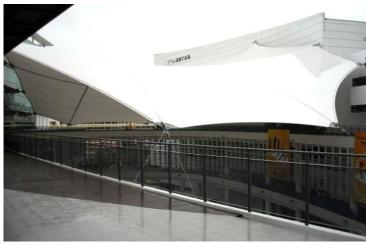














ADAS® ETFE Skylight

ETFE Skylights are a lightweight alternative to glass roofs and facades that can be in single layer or cushion form, which are pressurized with air to provide structural stability and insulation. ETFE film can be custom printed with various patterns to provide effective insulation and shading.

















ADAS® Fabric Facade

Fabric Facade is an alternative to metal facades, which lack the flexibility for freeform shapes. Lightweight and economical, the fabric properties maintain exterior visibility while providing glare and heat protection. It also create opportunities to play with lighting and colours on the facade.

















ADAS®

Warehouse Solutions

ADAS® Racking focuses on the design and build of turnkey, state-of-the-art racking projects with automated storage and retrieval systems.

By constructing robust, high-rise storage racks directly integrated into the building's structure, we increase storage efficiency and optimize land use while maintaining easy access to the full inventory.









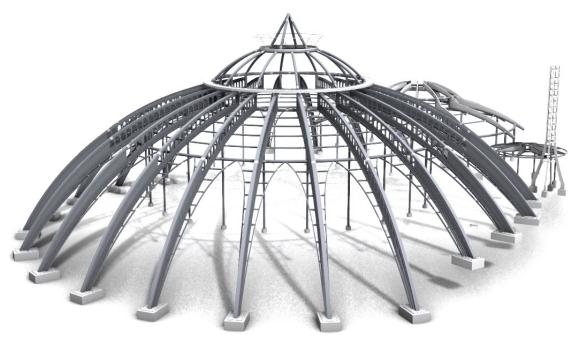


OUR USA PROJECTS





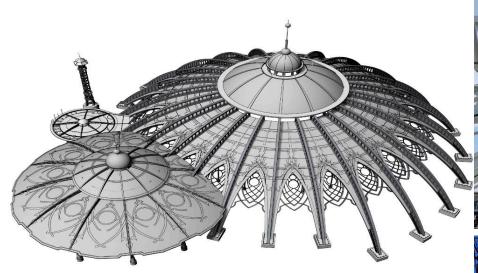




ADAS®Architectural Steel

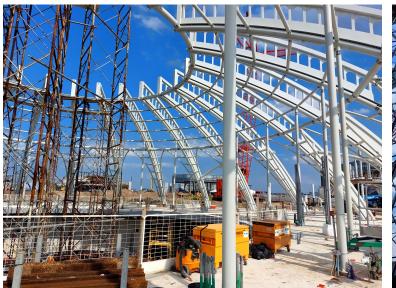
New Project Florida













Year : Ongoing

Scope : Design, Fabrication, Supply

Material : Architectural Steel

Area : 150ton

