



BUILDING SYSTEM

Building regulation advisory note

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Related	

Safety barriers in aboveground car parks – coroner’s recommendations

The purpose of this circular is to advise consent authorities of the steps to be taken to ensure that pedestrian and vehicular safety barriers in car parks built before 1989 are inspected and any defects remedied where proven to be necessary. This circular is being issued in conjunction with the Department of Local Government.

Introduction

Following a fatal accident in 2006, which occurred when a person was attempting to park a car in a Sydney multi-storey car park, an inquest was held with the Deputy State Coroner making a number of recommendations regarding the compliance of car park safety barriers with Australian Standard (AS) 1170.1 (1981).

Until 1989, paragraph 3.3 of the Standard had a note to advise the following:

NOTE: Special consideration should be given to the design of kerbings and guard rails to alleviate possible vehicular impact on the structure and it should be noted that the impact forces from runaway vehicles on ramps can considerably exceed the loads specified above.

The note was removed in the 1989 edition of the Standard.

Non compliant safety barriers

The inquest revealed that until the note was removed, a number of professionals employed in both private and local government sectors interpreted the Standard to mean that it allowed the use of kerbs, guardrails and wheel-stops, instead of the higher standard required of safety barriers.

In contrast, the Deputy Coroner formed the view that the Standard accompanied by the note called for special consideration to be given to enhancing the prescribed safety requirements, rather than the reverse.

In light of the above, the Deputy Coroner found that the interpretation of the note in the Standard between 1981 and 1989 was flawed where it resulted in the reduction of the standards of safety for barriers in car parks. As a result there is a danger that there may be a latent deficiency in

other aboveground car parks in NSW designed pre-1989.

With respect to the car park in question, the inquest also revealed that the concrete wheel-stops constructed in the parking bays may not have been properly fixed to the concrete slab, and that they were neither regularly inspected nor sufficiently maintained. The inquest also revealed that the steel barriers installed in the car park, despite their superficial appearance of considerable strength, were not sufficient to meet Australian Standards of safety for pedestrians, let alone moving motor vehicles.

Action required of consent authorities

In line with the Deputy Coroner's recommendations, consent authorities are requested to write to all car park owners and operators in their local government areas:

- notifying them of the potential flaw discovered in the interpretation of the note to paragraph [3.3] of the 1981 edition of AS 1170.1, in that the note did not allow a lessening of the standard required of safety barriers, but on the contrary required an enhancement of the standard required of pedestrian and vehicular safety barriers in car parks
- putting them on notice that reliance on wheel-stops and other devices as the primary safety barrier in aboveground car parks may place users at risk. (Owners may wish to seek legal advice about their legal liabilities for accidents.)
- strongly encouraging owners and operators of car parks (with car-parking levels more than one metre above the adjacent ground level) to have the car park safety barriers for pedestrians

and vehicles inspected by a qualified engineer to ascertain the structural adequacy of the barriers and identify what measures, if any, need to be implemented so that the car park barriers are structurally sufficient to withstand the actions to which they may reasonably be subjected

- requesting the results of the inspection to be communicated to the consent authority together with any action implemented by the owner to remedy the situation if proven necessary.

Council-owned car parks

With respect to council owned car parks built between 1981 and 1989 that were subject to AS 1170.1 (1981), councils are strongly encouraged to cause inspections to be conducted to ascertain the structural adequacy of pedestrian and vehicular safety barriers, and identify what measures, if any, need to be implemented so that the car park barriers are structurally sufficient to withstand the actions to which they may reasonably be subjected.

Upgrading, repair and maintenance of car parks

Consent authorities will be familiar with the provisions of section 121B of the *Environmental Planning and Assessment Act 1979* that are available to address issues concerning the upgrading of existing buildings. In this context, section 121B order no. 4 is available where it is necessary 'to repair or make structural alterations to a building.'

However, in considering the issue of an order, it needs to be recognised that it may not be reasonable or practicable for all existing car parks to achieve standards required by the current Australian Standard as some existing structures may not be able to be upgraded to current standards. Some situations will require a flexible approach in which existing structural capacity, economic and social impact factors are considered in a balanced manner to achieve the required outcome of providing for the safety of car park users.

Further enquiries

Enquiries by consent authorities and others regarding the content of this circular can be made to the Building Systems Unit of the Department of Planning on (02) 9228 6529.

Note: This and other Department of Planning Building Circulars are published on the web at <http://www.planning.nsw.gov.au/planningsystem/brians.asp>.

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Important note

This circular does not constitute legal advice. Users are advised to seek professional advice and refer to the relevant legislation, as necessary, before taking action in relation to any matters covered by this circular.

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