



BUILDING NOTE

NUMBER 39-2005

28 June 2005

ACCURATE TRIALS

Purpose

To advise local government building surveyors that for a limited time they might receive AccuRate certificates in lieu of FirstRate for verification that a building complies with the BCA energy efficiency provisions.

Background

The Australian Greenhouse Office (AGO) commissioned CSIRO to upgrade and rewrite an earlier HERS tool (NatHERS). Improvements were to include the capacity to take into account the cooling effects of natural ventilation in order to create an energy assessment tool that would be more suitable to tropical areas of Australia. This new 2nd generation HERS tool is called AccuRate.

AccuRate has been developed with the support of all Australian governments and following an extensive testing program, the software has now been released for use in a series of regulatory pilots with the endorsement of those governments. From now, until September 2005, the Sustainable Energy Development Office, in association with 18 participants, will be conducting regulatory trials of AccuRate in WA.

BCA Requirements

The BCA Performance Requirement P2.6.1 "Building [Energy Efficiency]" can be satisfied by utilising the Verification Method in V2.6.2.1, however, the BCA clause 1.0.9 (b) (ii) permits an approving authority to accept a Verification Method that is not in the BCA.

In order to verify the compliance of a Building Solution with P2.6.1 using the AccuRate Regulatory Version, the building must have, in climatic zones 1 to 3 of the BCA, the annual energy load equivalent to a 3.5 star house; or in climatic zones 4 to 6 of the BCA, the annual energy load equivalent to a 4 star house.

Recommendation

This Department recommends that it is appropriate for local government building surveyors to accept the AccuRate certificates generated before the end of September 2005, in lieu of the FirstRate certificates. Please find attached a sample AccuRate certificate.

Peter Gow

EXECUTIVE DIRECTOR OFFICE OF POLICY AND PLANNING

Building Notes are produced by the Department of Housing and Works (DHW) primarily to inform building surveyors and the building industry. The information contained in this Note is intended for general guidance only and must not be relied upon in any particular set of circumstances. To ascertain your precise rights and obligations, you should consult a building surveyor or other appropriate professional or refer to the applicable legislation.

Copies of Building Notes may be obtained from the DHW at 108 Adelaide Terrace, East Perth or by accessing the Department's web-site at www.dhw.wa.gov.au.

Assessor Certificate

Single Dwelling

Issued in accordance with the requirements of the
BCA Part V2.6.2.1 and the AccuRate Regulatory Pilot
1 June 2005 to 1 October 2005



Assessor		
Name: Test Assessor	Company: ABSA	ABSA #: 20529
Address: Level 3 Sydney Building Information Centre 525 Elizabeth St SURRY HILLS 1234		
Phone: (02) 8766 4848	Fax: (02) 8303 0566	Email: admin@absa.net.au
Declaration of Interest: The Assessor has provided design advice to the Applicant		

Client		
Name: Bob Smith	Company: Smiths Building & Design Pty Ltd	
Address: PO Box 15 PADDINGTON NSW 2021		
Phone: 02 4567 8910	Fax: 02 4567 8990	Email: bob@hotmail.com.au

Project	
Address: N/A 24 Jones Street NEDLANDS WA 6009	
Applicant: Martha Vincent	LGA: Wanneroo City Council

Assessment			
Date: 3/07/2005 6:48:	Job ID: ax265	Filename: 256	Run #: Design option B
Software: AccuRate v1.0		Climate Zone:	13
Proxies for materials: N/A		Proxy ref #: N/A	

Referenced documents	
<i>All details, upon which this Assessment has been based, are included in the project documentation which has been stamped and signed by the Assessor issuing this Certificate, as detailed below:</i>	
Thermal Performance Specification attached and affixed to drawings, page: 1, site & floor plans	
Drawings:	4684 rev B
Specifications:	4684 rev B

ABSA Assessor Certificate	ABSA Assessor # 20529	Certificate # 57958407	Issued: 03-Jul-05
----------------------------------	------------------------------	-------------------------------	--------------------------

BCA Part V2.6.2.1 - Building envelope thermal performance assessment

Predicted annual energy loads (MJ/M2/year)			
Heating: 28	Cooling (latent): 4	Cooling (sensible): 54	Total: 86
Dwelling Area Adjustment (MJ/M2/year)			
Net Conditioned Floor Area (M2) 212	Adjustment: 3	Adjusted Total: 89	
Rating			



Star Rating: 4

ABSA Assessor stamp

Thermal Performance Specifications BCA Part V2.6.2.1 - AccuRate Regulatory Pilot 1 June 2005 to 1 October 2005

These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M2
		Single - clear	Aluminium	5.8	.86	as per Window Schedule
		Single - toned	Aluminium	5.8	.7	as per Window Schedule

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2
-----------	------------	-------	-------	---------	------	---------

External walls Construction

Cavity Brick to lower storey
Weatherboard to upper storey

Insulation

None to cavity brick
R1.5 to weatherboard

Colour

Medium brickwork
Light weatherboards

Internal walls Construction

Brick, plastered

Insulation

None

Floors Construction

Concrete to lower storey
Timber to upper storey

Insulation

None

Covering

Carpet to living areas
Ceramic Tile to wet areas

Orientation, Exposure, Ventilation and Infiltration

Orientation of nominal north elevation 13
Terrain category Protected
Roof ventilation: Unventilated
Cross ventilation: Standard
Subfloor ventilation: On ground
Living area open to entry: Yes
Living areas separated by doors: Yes
Stair open to heated areas: Yes
Weather seals to windows and doors: Yes
Exhaust fans without dampers: No
Ventilated skylights: No
Open fireplace without damper: No
Vented downlights: No
Wall and ceiling vents: No

Roof Construction

Metal Deck

Insulation

Foil + R1.0 Batts

Colour

Medium

Ceilings Construction

Plasterboard

Insulation

R2.5

Window cover Internal (curtains)

Open Weave

External (awnings, shutters, etc)

None

Fixed shading Eaves (width, height above window heads)

600 0 to lower storey

450 0 to upper storey

Verandahs, Pergolas (type, description)

Overshadowing structures, trees

2 storey dwellings to east & west

20M tall tree to North as per site plan

ABSA Assessor stamp