Main-con : Specialty-Structures & Installations

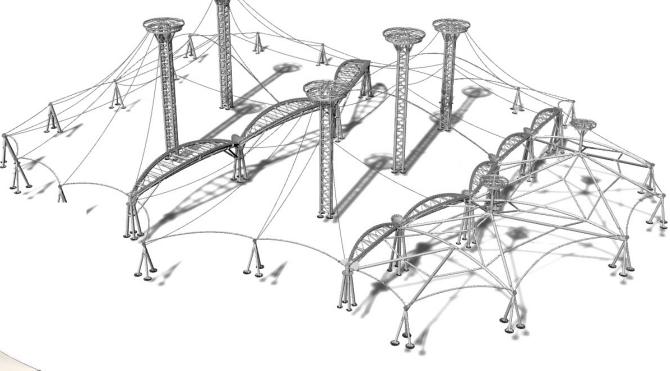






ADAS®Tensile Membrane





ADAS®Architectural Steel

Legoland Florida Miniland

Legoland Florida Miniland











Year : 2021

Scope : Design, Fabrication, Supply, Installation

Material : Single Layer ETFE & PVDF Coated PVC

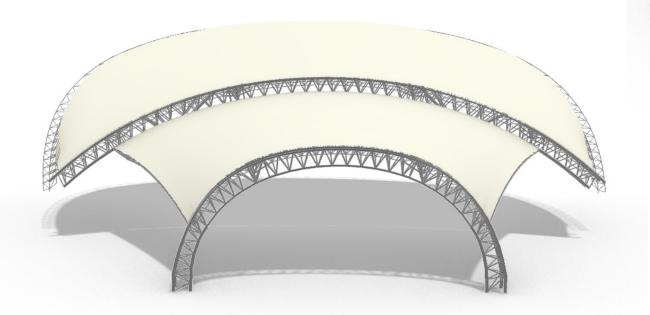
Area : 10,800sqm

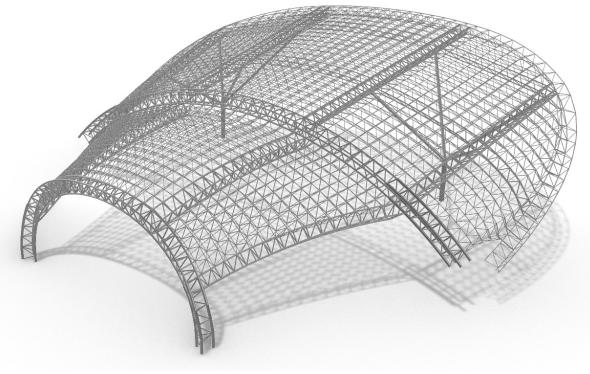
Client : Legoland Florida

OUR USA PROPOSALS



ADAS®Tensile Membrane



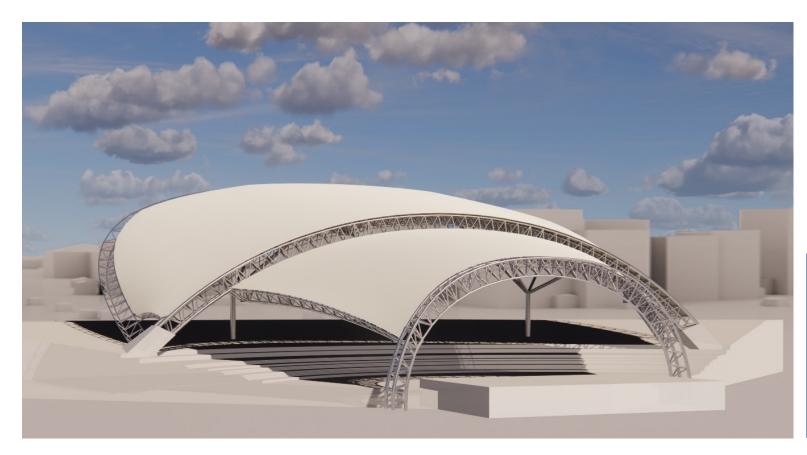


ADAS®Architectural Steel

Amphitheatre Design Proposal

Amphitheatre Design Proposal







Year : 2023

Scope : Design

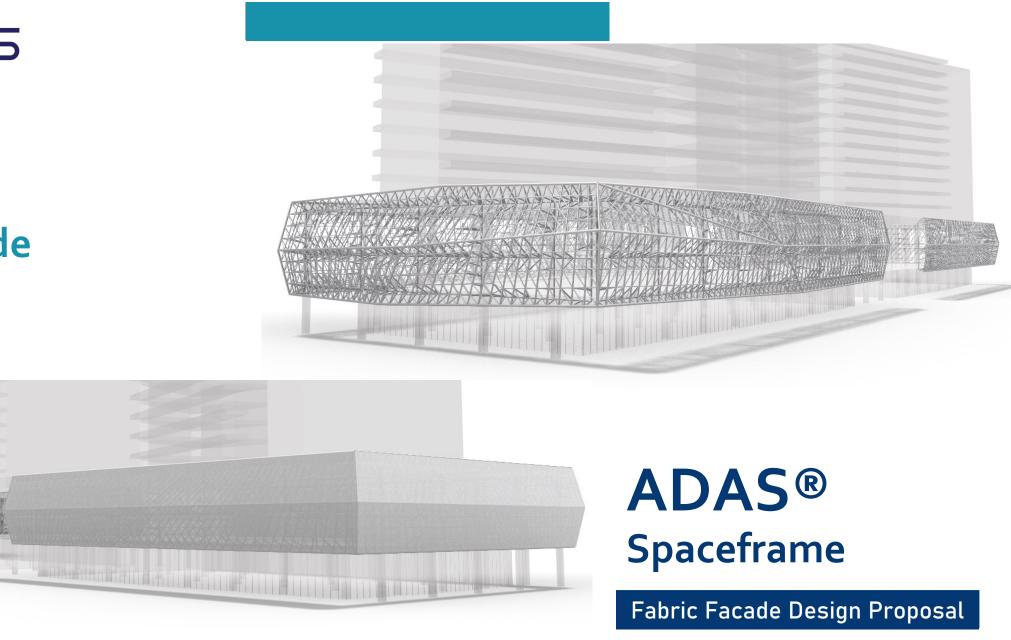
Material: PTFE FGT-800

