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Sydney Opera House – Concert Hall

Letter of Support

Memo no. M122899/59

Letter of Support

A key element in the renewal project for the Concert Hall in the Sydney Opera House is the acoustic upgrade of the hall with emphasis on classical concerts. For this purpose, a number of acoustic measures have been developed and planned during the last years.

A relevant part of these measures has successfully been tested on site during rehearsals and concerts. During the past 12 months, the proposed measures have been further developed and engineered in detail while it was possible to preserve the functionality of all relevant acoustic measures.

The most important of these acoustic measures are:

- Flexible arena riser layout on stage
- Reduced stage height above stalls floor
- Double curved reflectors above stage
- Proscenium reflectors in front of the stage
- Reflectors at the side walls above stage, stalls and lower circle
- Improved surface and orientation of box fronts in the stalls area

- Inclined reflector surface at top of the box fronts around stage and in the stalls
- Heavier cladding for stage side walls
- Diffuse structuring of walls behind boxes
- More flexible and comprehensive solution for the deployment of additional absorption for fully or partly amplified concerts

With the planned acoustic upgrade project the following acoustic improvements will be achieved:

- Improved contact for musicians on stage and better perception of own instrument, more homogeneous perception for the conductor
- Slightly improved acoustic support for double bass players
- Improved contact among singers on the choir seats, stronger acoustic support for a choir behind the orchestra and better contact between choir and orchestra
- Better balanced orchestra sound and dispersion of strong and focussed side wall reflections for seats in the stalls
- More precise and transparent orchestra sound for seats in the lower circle replacing the existing perception of a frontally incoming reverberation cloud, improved perception of envelopment and better support of dynamic changes
- Reduction of the acoustically perceived distance to stage for seats in the upper circle
- Improved envelopment for seats in the side boxes
- Improvements in sound quality for performances with electroacoustic support

Therefore, Müller-BBM fully supports the currently proposed renovation scheme.

Gunter Engel
Project Leader