

Project Profile: Specialist



Structural Engineering
Event Engineering

**Mega Arch,
Various Locations**

SWH developed a new, large span aluminium arched roofing system for outdoor events, that has been used at many significant locations.

Client
Total Solutions

In conjunction with Total Solutions, the 'Mega Arch' was developed by SWH- a large- span aluminium arched roofing system for outdoor events.

We undertook analysis to confirm the viability of the system in a variety of span and height configurations.

Extensive three-dimensional analysis and code check all elements of the structure included:

- Temporary load cases considered to account for the sequence of erection.
- Different payload and wind load scenarios considered.
- Checks for wind speed of 25m/s with the structure clad.
- Development of span capacity tables for new Mega Arch ladder beams.
- Analysis and capacity checks on new bespoke extruded aluminium profiles.

This new system have been used successfully used for New Year celebrations in Singapore and Creamfields, UK amongst other well-known events and locations.