Area : 9,000sqm

Client : Private



ADAS® Fabric Facade



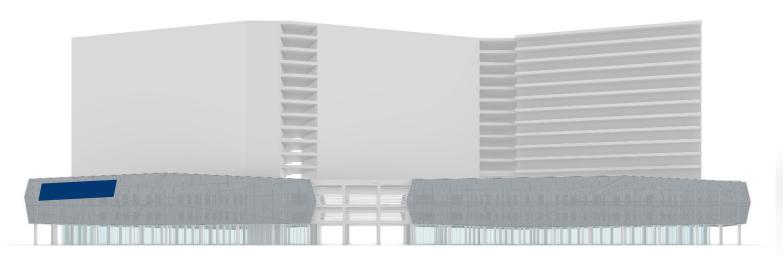
Multimedia Engineering Pte Ltd

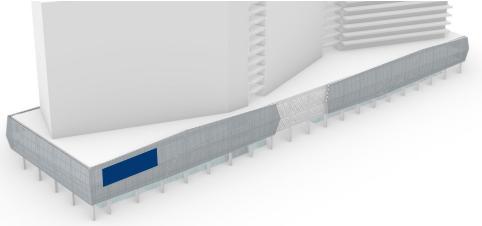
www.me.com.sg

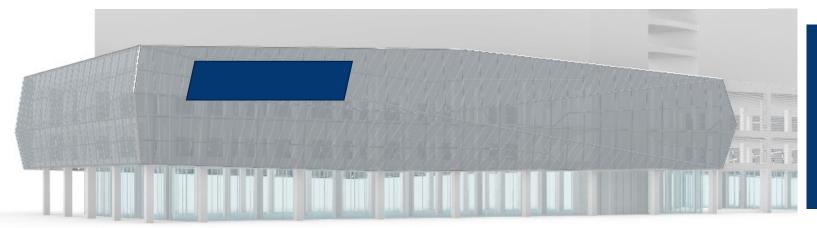
24

Fabric Facade Design Proposal









Year : 2022

Scope : Design

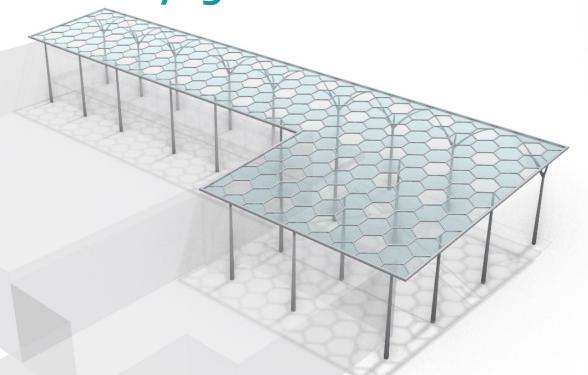
Material : PTFE Mesh

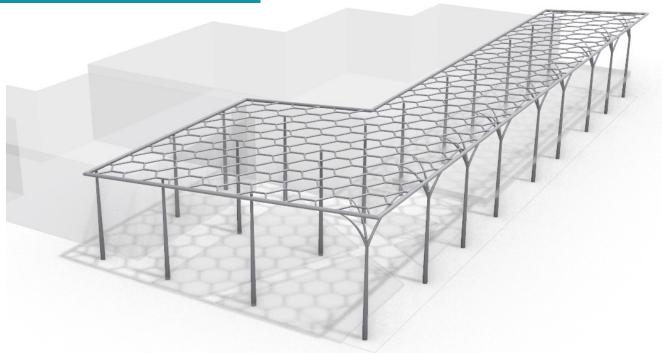
Area : 5,500sqm

Client : Private



ADAS® ETFE Skylight



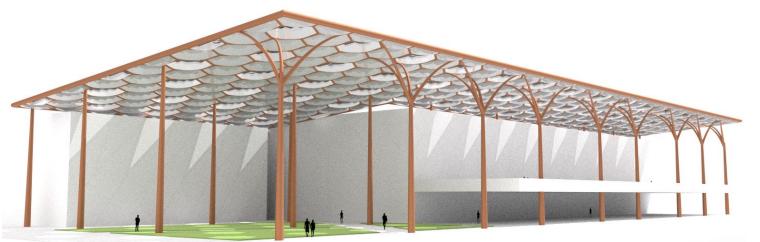


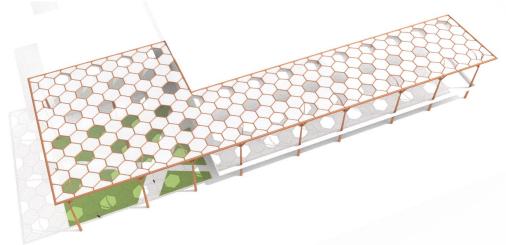
ADAS®Architectural Steel

Canopy Design Proposal

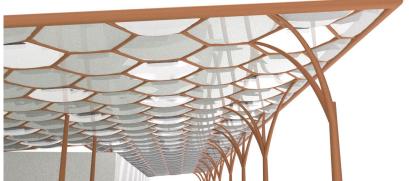
Canopy Design Proposal











Year : 2021

Scope : Design

