



BUILDING NOTE

NUMBER 33-2005

11 March 2005

BCA 2005

Background

The BCA 2005, which is due for adoption in Western Australia on 1 May 2005, has been released to the industry and public in general. The BCA 2005 has some new implications for Western Australia, the most significant being the new energy efficiency measures for Class 2, 3 and 4 buildings in Volume 1 of the BCA, the removal of Western Australian variations for sound insulation, the provisions for waterproofing of wet areas in Volume 2 of the BCA and the addition of specific requirements for wire balustrades.

Energy Efficiency Requirements in BCA Volume 1

On 1 July 2003 new Energy Efficiency Measures for Class 1 and 10 buildings were adopted in Western Australia, through the BCA. The BCA 2005 Volume 1 will expand the Energy Efficiency Measures, through a new Section 'J' 'Energy Efficiency'. The proposed measures, which have been developed pursuant to a 2000 agreement between the Australian, State and Territory Governments, affect Class 2, 3 and 4 buildings. The agreed strategy involves both the encouragement of voluntary measures by industry and the introduction of mandatory minimum requirements in the BCA.

Given the importance of the energy performance of buildings to the overall abatement of national greenhouse gas emissions, the development of the energy efficiency measures for inclusion in the BCA has been undertaken jointly by the Australian Greenhouse Office and the Australian Building Codes Board, pursuant to a January 2001 agreement between these two bodies.

The proposed requirements embrace wall, floor and ceiling insulation, insulation of ductwork and the thermal properties of glazing. They also involve requirements in relation to building sealing, air movement and services, as well as maintenance provisions. In addition to Deemed-to-Satisfy solutions, the BCA 2005 provides for the use of verification through a thermal calculation method that a proposed building complies with the performance requirements.

The Australian Building Codes Board and the Department of Housing and Works will be conducting a number of information sessions, across the State, on the new Energy Efficiency Measures of the BCA 2005. Further information on these seminars can be found at the ABCB website www.abcb.gov.au or by email to Building Codes and Regulation branch at the Department of Housing and Works buildingcontrol@dhw.wa.gov.au.

Section 'I' Maintenance Of Essential Services

The state variation for Section "I" has been removed.

Section 'F' Health And Amenity

State variations for sound transmission and insulation have been removed. As of 1 May 2005 the provisions of Part F5 of Volume 1 and P2.4.6 of Volume 2 will apply to Western Australia without any variations. The BCA sound provisions apply to attached Class 1 buildings and Class 2, 3 and 9c buildings. The scope of changes include:

- An increase in the airborne sound insulation requirements for walls and floors separating dwelling and sole-occupancy units.
- The introduction of impact sound insulation requirements for floors separating dwellings or sole-occupancy units.
- The introduction of field testing as an option for verifying the compliance of walls and floors.
- And extension of the sound insulation requirements for services to cover water supply pipes, duct work and storm water pipes.

The new provisions will better address the increased noise, particularly at lower frequencies, being generated by home theatre systems and sub-woofers. The previous acoustic performance of a wall, measured as an R_w , will now be reduced by 1 to 15 depending upon the performance of the wall against low frequency noise penetration. This is done through the introduction of a negative C_{tr} value, which is added to the R_w .

D2.16 – Balustrades or other barriers

New requirements are incorporated in the BCA 2005 Volumes 1 and 2 for wire balustrades.

Part 3.8.1 Wet Areas

Definitions and Deemed-to-Satisfy details have been amended to align the BCA to recent changes to AS 3740 including use of terms “waterproofing” and “water resistant” instead of “impervious to water”.

Please note that there are a number of other changes not mentioned here and that anyone using the BCA should ensure as of 1 May 2005 they are using the BCA 2005. If you require further information, please contact the Building Codes and Regulation branch at buildingcontrol@dhw.wa.gov.au or on (08) 9222 4563

Copies of the BCA, in either a digital format on CD or via web access or hard copies, can be purchased through the Australian Building Codes Board’s website at www.abcb.gov.au.



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