



Newsflash number 481

NatHERS software accreditation

Purpose

To update building industry practitioners on the use of house energy rating software in Queensland.

Background

The Building Code of Australia (BCA) and the Queensland Development Code MP 4.1—Sustainable buildings (QDC) require residential buildings to achieve a minimum energy equivalence for:

- houses and townhouses (class 1 buildings) = 6 stars
- multi-unit residential buildings (class 2) = 5 stars for the whole building, with no individual unit to achieve less than 4 stars.

There are four compliance methods available to assess the energy efficiency of designs, these being elemental (formerly the deem-to-satisfy (DTS)) provisions of the BCA, verification against a reference building, expert judgement (peer review) or software simulation.

Software that meets the Australian Building Codes Board's Protocol for House Energy Ratings can be used to demonstrate compliance with the energy efficiency (thermal performance) of housing design requirements of the BCA or QDC.

Three NatHERS (Nationwide House Energy Rating Scheme) software tools are currently available for use by energy assessors to rate the thermal performance of house designs. AccuRate was developed by the CSIRO and is accredited for use under NatHERS. The two other software tools—BERS Pro (developed by Solar Logic) and FirstRate5 (developed by Sustainability Victoria)—were provisionally accredited for use until 30 September 2011. All three use the same underlying thermal simulation engine called 'Chenath' (currently using version 2.13).

Accreditation results

The NatHERS National Administrator advises that:

- BERS Pro version 4.2, release number 110811 is now fully accredited
- FirstRate5 remains provisionally accredited until 30 September 2011 and the outcome of the Administrator's assessment process will be advised shortly on the NatHERS website (www.nathers.gov.au).

BERS Pro version 4.2, release 110811 includes a functionality that allows it to be used for NatHERS and for non-NatHERS accredited purposes. NatHERS accredited functionality produces NatHERS certificates identified by the following features:

- NatHERS logo in the top right corner
- BERS Pro version 4.2, release 110811
- Chenath version 2.13.

BERS Pro version 4.2, release 110811 is unable to be used under NatHERS for modelling house plans that include 'tilted roof windows with blinds'. House designs that include these features should use AccuRate or FirstRate5 as the software rating tool.

Transitional arrangements

The NatHERS National Administrator has acknowledged that the Chenath simulation engine version 2.13 has a marginal inaccuracy in the assessment of open plan houses. This issue is currently being addressed by the NatHERS National Administrator and they are expected to release an updated version of Chenath in the near future. This new version will then become the NatHERS simulation engine for all software.

If BERS Pro version 4.2, release 110811 is used in the non-regulatory mode (by selecting 'BERS simulation') then Chenath v2.20 can be substituted for Chenath v2.13. Chenath v2.20 can appropriately assess open plan houses. It is recommended that house energy assessors who use BERS Pro select the non-regulatory mode when assessing open plan houses.

This will produce a BERS Certificate instead of a NatHERS certificate. Building Codes Queensland accepts that it would be appropriate for building certifiers to accept BERS Pro Certificates in these circumstances to demonstrate a dwelling's energy efficiency compliance for open plan houses. This non-regulatory energy efficiency simulation gives appropriate recognition to the effects of ventilation for Queensland homes. Once the NatHERS National Administrator accredits the use of an updated version of the Chenath engine the regulatory mode should be used.

House energy assessors using BERS Pro are also advised to switch over to use version 4.2, release 110811.

Contact for further information

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