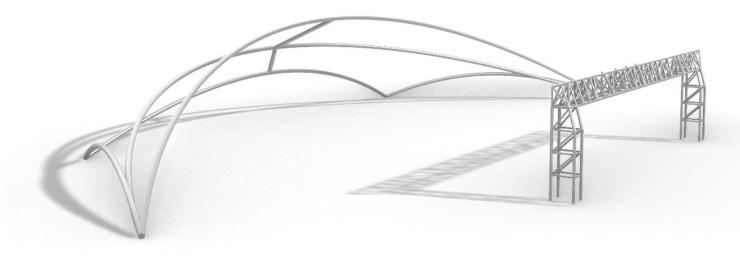
Material : ETFE Cushion

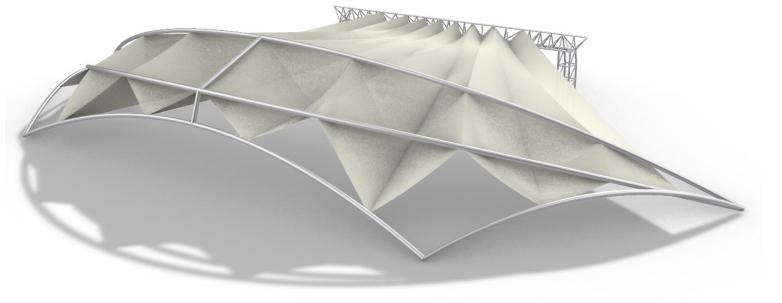
Area : 4,500sqm

Client : Private



ADAS®Tensile Membrane



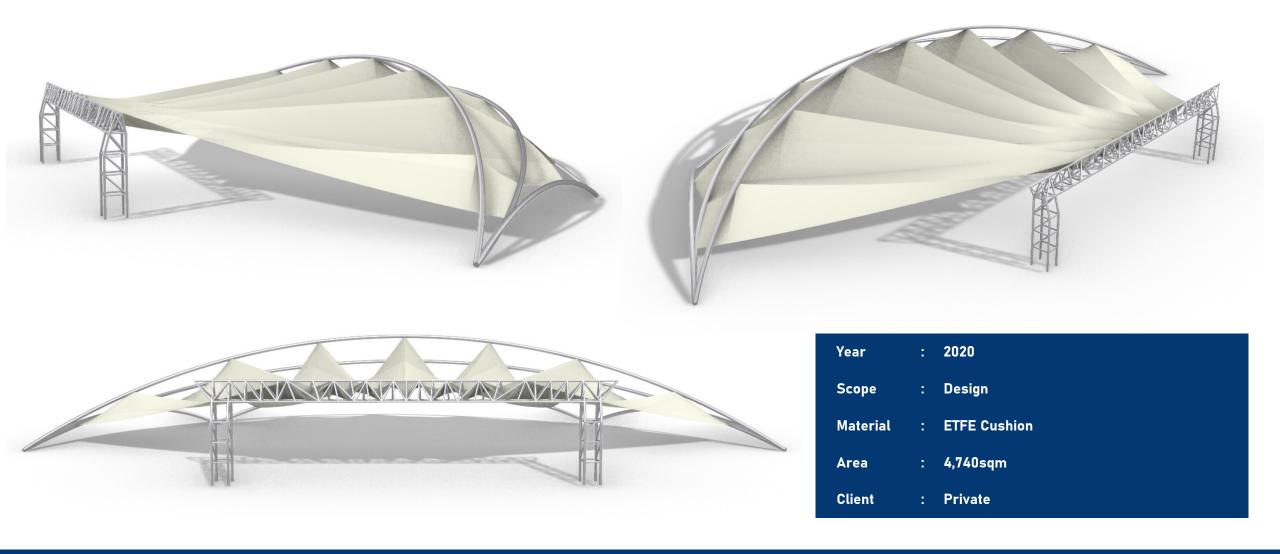


ADAS®Architectural Steel

Amphitheatre Design Proposal

Amphitheatre Design Proposal

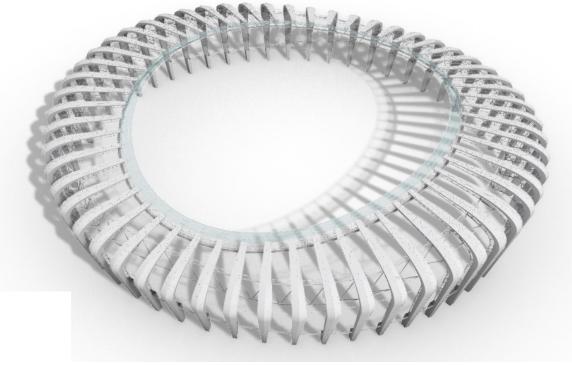


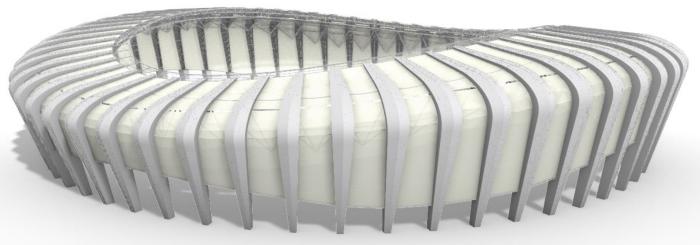


OUR OTHER PROJECTS



ADAS®Tensile Membrane



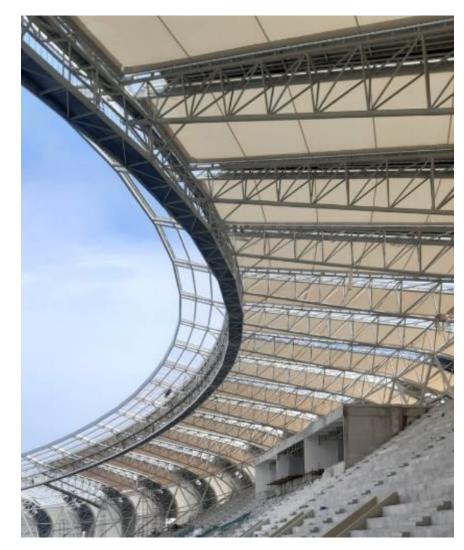


ADAS® ETFE Skylight

Sultan Ibrahim Stadium

Sultan Ibrahim Stadium











Year : 2019

Scope : Design, Fabrication, Supply, Installation

Material : ETFE & PTFE FGT-800

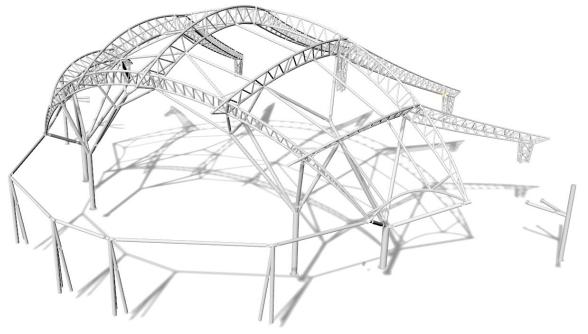
Area : 36,300sqm

