

Certificate No.: - EVENTEC/STR/072
Issued to: - Event Lighting
Product: - Diagonal Box Truss (T3BD* Series)

Product Certificate

We, Event Structural, certify that the product is in accordance with the relevant provisions of the standard codes of Australia, accepted engineering practices, and principles.

Please note that further review will be required if the design is modified in any way. This certificate shall not be construed as relieving any other party of their responsibilities, liabilities, or contractual obligations. This certificate is applicable only for this structure and relies upon all other risk assessments, WHS requirements, and job safety statements associated with the project.

Event Structural is not responsible for the operational safety of the structure and the public. We have been engaged for structural engineering compliance not how the end user engages with the structure, that is solely the responsibility of the client and event organiser.

1. Referred Standard Codes:

- AS/NZS 1170.0 - 2002: Structural Design Actions – General Principles
- AS/NZS 1170.1 - 2002: Structural Design Actions – Permanent, imposed and other actions
- AS/NZS 1664.1 - 1997: Aluminium structures

2. Technical Specifications

Main Tube	50mm x 2mm
Diagonal Brace	20mm x 2mm
Dimensions (W x H)	290 x 290 mm
Materials	Aluminum Alloy 6061-T6

Table 1- Technical Specifications

3. Load Table





Span(m)	Unif. Distributed Load (kg/m)	Centre Point Load (kg)	1/3 Points Load (kg)	1/4 Points Load (kg)
				
1	2500	2500	1250	850
2	950	1300	1000	700
3	750	1200	900	650
4	550	1000	750	560
5	400	800	630	440
6	250	700	570	385
7	200	600	500	330
8	150	500	400	280
9	120	400	370	245
10	95	350	320	220
11	80	320	270	190
12	70	300	250	175

Table 2 - Load Table

*Please note that these are idealised loading conditions and the users should consult a structural engineer to re-analyse the truss based on the actual loading conditions for the specific application.

4. Metal Component Analysis

Test Method: Acid digestion, analysis was performed by ICP-OES

Test Item	MDL	Result		6061-T6 brand
Metal Component Analysis (% = percentage by weight 0.0001% = 1 mg/kg MDL = Method Detection Limit N.D. = Not Detected (< MDL))	0.001%	Manganese (Mn)	0.060%	≤0.15%
	0.001%	Copper (Cu)	0.199%	0.15%-0.4%
	0.001%	Zinc (Zn)	0.042%	≤0.25%
	0.001%	Magnesium (Mg)	0.875%	0.8%-1.2%
	0.001%	Iron (Fe)	0.303%	≤0.70%
	0.001%	Silicon (Si)	0.430%	0.4%-0.8%
	0.001%	Titanium (Ti)	0.021%	≤0.15%
	0.001%	Chromium (Cr)	0.069%	0.04%-0.35%
	0.001%	Impurity	0.045%	≤0.15%
	0.001%	Aluminum (Al)	97.956%	--

Table 3 - Metal Component Analysis

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