



INFORMATION SHEET

BUILDING SERVICES

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NCC 2019 Changes – Fire Safety Provisions for Class 1 Buildings

The National Construction Code (NCC) 2019 contains a number of changes to the fire safety provisions for Class 1 buildings, and one specific change new provisions for cantilevered separating walls between attached Class 1 buildings.

Background

Many designs of town houses are constructed side by side and the designs include a portion of the dwelling that is cantilevered over a drive way entrance into a garage. The problem with this design is that the wall separating the townhouses had to be taken from the footing or ground floor concrete slab to the underside of the roof sheeting or roof tiles (non-combustible roof covering as prescribed in the NCC).

Alternatively a costly Performance Solution could be developed to delete the lower portion of the separating wall.

This reduced the ability to have a common driveway pass under the buildings or restricted the siting of the building and turning circles into the garages of the town houses.

The new provisions will enable the separating wall to be extended into the upper floor without the wall be required to extend down to a footing or ground floor slab provided that projecting first floor (floor and ceiling or floor /soffit) is constructed to resist the spread of fire to the upper level of the adjoining dwelling.

What is a separating wall?

A separating wall is a common wall between adjoining dwellings similar to a fire wall or party wall. This is different to an external wall or a zero lot line wall which the NCC considers as external walls of the building and not common to adjoining dwellings.

The new provisions only apply to a separating wall.

So what do the new provisions allow?

The new provisions will enable the separating wall to be extended into the upper floor without the wall extending down to a footing or ground floor slab provided that first floor system (floor and ceiling or floor /soffit) is constructed to resist the spread of fire to the upper level of the adjoining dwelling by a distance of 1.8m minimum either side of the separating wall.

The floor then is treated as part of the separating wall.

How do I achieve the required fire rating requirements to the cantilevered area?

The separating wall that continues out to the external face of the building will either be constructed of a minimum of 90mm masonry or of a light weight fire rated wall system having a fire resistance level of 60/60/60.

The floor/ceiling of the projected room will then be constructed to have a *'resistance to the incipient spread of fire of not less than 60 minutes'* or has a *'fire resistance level of at least 30/30/30 when tested from the underside.'*

DISCLAIMER - The above is intended to provide general information in summary form. The contents do not constitute specific advice and should not be relied upon as such. Formal specific advice should be sought by members with respect to particular matters before taking action.

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There are a number of proprietary fire rated wall and floor systems on the market that will meet these requirements.

It is envisaged that instead of just extending the fire rating to 1.8m either side of the separating wall, that for ease of construction most designs would fire rate the whole floor/ceiling system.

What about the support structure for the horizontal floor and wall?

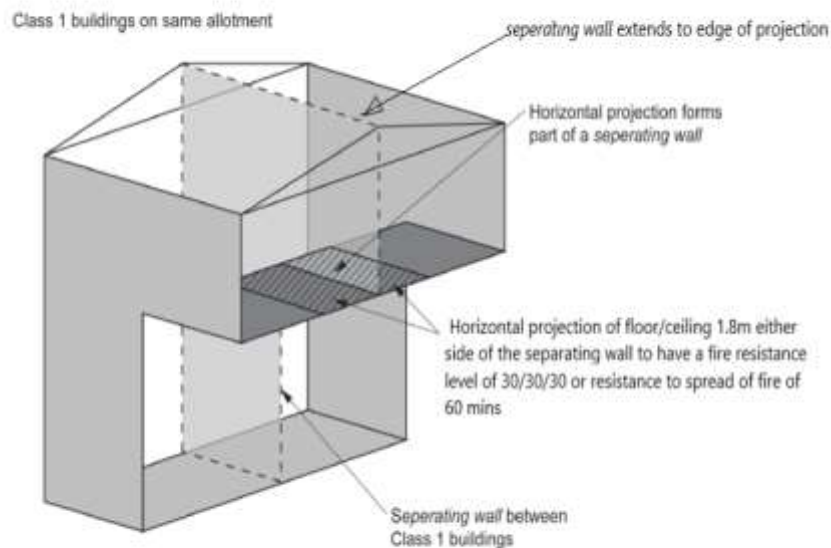
Any structural member that provides lateral or vertical support to the floor must also be fire protected and have an FRL of not less than 30/-/-.

