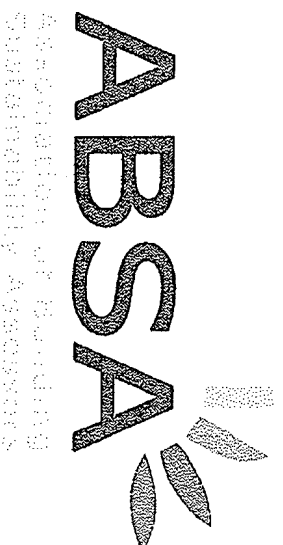


Assessor Certificate

Multiple Dwellings

Certificate Version 6.1. Prior versions not valid after 1 March 2006

Issued in accordance with
BASIX Thermal Comfort Simulation Method.



Assessor

Name: Barry Cotten Company: Chalmers Paige Pty Ltd ABSA : 20470

Address: 6 / 12 Tryon Road Lindfield

Phone: 1300671144 Fax: Email: barry@chalmerspauge.com.au

Declaration of interest: None

Client

Name: Company: Mackenzie Architects Pty Ltd

Address: 4/3 The Postern Castlecreg

Phone: Fax: Email:

Project

Address: 1 - 5 The Crescent Yagoona

Applicant: As above LGA: Bankstown

Assessment

Date: 8/12/2010 File ref: 10125 Software: Accurate Version: 1.1.4.1

Documentation

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Thermal Performance Spec:

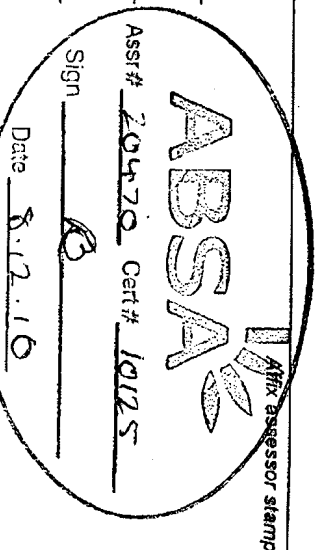
Attached, Affixed to drawings Page 1

Drawings: (Title, Ref. Revision, Issue date, etc)

SK01 - SK07

Building Specifications: (Title, Ref.#, Revision, Issue date, etc)

SK01



ABSA Assessor Certificate Assessor 20470 Certificate 87584966 Issued: 8/12/2010

Thermal performance specifications

Page 1 of 3

Unit number(s)	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions	Qualify for ventilation bonus
	Cond.	Uncond.	Heat	Cool (Sens & Lat)		
1, 7, 13	90.88	6	39	21	None	No
2, 8, 14, 20,	90.50	0	15	19	None	No
3, 9, 15, 21, 27,	87.79	6	8	19	None	No
4, 10, 16, 22, 28,	92.24	0	2	23	None	No
5, 11, 17, 23, 29,	90.91	0	2	23	None	No
6, 12, 18, 24, 30	84.72	6	19	20	None	No
19,	56.35	6	54	19	None	No

[illegible]

Assessor : 20470

Certificate: 87584966

Issued: 8/12/2010

Thermal Performance Specifications

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 m ²	Detail
		generic	aluminium				

Skylights	Product ID	Glass	Frame	U value	SHGC	Area m ²	Detail
Generic			aluminium			blind	

Window and skylight U and SHGC values, if specified, are according to NFRC. Alternate products or specifications may be used if their U value is lower, and the SHGC value is less than 10% higher or lower, than the U and SHGC values of the product specified above.

External walls	Construction	Insulation	Colour - solar abs.	Detail
	Masonry			

Internal walls	Construction	Insulation	Detail
	Masonry		

Floors	Construction	Insulation	Covering	Detail
	Concrete			

Ceilings	Construction	Insulation	Detail
	Concrete	None	
	Gypsock	R2.5	

Roof	Construction	Insulation	Colour - solar abs.	Detail
	Colourbond	Sarking		

Window cover	Internal (curtains)	External (awnings, shutters, etc)
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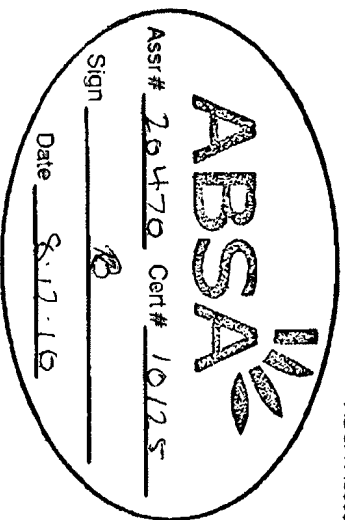
Fixed shading	Eaves (width - inc. gutters, h't above windows)	Verandahs, Pergolas (type, description)
Balcony		

