

TSE

Technologies in Structural Engineering P/L

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Transtage Staging Equipment
1/364 Park Road
Regents Park, NSW 2143

Re: Load Capacity of Transtage Premiere Staging

Dear Sir,



A series of tests on five Transtage Premiere staging units measuring 1000x1000x420 mm in height were undertaken for your company in January 2013. The tests involved the application of a vertical uniformly distributed load to the horizontal surface of each unit up to a maximum deflection of 90 mm. The results are presented in full in TSE Report 248, "Laboratory Investigation of the Load Capacity of Transtage Premiere Staging Platforms", and the load capacities are summarised below.

| Loading Condition | Transtage 1000x1000x420 mm aluminium and plywood stage unit |
|--|---|
| Serviceability Limit State load capacity | 10.5 kPa |
| Ultimate Limit State load capacity | 18.7 kPa |

The vertical load capacities listed above were based on the characteristic capacity of the staging units at the first sign of non-linear deformation (for the serviceability limit state), and at the maximum load capacity (for the ultimate limit state condition). It has been assumed that no dynamic or lateral loads are applied to the units concurrent to the vertical uniformly distributed load. The capacities have been factored using a material performance reduction factor of 1.3 based on short-term crowd loading of the units. The capacities listed above are well above the suggested design load of 5.0 kPa provided within AS1170.1 for crowds within a public assembly area.

Yours faithfully,



Dr. Stefan Bernard BE, PhD
Director, TSE P/L