Main-con : CGPV Industrial Building System Sdn Bhd



ADAS®Tensile Membrane





ADAS®Architectural Steel

Night Safari Amphitheatre

Night Safari Amphitheatre











Year : 2022

Scope : Design, Fabrication, Supply, Installation

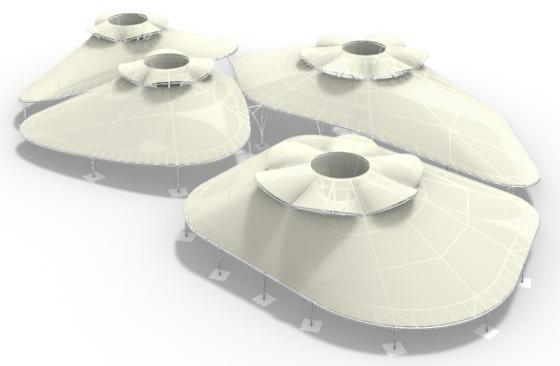
Material : PTFE FGT-800

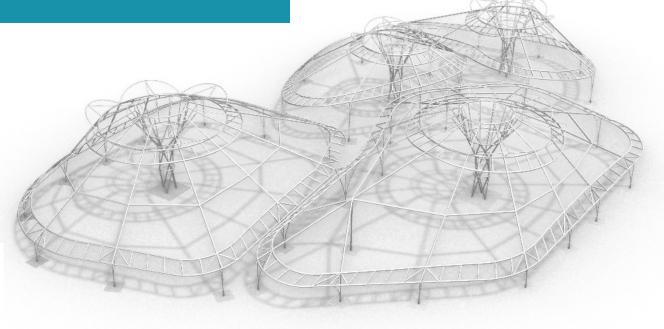
Area : 2,400sqm

Client : Wildlife Reserves Singapore - Night Safari



ADAS®Tensile Membrane





ADAS®Architectural Steel

Legoland Malaysia Miniland

Legoland Malaysia Miniland













Year : Completed

Scope : Design, Fabrication, Supply, Installation

Material Single Layer ETFE & PTFE-coated glass fiber

fabric

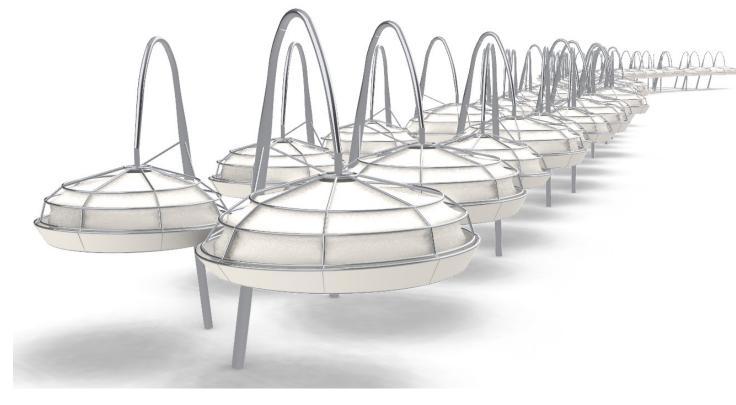
Area : 11,000sqm

Client : Legoland Malaysia



