PROFESSIONAL:
Inspections and building safety

The recent collapse of a balcony in Victoria and further information on the potential for the collapse of roofs illustrate the need for council authorised officers to be vigilant and observant.

The purpose of this notice is to increase awareness of the risks associated with these structures and of the need to take action where there is evidence of them becoming unstable.

DISCUSSION
Balconies and roofs are especially critical structures because of the loads that they support and the potential for serious injury. For various reasons they can become unstable over time and council inspection policies should identify these as being structures of significant risk.

Balconies
Poor maintenance of exposed balconies can result in rotten timbers, rusted steel brackets and bolts, and severely spalling concrete. These are all signs of significant degradation of the supporting structural framing and are cause for concern. When assessing the risk of collapse, factors to consider are:

• The potential for significant crowd loading on the balcony
• Cantilevered balconies have little redundancy and collapse is likely to be without warning
• What is underneath and how far is it likely to fall?
• The balcony may be sound but is the balustrade secure and could it prevent someone from falling through it?
• What is the condition of any verandah supported by the balcony - could the collapse of one lead to the collapse of the other?

Roofs
The most obvious sign that a roof may be unstable is a sagging ridge line and this can be readily detected from a distance such as just driving by. Other signs that require closer inspection are walls moving outwards at the top and movement in cornices. There are many reasons why a roof may become unstable:

• Nailplates separating from trusses
• Termite attack
• Contractors removing structural framing members to get services in
• Leaks degrading the timber or steel framing
• Poor initial framing and workmanship by the carpenter/builder

Because of the nature of roof spaces they are rarely accessed and this means that defects can go unnoticed for years. Bringing an apparent defect to the attention of the building owner can enable remedial action to be taken before it gets prohibitively expensive and before there is a sudden collapse.
What to do?
The building surveyor needs to carefully assess the risk and determine a suitable course of action.

If the level of risk does not warrant urgent action then a first step would be to contact the building owner and advise of the observations and the potential for serious structural failure unless the matter is attended to. A report could be sought on the condition of the structure from the owner’s structural engineer.

More urgent action may be required if the building appears to be in imminent danger of collapse and this could involve both contacting the owner and also issuing an emergency order under Section 69 of the Development Act to make the building safe. Options to consider are:

- cease occupation of the structure
- temporary propping
- barricading around the base of the structure to prevent public access under it
- obtaining engineering advice on making the structure safe

As soon as possible photographs should be taken to record the state of the structure and substantiate the observations made.

Further information
Planning SA
136 North Terrace Adelaide
GPO Box 1815 Adelaide SA 5001
Telephone: 8303 0600
www.planning.sa.gov.au/go/building

Contact:
Don Freeman, Manager
Building Policy Branch
Level 4, 136 North Terrace Adelaide SA
Telephone: 8303 0602
ISSN: 1443-8038