



LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON ECONOMIC DEVELOPMENT AND TOURISM
Mr Jeremy Hanson MLA (Chair), Mr Michael Pettersson MLA, Ms Suzanne
Orr MLA (Deputy Chair)

Submission Cover Sheet

Inquiry into Building Quality in the ACT

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The Committee Secretary,
Standing Committee on Economic Development and Tourism,
Legislative Assembly for the ACT

Sent by Email: LACommitteeEDT@parliament.act.gov.au

Submission to the Inquiry into building quality in the ACT

By way of background we are the owners of [REDACTED] [REDACTED] Gungahlin ACT) and our submission to the Inquiry is in relation to the design safety standards and compliance of the glass balustrades installed on our apartments balcony and an unsafe; and shoddy approach to 'fixing' an issue in relation to roof top thermal expansion control.

In relation to the safety of the balustrade our concerns set out below are also reflected by a number of many other property owners in the complex. We have provided a number of photographs to assist, with Photo 1 of the two building towers of the [REDACTED] completed in early 2018.

Balustrade Safety and Design

The balcony glass balustrades installed on each floor of both buildings is typically set out away from the building facia, see Photos 2, 3 & 4. The gap between the balcony edge/facia and the glass balustrade is very excessive and is the primary issue of concern (see Photos 5 & 6), although missing or loose balustrade stanchion mounting bolts were also an issue, (see Photo 7). We (the owners [REDACTED] have made requests to the builder [REDACTED] for detail of the balustrade design and approval process, but have only received verbal assurances that the balustrades and design are 'approved'.

A number of residents spoken to have advised that they are reluctant to use the balcony area of their apartments due to the safety of the balustrades and in some cases will not let small children (including toddlers) and pets onto to the balcony for fear of falling or entrapment in the balustrades gap. Many owners have also stated that had they been aware of the balustrades safety, they like us would not have gone ahead and purchased the apartment. Regrettably we only became aware of the balustrade safety issue at the time of the first inspection which was about one month prior to the mandatory legal settlement date. We understand that the body corporate Executive Committee for the complex is investigating possible options to mitigate or fix (at the owner's expense) the balustrade gap.

Specifically, the balustrade safety and design issues relate to an unusually excessive and consistent gap between the facia and the glass balustrade panel. From our understanding the balustrade should comply with the performance requirements of the National Construction Code (NCC), Part 3. We have searched for alternate guidance relating to maximum distances between a surface/floor level and the

bottom opening (outwards away from a floor) of a balustrade, but the only (and nearest) guidance found is in the *NCC at Part 3.9.2.3 Construction of barriers to prevent falls*;

(c) Openings in barriers (including decorative balustrades) must be constructed so that they do not permit a 125 mm sphere to pass through it and for stairs, the opening is measured above the nosing line of the stair treads.

In application it would appear that Part 3.9.2.3 (c), is focused at horizontal distances and not the setback distances (outwards from the building line) as with the Infinity's balustrades, however in the absence of any other standard or guidance we have used this section as a performance measurement. We have taken a number of measurements along the balcony and found gaps between the glass balustrade and the building facia ling that regularly exceed the prescribed 125mm; see Photo 5 and 6 as examples. As we understand the ACT construction legislation, a builder (in addition to legislative compliance requirements) should also consider undertaking a risk assessment of a proposed design or system of work as an integral part of the construction process. This appears to be absent in relation the design and safety of our apartments balustrade.

With the current balustrade design we believe there are a number of potential serious and dangerous scenarios that could result in serious or fatal injury. For example:

- a. a glass wine bottle (diameter of say, less than 100mm) could be easily and accidentally knocked over, roll and drop through the balustrade openings, falling around 70 metres with catastrophic effect onto someone in the busy public thoroughfare below (see Photo 6 for comparison), which incidentally provides the only access/egress to the adjacent [REDACTED] child care centre (top right in Photo 3) as well as the main pedestrian access and egress to both [REDACTED];
- b. Another possible scenario is an entrapment of body parts. A small child *may not* necessarily fall through the balustrade gap, however they certainly may get a body part entrapped between the glass balustrade and building facia edge. In this scenario it may be necessary to remove the glass balustrade panel (a difficult and high risk procedure) to free the person; and
- c. One other scenario, is the very real potential for small pets such as cats and small dogs (there are a number currently residing in the complex) to fall fatally through the balustrade gaps.

Unfortunately the building class of this structure does not require the balustrade to comply with *Australian Standard AS1428 'disability access code'* which is more inclusive in its coverage of gaps between balustrades and floors. Under AS1428 the balustrade gap of this width would be prohibited.

It is totally incomprehensible why this balustrade design was chosen by [REDACTED] and subsequently internally certified/approved. However what is more unfathomable is why a very simple risk assessment wasn't conducted of the gap between the

balustrade and the fascia at the design stage? Such a risk assessment (e.g simple as asking 'what if') would certainly have found inherent risks with the design. We can only imagine that [REDACTED] internal certification and design approval was not functioning or failed. Either way, there appears to be a lack of due diligence in the construction. As owners we feel the balustrade design, with the excessive gap to be very unacceptable and has therefore introduced an unnecessary hazard and risk that will be very costly as the balustrade rectification costs to mitigate the risk of objects and people from falling/dropping through the gaps has now been transferred individually onto all 426 apartment property owners at the [REDACTED].

