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What You Should Know

Building Code of Australia – Part J

BMT & ASSOC
QUANTITY SURVEYORS

The Building Code of Australia (BCA) Part J regulation aims to reduce greenhouse gas emissions from all Class 2 to 9 buildings (commercial buildings). A gradual introduction has occurred to improve the efficiency of commercial buildings and mirror the effects of the BASIX legislation introduced for residential dwellings in NSW.

Part J incorporates the use of the building, how it was constructed, where it is located, and the effects of nearby landforms, structures and buildings. Specific areas targeted by BCA Part J include the following 8 areas:

J1. Building Fabric – the components of a building including roof, ceilings, walls and floors must be energy efficient.

J2. External Glazing – glazing on windows must be efficient so as not to let too much heat in, as well as air conditioning use not being excessive to counteract the heat being let in through the windows.

J3. Building Sealing – air leakage must be minimised as it has an effect on air conditioning/heating use – this includes making sure that sealing around windows, chimneys and doors is adequate.

J4. Air Movement – adequate ventilation can ensure that air movement within a building offers a form of cooling – thus reducing air conditioning usage. In some cases there may be restrictions on ceiling fans and evaporative coolers.

J5. Air Conditioning and ventilation systems – must meet the intended use of the building

J6. Artificial lighting and power – power can be regulated and controlled using motion detectors, timers and sensors to ensure adequate lighting is available at all times.

J7. Hot water supply – must be designed and installed within legislation

J8. Access for maintenance – must be made available so that equipment can be maintained in order for it to be operating efficiently at all times.

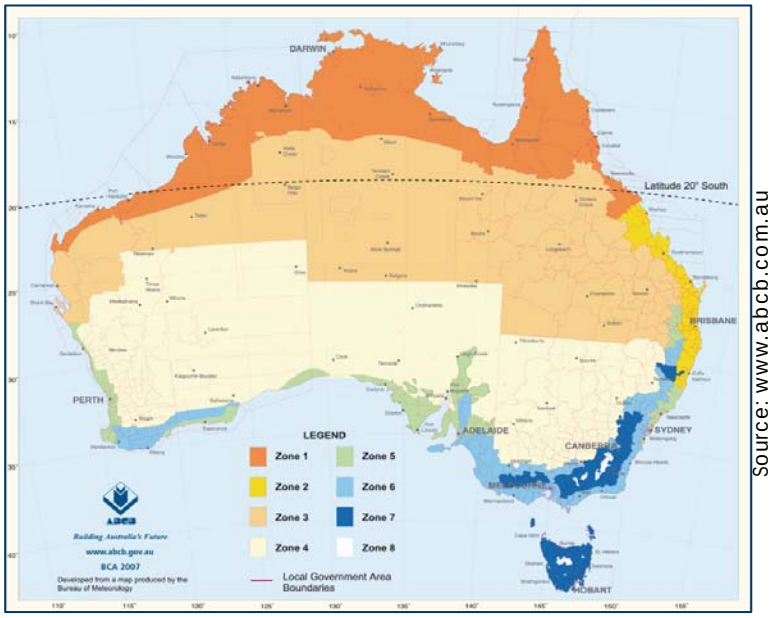
Implementation Dates

Efficiency measures have been gradually introduced since 2003 over various classes of buildings. In 2006 however, efficiency measures became mandatory for new/refurbished Class 2 to 9 buildings. The following table represents each State's implementation date.

ACT	NSW	NT	QLD	SA	TAS	VIC	WA
1 May 06	1 Nov 06	1 May 06	1 May 06	1 Aug 06	1 May 06	1 May 06	1 May 06

Geographical Areas

The energy efficiency requirements as set out in Part J of the BCA vary according to the class of the building and the climate zone that the building is located in. As can be seen from the diagram, Australia has been divided into geographical areas. Each area represents a different level of energy efficiency that is required based on the climate of that area.



Source: www.abcb.com.au

The Effects on Construction Costs

As with any legislative change, the introduction of these new requirements will affect construction costs. As many builders scramble to interpret these new requirements, the

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full effects of the changes are yet to be realised. As with BASIX requirements in NSW, there are varying methods to achieve compliance with this new code. Therefore every project must be approached differently.

Since the introduction of Part J, BMT & ASSOC have observed increased construction costs due to additional items having to be incorporated into the design in order to comply. Items adding cost to these classes of buildings include louvres, shading, low energy glazing for windows and more efficient mechanical air-conditioning systems. In several cases, these additions have added up to 5% to the total construction cost.

While these measures do increase capital costs to constructing projects, their effects should be counteracted in the long term with significantly reduced operating costs.

The Risk to Financiers

Compliance with these new requirements and all other building codes is a condition precedent to gaining Construction Certificate approval. The risk to financiers exists in establishing finance approval on proposed projects that have current Development Approvals, but are yet to obtain Construction Certificates. If the new requirements have not been considered by the developer in the early stages of a project, the requirements of the revised code could see significant price increases in the design period leading from Development Application to Construction Certificate, affecting the projects feasibility.

BMT & ASSOC have worked extensively in assessing the impact of these new requirements and are able to provide advice on proposed budgets and likely costs of a project prior to it being financed. Feel free to contact Tom Plenty or Pedro Cardoso at the office for more information or advice about your construction project.

Recently Completed Projects

Location: Wallsend, NSW

Project type: 2 residential dwellings

Approx. Construction Cost Per Square Metre: $1,100/m2

Location: Clontarf, QLD

Project type: 30 residential units

Approx. Construction Cost Per Square Metre: $1,350/m2

Location: Leichhardt, QLD

Project type: 30 residential units

Approx. Construction Cost Per Square Metre: $1,200/m2

Location: Fairfield, VIC

Project type: 6 residential units

Approx. Construction Cost Per Square Metre: $2,250/m2

Location: Albion Park, NSW

Project type: 28 residential units

Approx. Construction Cost Per Square Metre: $1,350/m2

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