



The BCA made simple Part 1

Jerry Tyrrell provides a gateway for you to enter this vital book.

The Building Code of Australia (BCA) is the 'bible' for everyone who builds in Australia. It is clearly written and very comprehensive. Yet no builder or tradesman I know reads it. This is because most contractors:

- are doing and making rather than reading and researching
- leave responsibility for BCA knowledge to others such as council, private certifiers and architect/designers.

The BCA is produced in two volumes:

Volume 2 *Houses, garages and sheds etc.*

Volume 1 *All other buildings.*

As you can see I think the volume numbers should be reversed.

What do we need to know?

The only people I want to help are you building guys and girls. So the next paragraphs might get a few bureaucrats and educators a bit cross.

Both books set out:

- definitions and explanations
- lots of rules and ways to do building work
- what Australian Standards apply.

Basically, this information says:

- you must build in accordance with the relevant Australian Standards, specific BCA requirements and trade practice

- all work you do must be structurally adequate, dry, safe (including during a fire), healthy, accessible and use energy responsibly. Basically everything must be fit for its purpose. Common sense for every good builder out there. Backed by the help you can get from professionals
- you can use different ways to do things but whatever you do must be OK and similar to any specific requirement set out in the BCA.

Both volumes tell you about the 10 different types of buildings or 'Classes'. This is very helpful information to have because the Class of a building can require you to take more care with fire safety and other important issues.

Volume 2 Houses and garages and sheds etc

I'm going to take this second volume first. There are a number of problems with Volume 2:

- you will only need the BCA if you have made a mistake and are facing a complaint or dispute with your customer
- it is difficult to find what you need unless you are good at research and already know the publication
- it does not help you anticipate any high risk part of your work

- it does not require you to check out the products or practices you are told to use by designers, manufacturers and clients. If you use a dud product properly which falls apart prematurely the BCA will not help you

- there is no basic educational version for use in the schools, colleges and universities
- there is no mechanism for readers to provide feedback about recurrent problems eg corrosion of site welding, need for thicker tile batten at eaves, problems with MDF joinery embedded in tiles, etc.

My advice is simple. If you don't know the basic construction tips contained in Volume 2, then you are unlikely to find them before you make an expensive mistake.

So, Volume 2 will not help you much at all. Instead you really need to:

- learn your construction basics well when you are a student, especially when learning from experienced tradesmen on site
- learn the principles and reasons behind good building eg: use gravity to drain water whenever possible, use durable materials, allow for movement between different materials, etc
- learn to find answers through research skills
- keep up to date with changes in materials and details
- get expert advice from your designer/architect friends when you are out of your depth.

The academic in me likes the BCA and finds it very useful once in while. I just wish a simple version was part of the construction subjects I studied at tech and university. However, the main game for all of you is to not have the provisions of this essential publication thrust down your neck

SPECIFIC VERSUS PERFORMANCE SOLUTIONS

The BCA lets you use different ways to solve any building problem. You can either build it in accordance with existing accepted and approved methods. This is called a 'deemed to satisfy' solution.

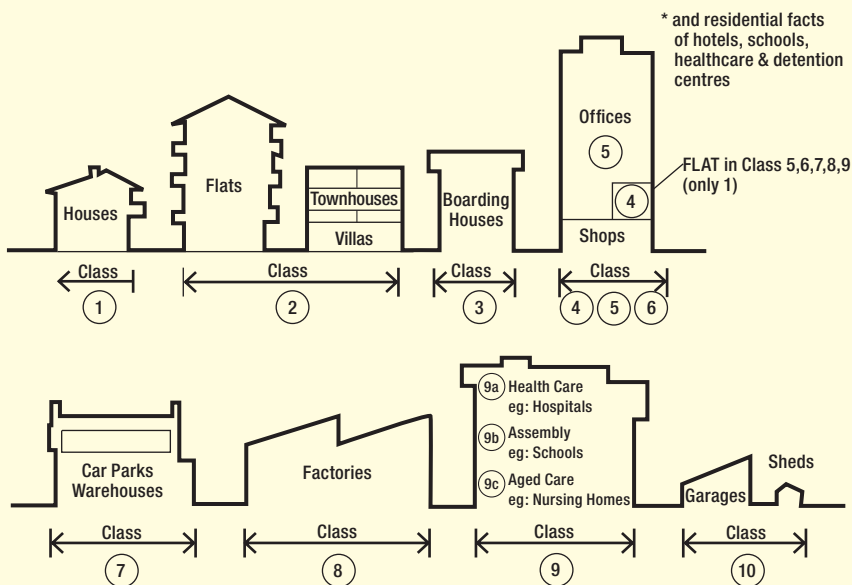
Or you can use a solution that achieves the same outcome which is called a 'performance' solution. For instance, the BCA is very confused about where disabled access conflicts with lower ground levels and termite protection. You might rightly recommend that you want external ground level of your building at the same level of internal floors where there is no flood risk and frame is termite resistant. However, if you use a performance solution you need to know the solution is acceptable to relevant approval authority.

CLASSES OF BUILDINGS

Here is knowledge which sets you up for life! Yeah. Really. You need to know the Class of the building you are dealing with so you'll know what I'm talking about in my next article.

There are 10 different classes of buildings. Most of the ones you deal with are houses and these are Class 1. The units, townhouses and villas you build are Class 2. The Class of the building will help you work out:

- what fire safety measures you will need
 - between your building and neighbouring ones
 - between spaces within the building
 - between different classes within the building eg shops and offices
 - to make sure people get out safely
- the way you build to comply with the latter
- any requirements for people with disabilities
- what acoustic requirements are required eg between individual apartments
- what energy efficiency is required eg insulation of roofs etc
- lots of things you rarely require eg atrium construction and special use buildings such as theatres.



Classes of Buildings
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The BCA specifies 10 different classes of buildings. Most residential builders deal with Class 1 (houses) and Class 2 (units, townhouses and villas).

by half a dozen building-illiterate lawyers and barristers.

Like most things keeping it simple is best. Know your stuff well, including when you need to check out an uncertainty in the BCA or talk to someone who will tell you what is required before you make a mistake (see www.tyrrells.com/Check/Who_swho304.pdf for these other people in the process). That way the BCA is easy to include in your business practices. ■

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