ADAS®Tensile Membrane





Clarke Quay Bluebell Replacement

Clarke Quay Bluebell Replacement







Year : Ongoing

Scope : Fabrication, Supply, Installation

Material : PTFE-coated glass fiber fabric

Area : 3,820 sqm

Client : W'Ray Construction Pte Ltd



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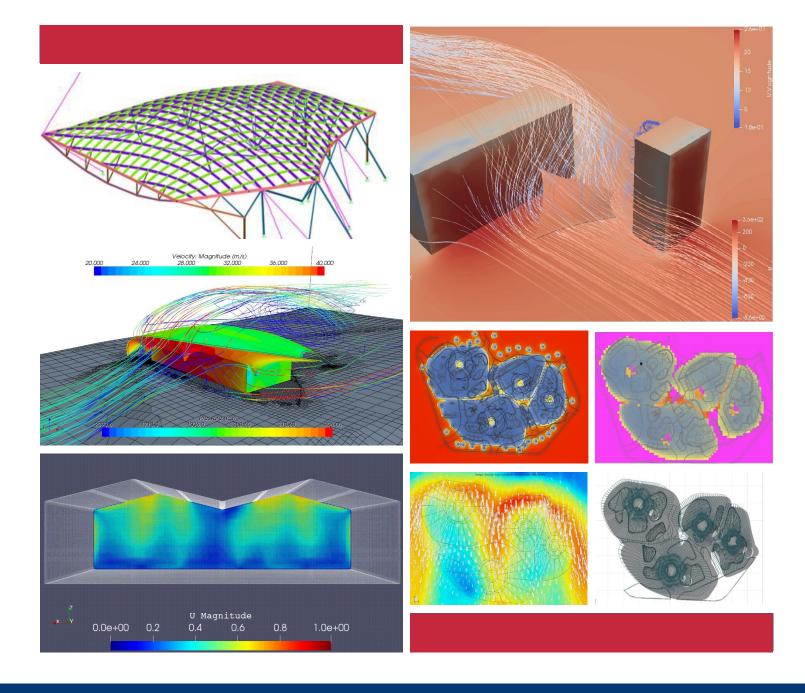
OUR ENGINEERING



ADAS®Software & Analysis

We developed our own software for analysis to guarantee the performance of our design and engineering.

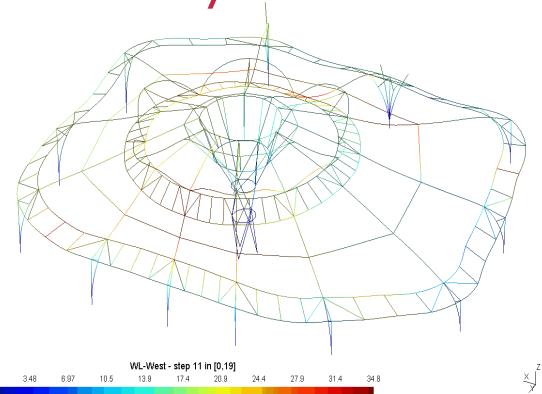
Our analysis includes but is not limited to: advanced engineering, computational fluid dynamics (CFD), wind load, solar radiation, illumination, and comfort.