This would apply to any steel beams or similar members incorporated in the floor system to support the cantilever design and the wall.

Can I have any timber crossing any part of the underside of the separating wall?

Yes, similar to the requirements at the top of a separating wall, timber framing that does not exceed 75mm x 50mm (i.e. ceiling battens) may cross over.

The wall must also extend to the underside of the floor/ceiling, have any gaps between the bottom of the wall and the underside of the floor /ceiling packed with mineral fibre or other suitable fire resisting material. (see diagram below)



External Walls on Boundary

While we are on fire separation another change is clarification on the construction requirements of external walls which are required to be fire resisting. i.e. the masonry garage wall on the boundary or within 900mm of the boundary.

There was some confusion as to where the masonry wall could terminate and what an acceptable distance was from the top of the masonry wall to the underside of the gutter or fascia.

This has now been addressed in the NCC and the provisions now states that the external wall must commence from the footing or ground slab and extend to the underside of a non-combustible roof covering except the wall may terminate not more than 200 mm from the underside of the non-combustible roof covering

fascia, gutter or flashing.

The intent of this typical construction is to ensure that any combustible material like the end of a rafter or truss is not directly exposed to fire at the junction of the wall and gutter, fascia or eave lining.

Other Part 3.7 changes

Other changes to Part 3.7 include some clarification provided on the allowable encroachment provisions for gutters/eaves and a number of new scenarios added to clarify external wall protection separation requirements for Class 10a buildings and Class 1 buildings, particularly where the Class 10 may be offset from the Class 1.

Another change is that under the separating walls provisions it now includes an option to use 90 mm masonry wall for a separating wall or a wall with an FRL of 60/60/60. The inclusion of this provision has been added similar to the provision for external walls provisions.

The provisions have also been restructured into 4 Parts but that is more of an editorial change.

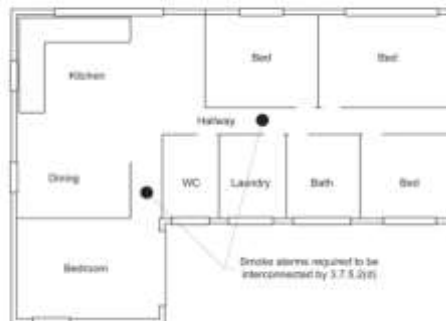
Smoke alarms

The smoke alarm provisions have had some minor revisions and includes a number of new figures and additional explanatory information to assist application.

This includes clarification of smoke alarm requirements where bedrooms are located in separate areas of a dwelling on that storey – this was an area of differing interpretations and larger floor plates and separate wings of houses raised this matter for clarification.

Don't forget interconnection requirements would also apply to this situation.

Class 1a building where bedrooms are located in separate areas



State and Territory variations

It is also important to check with your local authority or administration for any specific State or Territory provisions for these new provisions that may override the NCC provisions.

You should also check with your local authority or administration regarding transitional arrangements and to what version of the NCC applies to your project.

Find out more

HIA has ran and is continuing to run a series of seminars across the country providing a 'deep dive' analysis into the major changes affecting houses and low- to mid-rise residential buildings. A video of these presentations will also be available on the HIA website shortly.

HIA has also produced a number of other information sheets that can be accessed from our website. More of these will be developed in the coming weeks.

Additionally HIA has produced a 'summary of NCC changes' document that members can email and request a copy of. For more information visit the [HIA website](#).

The ABCB have also developed a range of resources to assist in understanding and applying the changes.

Getting a copy of the NCC

You can download the new editions of the NCC from the ABCB website www.abcb.gov.au or if you want a hardcopy you can get this from the HIA website [here](#).

For further information on the changes HIA members can contact HIA's Building Services team on 1300 650 620 or email hia_technical@hia.com.au