Thermal Expansion Fix Costs Passed onto Property Owners

The second issue we would like to inform the Inquiry of relates to an unsafe and somewhat temporary fix to an unusual problem at the [REDACTED]. The Inquiry may recall that in 2017 the 27 story Wayfarer apartment complex in Belconnen [REDACTED] had a number of unusual disturbances reported by residents involving persistent loud noises heard inside their apartments (<https://www.canberratimes.com.au/national/act/belconnen-wayfarerbuilding-resident-moves-out-after-months-of-disturbances-20171023-qz6498.html>). It has been reported that the causation was subsequently found to be thermal expansion of the Wayfarers roof. As a solution, [REDACTED] had several tones of river pebble and rock deposited by helicopter onto the rooftop of the Wayfarer building to act as a type thermal insulator.

Curiously some 12 months later as part of the final stage of [REDACTED] construction the same thermal dampening strategy (apparently also a somewhat of an afterthought) [REDACTED]. The issue of thermal expansion of the concrete rooftop of the [REDACTED] may or may not be an issue, however several tons of river pebble and rock have created a new problem and hazard. Although we initially didn't believe it until witnessed, the resident local crows/ravens appeared to believe the smooth round river pebbles (approximately 30 to 50mm in diameter) placed on the [REDACTED] rooftop were some type of edible nut or egg. However once the bird had pick up the pebble and realised it was not edible they quickly dropped the pebble. We subsequently found several rocks and pebbles mysteriously deposited on our balcony area and other residents also reported finding them on their balconies and ones were also found on the ground surrounding the buildings. The causation was identified and after complaints from the residents [REDACTED] installed nylon netting across the building's rooftop to prevent the crows picking up the pebbles. This very amateurish and unprofessional 'fix' lasted about 3 weeks until the very windy weather conditions in mid-winter this year ripped and blew the netting over the side of the building (see Photo 8 and centre of Photo 4). When asked why nylon, and not more durable and long lasting metal (chicken wire etc) mesh or netting was used, the [REDACTED] representative indirectly conceded cost was a major component. It seems that other solutions such as an insulating membrane or sprayed adhesive (onto the pebbles) were not considered. So once again poor design, planning and penny-pinching by the construction firm has resulted in a quick fix on the fly solution which will result in the transfer of (in the medium to long-term) rectification costs onto the buildings owners/residents. As a result of this amateurish approach by [REDACTED] the nylon netting will need to be replaced in a few months once the sun, wind and other environmental conditions cause the netting to deteriorate and shred. Rectification cost will be carried by the building's owners. This may then also give the crows an opportunity to resume their

interest in the pebbles, with the alarming potential of individuals at ground level being struck by a high velocity object dropped from 70 plus metres. Once again this is very unprofessional and a clear demonstration of a lack of proper thought and investigation into the design, planning and risk management, and as a result a subordinate, but substantial cost transfer to property owners.

As a side note, we subsequently made a complaint about the balustrade and netting problems to Access Canberra's Building and Construction Services. In late August 2018 a team of Inspectors from the Construction Occupations Registrar visited and inspected the balustrade of our property, taking notes and photographs of balustrade and roof netting. As of the date of writing this submission to the Inquiry we have not had any follow up response or report back from Access Canberra's in relation to the Inspectors visit.

In summary, we do *not* believe the above issues are anomalies or one offs, but part of a systematic failure driven a corporate culture of complacency, (enhanced by a very captive internal design and certification regime) and driven by the need for a quick buck. Lamentably in our case and we suspect many others, the cost of this failure is transferred onto us the property owners and therefore, subsequently as the Inquiry would appreciate; the community.

Finally, we hope the Committee may find our submission useful in its current Inquiry into building quality in the ACT and we would like to thank the Committee for the opportunity to make this submission. We would like to offer for consideration the following recommendations:

1. Obligation placed on the builder; in the absence of any legislative requirement, standard or guidance, there shall be a proper investigation of a design component whereby there is potential for an object to fall in excess of 2 metres. This should be performance based and trigger a mandatory and documented risk assessment that must be approved by the projects certifier.
2. ACT Government; the ACT through its representative (Director-General Environment, Planning and Sustainable Development Directorate) make representations to the Australian Building Codes Board to expand Part 3.9.2.3 (c) of the National Construction Code to investigate and make specific recommendations on the maximum safe distances a balustrade can be set out and way from a floor or balcony, specifically taking into consideration balustrades in high rise developments.
3. Obligation placed on the builder; a mandatory and documented risk assessment must be conducted and approved by the project certifier at the design stage and prior to the implantation of a proposed control measure whereby loose material in any form is proposed to be used and by its nature the material may create a hazard through unintentional movement, including falling.

Yours sincerely
Peter & Suzanne Hopner
22 October 2018

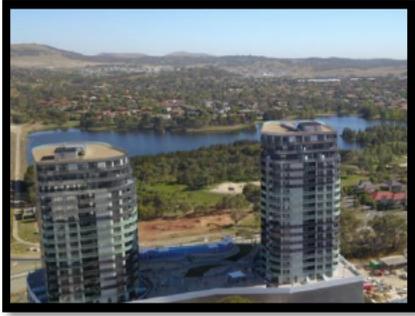


Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8