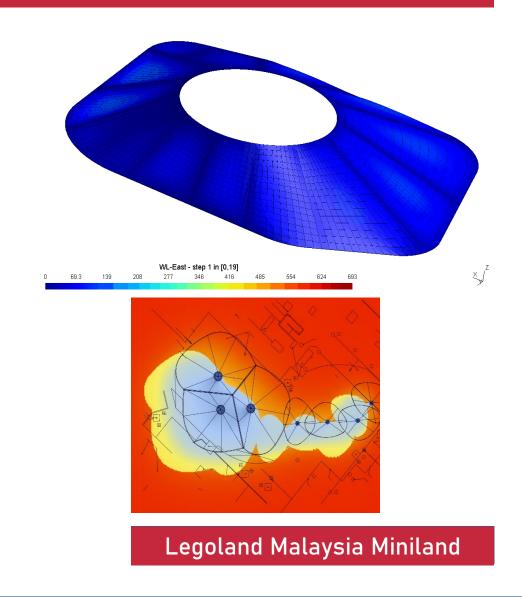




Using Finite Element Method (FEM) for structural and component stress analysis

ADAS®Software & Analysis

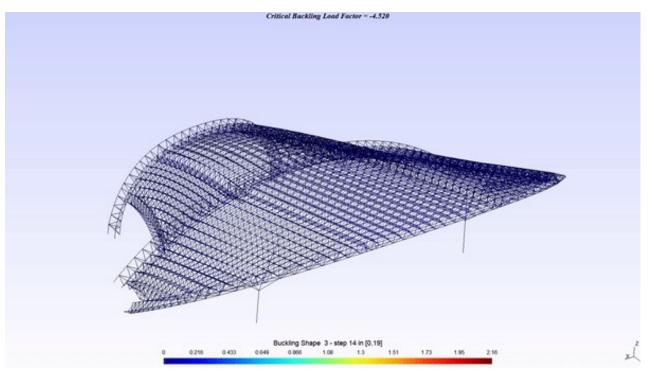


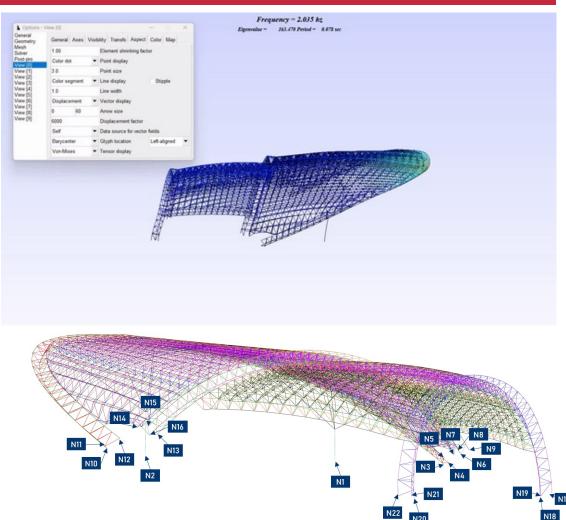




Analysis for Buckling Load, Mode Shape, Reaction Forces

ADAS®Software & Analysis





Amphitheatre Design Proposal

OUR FABRICATION



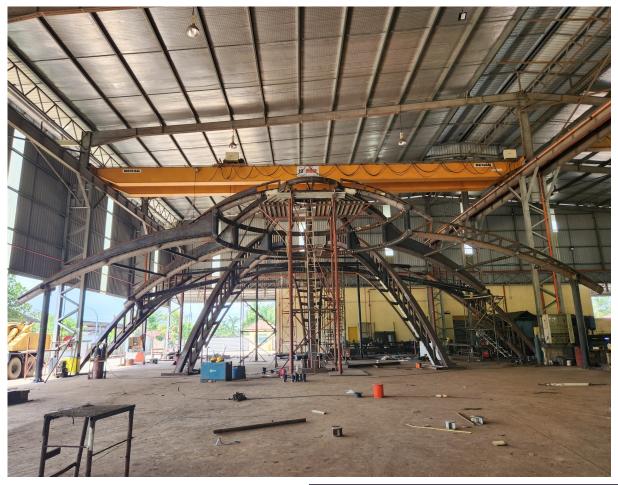


Steel Fabrication Factory







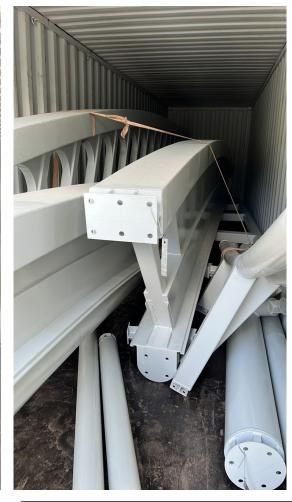


Pre-assembly Checks









Material transportation