Overshadowing	Overshadowing structures	Overshadowing trees
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Orientation, Exposure, Ventilation and Infiltration

Orientation of nominal north:	315
Terrain category:	Suburban
Roof ventilation:	None
Cross ventilation:	None
Subfloor:	None
Living area open to entry:	No
Doors separate living areas:	No
Stair open to heated areas:	No
Seals to windows and doors:	Yes
Exhaust fans without dampers:	No
Ventilated skylights:	No
Open fire, unfired gas heat:	No
Vented downlights:	No
Wall and ceiling vents:	No

ABSA Assessor stamp

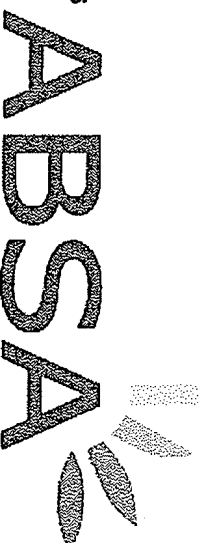


Assessor Certificate

Single Dwelling

Certificate Version 6.1.1. Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of
BASIX THERMAL COMFORT - Simulation Method



Assessor			
Name:	Barry Cotten	Company:	Chalmers Paige P/L
Address:		P.O. Box 42 LINDFIELD NSW 2070	Assr #: 20470
Phone:	(02) 9416 0684	Fax:	Email: barry@chalmersp Paige.com.au
Declaration of Interest: None			
Client			
Name:	Company: Mackenzie Architects		
Address: 4 / 3 The Postern CASTLECRAG NSW 2068			
Phone:	Fax:	Email:	
Project			
Address: 1 / 1-5 The Crescent YAGOONA NSW 2199			
Lot / DP:		/	LGA:
Applicant:			
Assessment			
Date:	6/12/2010	Job ID:	1016
Filename:	10125	Run #	1
Software:	AccuRate	Version:	1.1.4.1
Climate Zone:	56		
Referenced documents			
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:			
Thermal Performance Specification / Commitments attached and affixed to drawings, page: SK01			
Drawings: SK01 - SK07			
Specifications: Only specifications, detailed on Drawings identified above, have been referenced			

ABSA Assessor Certificate Assessor # 20470 Certificate # 87584966 Issued: 08-Dec-10

THERMAL COMFORT - Simulation Method

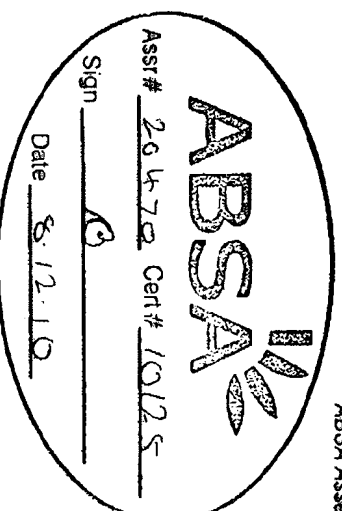
The details must be entered into your BASIX Assessment

Area calculations (M2)	
Net Conditioned Floor Area	91
Net Unconditioned Floor Area	6
Concessions / Ventilation Bonus	
Eligible Concessions:	None

The dwelling has the required shading to qualify for BASIX cross ventilation bonus: N/A

Predicted annual energy loads

Heating:	39
Cooling:	21
(sensible + latent)	
Total:	60



ABSA Assessor Certificate

Assessor # 20470

Certificate # 87584966

Issued: 08-Dec-10

Thermal Performance Specifications - BASIX THERMAL COMFORT - Simulation Method

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	Detail
---------	------------	-------	-------	---------	------	---------	--------

Generic

Single clear

Aluminium

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
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Generic

Any U and SHGC values specified on Certificates issued after 1 May 2007 are according to NF-RC. All values prior to this date are ANAC. Alternate products may be used if their U value is lower, and the SHGC value is less than 10% higher or lower.

