

## Deck collapse

The Coroners Inquest into the deck that collapsed at Ascot in November 2008 that tragically led to the death of one of the guests concluded in mid October 2009.

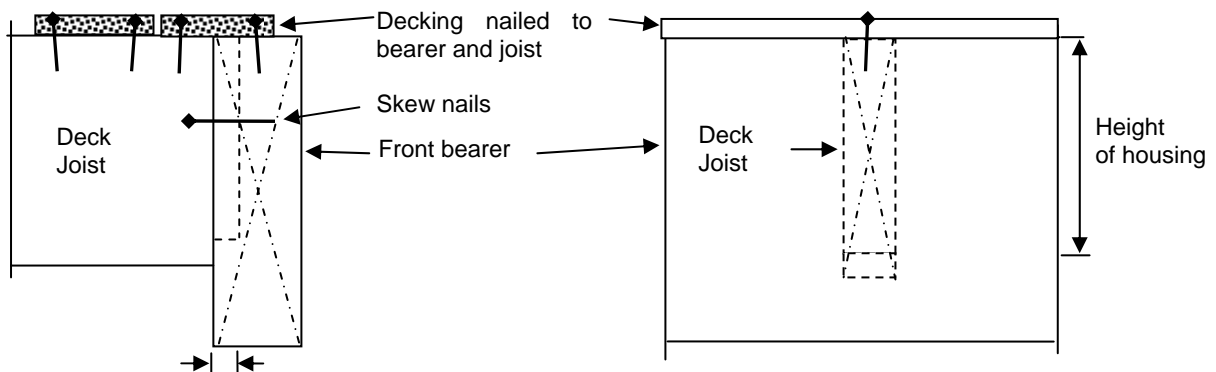
Timber Queensland's Manager –Timber Application and Use, together with a number of other experts undertook inspections just following the collapse and prepared reports for various parties. Timber Queensland's inspection and report was undertaken for BCC who subsequently provided it to the Police as a part of their investigations. Fortunately, the majority of the expert reports reached very similar conclusions as to the cause of the collapse.

In his summary at the conclusion of the Inquest, the Coroner advised that he would be releasing preliminary recommendations prior to completing his final report and findings.

Whilst not wanting to pre-empt the Coroners findings, the consensus as to the cause of the collapse can be summarized as follows:-

- Extensive corrosion had occurred over the 90 year life of the deck to the nails that fixed the joists outer end to the outer bearer
- The joists which were originally coggged into the bearer with approximately 20mm bearing, had separated from the bearer over time (for whatever reason) such that there was minimal bearing (just a few millimeters in some cases) just prior to the collapse
- The significant load (but not overload) that was applied to the joists during the function being held at the time was sufficient to dislodge one or a number of these joists from the bearer and that this then led to an 'unzipping' of all joists with the deck collapsing away from the house like a 'trap door' opening.

The following sketch indicates the original construction detail prior to the joists becoming separated from the bearer.



All Timber Queensland Members should note this potential failure issue with the construction method used and should include it with all the other issues (hand rail sizes and fixings, timber decay etc) in respect to any inspections undertaken on decks in the future.

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