

STANDARDS APPLYING TO BASIX (NSW)

I am an Architect (Registered in NSW 3501) and an ABSA Accredited Energy Assessor. I have been in practice locally and internationally since approximately 1970. I have been an accredited Energy Assessor since approximately 1997.

The present Australian standards for construction are covered by the Building Code of Australia (BCA) – this version of the Building Code, which references standards, has been in force since 1996 having been modified several times in ensuing period.

It is a prescriptive National Code setting acceptable standards of structural sufficiency, safety (including safety from fire), health and amenity for the benefit of the community now and in the future.

Modifications to the (BCA) have since its inception included various elements and recently the BCA has been expanded to include matters relating to Energy Efficiency – Part 3.12 (BCA 2005) and as of 1st May 2006 (Section J).

The BCA contains particular requirements that relate to specific State circumstances and these State variations are contained within the BCA.

In particular my submission to the Commission relates to the provisions of the BCA as they relate to NSW in the area of Energy Efficiency. Whereas with the exception of NSW the remaining States and Territories have adopted the Measures outlined in the BCA in respect of Energy Efficiency in NSW this Section of the BCA (Part 3.12 and Section J) is replaced by BASIX defined (within the BCA) as a 'web based planning' tool that assesses developments (at this stage being limited to the Residential Sector) against set targets for these developments in the areas of efficient use of Water, Power and Thermal Performance.

BASIX is a tool that has been developed by the NSW Department of Planning (DoP) – Sustainability Unit.

The area of Thermal Performance includes assessment via the use of Simulation Software (currently NatHERS) covered by a defined Protocol contained within the BCA and adopted as the National Standard used to assess predicted heating and cooling loads attributable to residential buildings – both single dwellings and Multi Unit developments.

Thermal Comfort Assessment (Residential Buildings) in NSW is carried out (in the main) by Accredited Assessors who gain Accreditation through the Association of Building Sustainability Assessors (ABSA) appointed by the National Administrator the Australian Greenhouse Office to administer the accreditation of Assessors.

This Accreditation is soon to be rolled out as a National Requirement under the National Framework on Energy Efficiency (NFEE) and all Assessors are to undertake training and be examined and recognised under the Australian Qualifications Framework (AQF) an initiative of both State and Federal Governments.

In NSW as a consequence of BASIX and the implementation of the Do it Yourself (BASIX DIY) tool the previously defined standards covering predicated Thermal Performance of residential buildings (being the simulation method recognised within the BASIX Framework) has been progressively eroded by (BASIX DIY) to the point where a review carried out by ABSA Assessors suggests that there is in some instances a disparity (as high as 30% to 50% between the results being predicted for assessments using (DIY) when compared with the Simulation Method Assessment of predicated building performance.

This disparity includes but is not limited to – materials of the external fabric, insulation levels, and glazing. The (DoP) state that their 'Tool' is more sophisticated version of the Deem to Satisfy Provisions of the (BCA) when in fact reviews conducted by ABSA Assessors clearly show that in the main the BASIX DIY 'Tool' in areas of glazing produces results that do not meet the prescriptive standards set down in the BCA 2005.

No review has been carried out using DIY in comparison with the soon to be implemented provisions under BCA 2006 in this respect.

In this context I state my concerns on the following basis:

1. The NSW (DoP) have been approached and made aware of this disparity;
2. The NSW (DoP) have been requested to make available the basis for the calculation of heating and cooling loads used by the (BASIX – DIY) tool for independent testing and verification, and the (DoP) have refused – citing commercial confidentiality;

3. The NSW (DoP) appear to be lowering the standards previously used to assess building thermal performance in NSW when compared with the existing standards set by BCA 2005;
4. The NSW (DoP) appear to be acting outside the nationally defined standards contained within the (BCA) and setting standards that have no basis which can be substantiated and verified by independent testing; and
5. The NSW (DoP) through BASIX DIY appear to be circumventing the soon to be implemented standards proposed under the (AQF) by allowing unqualified individuals to carry out BASIX CERTIFICATION in NSW by allowing 'mums and dads' and their children to generate BASIX CERTIFICATES without any qualifications, quality assurance review, auditing or technical training.

These circumstances are likely to lead to the dismantling or watering down of the proposed introduction of 2nd Generation Software such as AccuRATE, FirstRATE and BERS which have been developed in conjunction with the CSIRO for use as part of the National Accreditation under the (AQF) to simulate thermal performance in residential buildings.

While the current and future software has undergone strict testing and design prior to its introduction it appears that BASIX DIY for thermal performance has been introduced without testing or verification. It has been forced into the system without stakeholder consultation or participation and does not conform to any known or published protocol that can be verified because of the refusal of NSW (DoP) for DIY to be submitted for independent testing.

Moreover the concept of the ability for use by unqualified, untrained people without any accreditation standards will in my opinion lead, as appears to be the case at present, to lowering the standards and goals being the aim of the AGO and State and Federal Governments namely the reduction of Greenhouse Gas (GHG) Emissions and clearly do not align with the stated aims of (BCA) in its current form and its soon to be introduced amendments.

Whilst I commend the concept of BASIX I do not hold with the principles adopted by (DoP) that allow the watering down of standards via its use by non Accredited persons and the seemingly unpredictable results currently being allowed by the DIY Tool in preference to tested and approved simulation methods that have a National Acceptance.

I request that the Productivity Commission review this disturbing situation. In short Standards, Codes and Accreditation are developed so that Standards can be maintained and where practicable increased in the light of new technology, not lowered as appears to be the case with BASIX –when this is clearly the case any failure in the Standards and Codes should be rectified.

Yours faithfully,

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