

By Email
To Whom it May Concern

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Dear Sir/Madam

1 Alfred Street, Sydney – Tower B
Fire Safety Engineering – Ballroom egress width

This letter explains the fire engineering solution associated with the ballroom and pre-function space at Level 3 of the Tower B.

The population on Level 3 would be limited by the egress width (if not limited to a lower number by the provision of amenities or area). In accordance with Clause D1.6 of the BCA, the maximum population of 320 is allowed for Level 3 which is served by three fire stairs of at least 1m egress width each. The proposed design population for the ballroom and pre-function floor (i.e. Level 3) will be over 320 occupants, as shown in Option 1 and Option 2 below, which will be addressed as a performance solution.

	Aggregate exit width	BCA Population	Option 1 Design Population	Option 2 Design Population
Level 3	3m	320	400	> 400 (counted based on Table D1.13 of BCA)

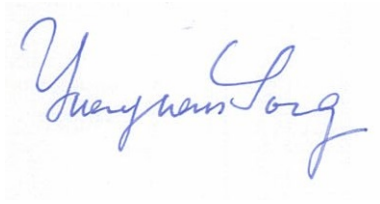
For Option 1 design population, the proposed alternative solution will demonstrate that the overall egress time for people on the fire floor to enter the fire exit is not longer than a DtS compliant case. The increased queuing time required for the additional 80 persons on this floor will be addressed by the enhanced detection on this floor.

For Option 2 design population, a performance based smoke control system will be provided to the ballroom and pre-function area to retain the tenable conditions during fire evacuation from these areas.

The reduced egress width on Level 3 of Tower B has been included in the submitted Fire Engineering Brief Questionnaire (FEBQ) dated 2 December 2016. As per the discussion in the FEBQ meeting on 1 March 2017, the Fire & Rescue NSW was generally satisfied with the proposed alternative solutions above.

The performance solution described above addressing the egress width for the Level 3 ball room and pre-function space will also be documented in the subsequent Fire Engineering Report as part of the formal fire engineering approvals process in NSW.

Yours faithfully

A handwritten signature in blue ink, reading "Yuanyuan Song". The signature is written in a cursive, flowing style.

Yuanyuan Song
Engineer