

TECHNICAL BULLETIN – TB153

NATIONAL CONSTRUCTION CODE (THE BUILDING CODE OF AUSTRALIA)

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INTRODUCTION AND SCOPE

One of the most important documents for use by all involved in the building industry is the National Construction Code of Australia (also called the BCA). The current edition (NCC – 2017; the 2019 version is under review at the time of writing) is available in multiple volumes covering a range of different construction issues.

We are concerned with Volume One which cover Class 2 to Class 9 buildings, while Volume Two covers Class 1 and Class 10 buildings. This bulletin introduces the different classes of building and briefly attempts to explain the importance of the NCC.

AUSTRALIAN BUILDING CODES BOARD

The NCC (BCA) is produced and maintained by the Australian Building Codes Board on behalf of the Australian Government and each State and Territory Government. It is a uniform set of technical provisions (set out as objectives, functional statements and performance requirements) for the design and construction of building structures while allowing for variations in climatic, geographical and geological conditions throughout the country.

GOALS OF THE NCC

The goals of the NCC are to enable achievement and maintenance of acceptable standards of structural efficiency, safety (including safety from fire), health and amenity for the benefit of the community.

Both volumes of the NCC have been written in a performance format to allow the flexibility to utilise new and innovative products and systems and designs in buildings and which conform to the stated goals of the NCC. Thus a building solution will comply with the NCC if it satisfies the Performance Requirements.

To assist in achieving understanding of these goals, definitions of building terms as well as a summary of assessment methods have also been provided in the NCC, Volumes One & Two.

LEGISLATIVE ARRANGEMENTS

The NCC has legal effect by the building regulatory legislation in each state and territory. This legislation is by an Act of Parliament and empowers the regulations of certain aspects of buildings and structures.

Any provision of the NCC may be over-ridden or be subject to, State and Territory legislation and must be read in conjunction with that legislation. For example South Australia has special provisions concerning waterproofing requirements.

BUILDING CLASSIFICATIONS

The NCC Volumes One & Two each cover different classes of building. What are those classes? The table overleaf sets out the classification scheme which is based on the purpose for which the building is designed, constructed or adapted for use.

As a general rule, the NCC requirements become tougher as buildings become taller as there are more risk factors to be managed to protect the health and amenity of the occupants. This includes safely managing the increasing complexity during the construction period of the building itself. The class of building will determine such things as what fire safety measures are needed, the way the building is constructed to comply with fire regulations, the acoustic insulation required between dwellings, the energy efficiency requirements (e.g. insulation in roofs) and a myriad of other details.



Building Class	Building Type	Comment
Class 1a Class 1b	- Detached House <i>or</i> - One of group of 2 or more attached dwellings each being a building separated by a fire resisting wall <i>or</i> - Boarding house, hostel, guest house or like with floor area not exceeding 300m ² <i>or</i> - In which not more than 12 persons normally reside.	Includes residential dwellings such as a row house, terrace house, town house <i>or</i> villa unit.
Class 2	- Building containing 2 or more sole occupancy units, each being a separate dwelling.	e.g. residential dwellings such as flats
Class 3	- Residential building other than class 1 or 2, which is a common place of long term <i>or</i> transient living for a number of unrelated persons, including boarding house, residential part of hotel or motel <i>or</i> residential part of school <i>or</i> accommodation for aged, <i>or</i> residential part of health care building which accommodates staff <i>or</i> residential part of a detention centre.	Includes residential dwellings, guest house, hostel, lodging house <i>or</i> back-packers accommodation. Includes accommodation for children <i>or</i> people with disabilities.
Class 4	- A dwelling in a building of class 5, 6, 7, 8, or 9 if it is the only dwelling in that building.	e.g. caretakers or managers residence.
Class 5	- Office building used for commercial or professional purposes excluding classes 6, 7, 8, or 9.	
Class 6	- Shop or other building used for the sale of goods or the supply of services direct to the public including an eating room <i>or</i> - A dining room, bar, shop or kiosk part of hotel or motel <i>or</i> - Hairdresser or barbers shop <i>or</i> - Market or sale room or service station.	Includes café, restaurant, milk bar. Also public laundry or undertakers establishment.
Class 7a Class 7b	- Carpark - For storage or display of goods or produce for sale by wholesale	
Class 8	- Laboratory or building in which a handicraft or process for assembling, altering, repairing, packaging, finishing or cleaning of goods or produce is carried out for trade, sale or gain.	
Class 9a Class 9b Class 9c	- Health-care building including those parts of the building set aside as a laboratory. - An assembly building including trade workshop, laboratory in school but excluding other parts of building that are of another class. - An aged care building	
Class 10a Class 10b	- Private garage, carport, shed or the like. - Structure being a fence, mast, retaining wall, free standing wall, swimming pool or the like	Non- habitable buildings or structures.

STANDARDS

The **Housing Provisions** of the NCC schedule refers to a number of Australian/New Zealand standards which are documents that generally summarise best practices in the selection and application of construction products and materials. The standards may be more prescriptive (i.e. recommend material types suitable for use in specific situations) rather than performance based (i.e. must achieve a certain outcome regardless of the materials used). All standards are recommendations only, with those that are referred in the NCC having more legal authority than those not referenced (referenced mandatory examples include AS3740 and AS4654, mentioned AS3958 and non-referenced AS1884).

The standards that are important to manufacturers and applicators of flooring compounds, tile adhesives and waterproofing systems include those for the construction of buildings using timber and concrete elements for the structural form and strength, as well as fibre cement sheeting for floors and walls, and plasterboard wall linings. These materials comprise the majority of substrates to which these flooring, tiling and waterproofing products are applied. The standards themselves cover issues such as the composition of concrete for different purposes, acceptable levels of moisture and curing periods for concrete, allowable deflection of substrates, surface preparation, and the performance requirements for tile adhesives and waterproofing membranes. Thus these standards provide the technical details for different aspects of the building processes and products used to allow selection and application to meet the goals of the NCC.

The Performance Requirements of the BCA will over-ride the recommendations of any standard. For example, the performance requirement of the BCA regarding the waterproofing of internal wet areas will over-ride the recommendations of AS3740 if there are found to be water leaks into other parts of the building, even allowing for the fact that AS3740 and the NCC from 2011 onwards were linked.

SUMMARY

The NCC governs the construction of buildings by providing a classification system for the different types of building based upon the purpose for which it is built, and by providing a set of uniform performance requirements designed to achieve and maintain the health and amenity of the occupants.

IMPORTANT

This Technical Bulletin provides guideline information only and is not intended to be interpreted as a general specification for the application / installation of the products described. Since each project potentially differs in exposure / condition specific recommendations may vary from the information contained herein. For recommendations about specific applications / installations contact your nearest Ardex Australia Office.

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REASON FOR REVISION

Review and update

REVIEW REQUIRED

Recommended 24 months from issue as NCC is renewed bi-annually.

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