

Certificate No.: - EVENTEC/STR/251
Issued to: - Event Lighting
Product: - Diagonal Box Truss (T3BLSPD* Series)

Product Certificate

We, Event Structural, hereby certify that, subject to the limitations specified herein, the structural design complies with the relevant Australian Standards, accepted engineering practices, and structural principles.

Any modification to the design will require further engineering review and may render this certification void. This certificate shall not be construed as relieving any other party of their respective responsibilities, liabilities, or contractual obligations. Furthermore, this certification applies exclusively to the specified structure and is contingent upon the implementation of all project-related risk assessments, Work Health and Safety requirements, and Safe Work Method Statements.

Event Structural assumes no liability for the operational safety of the structure or public safety. Our scope of work is strictly limited to structural engineering compliance; the management of end-user interaction and operational conduct remains the sole responsibility of the client and the 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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