



# ADVISORY NOTICE

## BUILDING

28/04

*Advisory Notices are issued to assist in the interpretation of the Development Act 1993*

*December 2004*

## PROFESSIONAL PRACTICE:

### Roof trusses – nail-plate connectors

#### BACKGROUND

Independent research work undertaken by structural engineer John Goldfinch, of Koukourou Engineers, into failures of timber nail-plate roof trusses has indicated a disturbing number of failures where the nail-plates have worked their way out of the timber members such that they are no longer effective as load carrying components.

These instances are predominantly associated with a particular form of nail-plate that is no longer produced and a particular fabricator who is no longer in existence. These two points provide comfort that new buildings are not involved, and that it only applies to existing buildings constructed pre-1997. Even then, not all pre-1997 buildings with nail-plate roof trusses will be affected but it is impossible to know which ones have the particular nail-plate that could be susceptible to failure.

As a precautionary measure it is suggested that building surveyors take the following action.

#### DISCUSSION

Section 53A of the Development Act enables a relevant authority to require certain work to be done, to ensure that the building is safe, when considering an application. However, this provision can only be applied to buildings constructed prior to 15 January 1994.

This leaves a gap of 3 years where the ability to address the issue is limited.

Accordingly, when considering an application for an alteration, or addition/extension, to an existing building (constructed pre-1997) it is suggested that the building surveyor:

- Ask for information on the date of construction.
- If the building was constructed prior to 15 January 1994, **or**, if constructed between 1994 and 1997 and the proposed development involves work to the existing roof, **then** (if it is not already evident), request information on the type of construction of the existing roof.
- If the roof framing is confirmed as comprising nail-plate trusses then an engineer's report on the condition of the trusses should be requested.

NOTE: This does not need to be a certification of the structural adequacy of the entire roof framing. The aim is to get a professional inspection of the condition of the trusses so that any issues, such as nail-plates working out of the timber, are identified and rectified.

- Should the engineer's report indicate problems with the trusses then the building surveyor can either require remedial work to be done as a condition of approval pursuant to Section 53A for buildings

constructed prior to 15 January 1994, **or**, for 1994-97 buildings ask for information on the remedial work to be undertaken as part of the proposed work on the roof.



## Further information

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