External walls	Construction	Insulation	Colour - Solar absorptancy	Detail
----------------	--------------	------------	----------------------------	--------

Cavity Brick

None

Medium - SA 0.475 - 0.7

Internal walls	Construction	Insulation	Detail
----------------	--------------	------------	--------

Brick plastered

None

Floors	Construction	Insulation	Covering	Detail
--------	--------------	------------	----------	--------

Concrete

None

None

Ceilings	Construction	Insulation	Detail
----------	--------------	------------	--------

Plasterboard

R2.5

Concrete

None

Roof	Construction	Insulation	Colour - Solar absorptancy	Detail
------	--------------	------------	----------------------------	--------

Metal Deck

Foil (Sisalation)

Medium - SA 0.475 - 0.7

Window cover	Internal (curtains)	External (awnings, shutters, etc)
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Holland blinds

None

Fixed shading	Eaves (width - inc. gutters, height above windows)	Verandahs, Pergolas (type, description)
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0 250

Balconies

Overshadowing	Overshadowing structures	Overshadowing trees
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Orientation, Exposure, Ventilation and Infiltration

Orientation of nominal north elevation 350

Terrain category Suburban

Roof ventilation: Unventilated

Cross ventilation: None

Subfloor ventilation: Enclosed

Living area open to entry: No

Living areas separated by doors: No

Stair open to heated areas: No

Weather seals to windows and doors: Yes

Exhaust fans without dampers: No

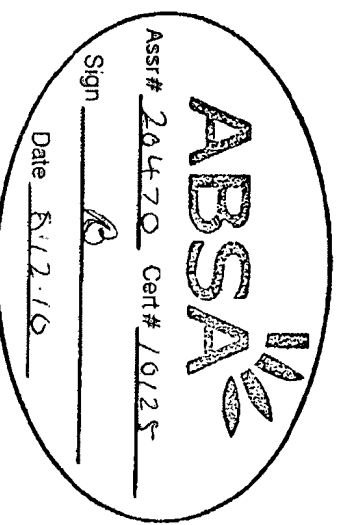
Ventilated skylights: No

Open fireplace or unfired gas heater: No

Vented downlights: No

Wall and ceiling vents: No

ABSA Assessor stamp



Assessor # 20470

Certificate # 87584966

Issued: 08-Dec-10

Thermal Performance Specifications

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 content of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M	Detail
Generic		Single clear	Aluminium				

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M	Detail
Generic							

Any U and SHGC values specified on Certificates issued after 1 May 2007 are according to NFRC. All values prior to this date are AIAAC. Alternate products may be used if their U value is lower, and the SHGC value is less than 10% higher or lower.

External walls	Construction	Insulation	Colour - Solar absorptance	Detail
Cavity Brick	None		Medium - SA 0.475 - 0.7	

Internal walls	Construction	Insulation	Detail
Brick plastered	None		

Floors	Construction	Insulation	Covering	Detail
Concrete	None			

Ceilings	Construction	Insulation	Detail
Plasterboard	R2.5		
Concrete	None		

Roof	Construction	Insulation	Colour	Detail
Metals Deck	Foil (Sisalation)		Medium - SA 0.475 - 0.7	

Window cover	Internal (curtains)	External (awnings, shutters, etc)
Holland blinds		None

Fixed shading	Eaves (width - inc. gutters, height above windows)	Verandahs, Pergoles (type, description)
0	290	Balconies

Overshadowing	Overshadowing structures	Overshadowing trees
---------------	--------------------------	---------------------

Orientation, Exposure, Ventilation and Infiltration			
Orientation of nominal north:	350	Living area open to entry:	No
Terrain category	Suburban	Living areas separated by doors:	No
Roof ventilation:	Unventilated	Stair open to heated areas:	No
Cross ventilation:	None	Seals to windows and doors:	Yes
Subfloor ventilation	Enclosed	Exhaust fans without dampers:	No
		Ventilated skylights:	No
		Open fire or unflued gas heater:	No
		Vented downlights:	No
		Wall and ceiling vents:	No

