

Flexibility and the BCA

The Building Code of Australia (BCA) is referred to as a performance-based document that provides flexibility when designing a building. What does this mean for those designing and constructing buildings and how can it be utilised in a practical sense?

The BCA allows for a number of methods to achieve a building solution, providing the one adopted complies with the performance provisions it sets out.

The performance provisions state how a building must achieve minimum standards on such things as the structure, damp and weatherproofing, fire safety, health and amenity, safe movement and access and energy efficiency.

The objectives of the BCA are also stated; primarily being to safeguard people and occupants from injury and illness and also consider damage to other property.

The most common method to achieve a building solution is to adopt the 'deemed-to-satisfy' (DTS) provisions in the BCA. This gives you the option of adopting either the 'acceptable construction practice' which is the technical information contained in the BCA or the 'acceptable construction manual' – the referenced Australian Standard or other design manual, if that part of the code does have an associated acceptable construction manual. Using either of these methods will guarantee compliance with building regulations but a building solution can also be achieved by other means.

If a method not consistent with either of these can be devised and shown to comply with the relevant performance provisions in the BCA, known as an 'alternative solution', it will achieve compliance.

USING AN ALTERNATIVE BUILDING SOLUTION

If you are considering using an alternative solution, evidence must be supplied to support that the use of a material or form of construction meets the BCA performance requirements. The BCA provides various assessment methods that can be used to determine that the alternative solution proposed will comply.

These methods allow evidence such as a report from a registered testing authority, a certificate from a registered engineer, a current certificate of conformity or accreditation that may be issued by the appropriate authority, but does not note any other form of documentary evidence that describes the materials and form of construction will be suitable can be used.

The BCA also provides verification methods for some of the performance provisions in the code; verification methods are not provided for all performance areas but other verification methods

can be used if the appropriate authority, which generally means the relevant building surveyor, will accept them. Other methods such as comparison with the DTS provisions or expert judgement are also allowed.

It is important to note that the correct process needs to be adopted if using an alternative solution pathway and the BCA provides guidance around this. It initially requires identifying the DTS provision in the BCA that is to be the subject of the alternative solution, the performance requirements that are relevant to that DTS and any others that may be relevant to the alternative solution proposed.

The relevant building surveyor will need to be satisfied that the building method you propose will satisfy the performance requirements in the BCA; this will require providing evidence of suitability as noted earlier.

The flexibility provided under the BCA means that you are not 'locked in' to a specific construction method and may achieve compliance in several ways; for example it may be difficult to strictly comply with a Building Code provision or Australian Standard clause and it may be possible to demonstrate compliance by citing another document or report that clearly states the material or method of construction will be suitable.



Ask Steve

Q. When carrying out a renovation or addition to an existing building can the relevant building surveyor ask for the existing building to be brought into compliance with current regulations?

Brenda, Bairnsdale

A: If any proposed alterations to buildings, together with any previous alterations either permitted or completed within the last three years represents more than half the volume of the existing building, the entire building must be brought into conformity with the regulations, according to Regulation 608 of the Building Regulations 2006. Under this part of the regulation, the relevant building surveyor (RBS) can exercise discretion in that they can consent to partial compliance where it is considered that bringing the existing building into compliance is impractical or not cost effective. The RBS would generally take into account the safety of the building occupants in relation to fire and structural stability when exercising discretion.

If the alteration is an addition to the building, the RBS may only consent to partial compliance, or exercise discretion, if the floor area of the extension is the lesser of 25 per cent of the existing floor area or 1000m². It is important to note that both additions and renovations are considered alterations to buildings. It may be the case that a large addition to a building may trigger the volume rule and require the existing building (subject to RBS discretion) to be brought into compliance.