

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

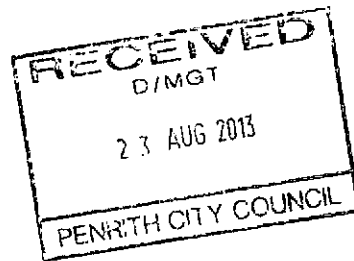
Certificate number: 481786S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by the Department of Planning. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Director-General

Date of issue: Wednesday, 08 May 2013

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary		
Project name	13-14297	
Street address	Elimatta Avenue JORDAN SPRINGS 2747	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited -	
Lot no.	2035	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	4	
Project score		
Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 46	Target 40

Certificate Prepared by
Name / Company Name: Energy Ratings Australia Pty Ltd
ABN (if applicable): 31133256676

## Description of project

### Project address

Project name	13-14297
Street address	N/A Elimatta Avenue JORDAN SPRINGS 2747
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan -
Lot no.	2035
Section no.	-

### Project type

Project type	separate dwelling house
No. of bedrooms	4

### Site details

Site area (m <sup>2</sup> )	468
Roof area (m <sup>2</sup> )	269
Conditioned floor area (m <sup>2</sup> )	155
Unconditioned floor area (m <sup>2</sup> )	10
Total area of garden and lawn (m <sup>2</sup> )	184

### Assessor details and thermal loads

Assessor number	20390
Certificate number	1005255631
Climate zone	28
Area adjusted cooling load (MJ/m <sup>2</sup> .year)	27
Area adjusted heating load (MJ/m <sup>2</sup> .year)	50

### Other

none	n/a
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### Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 46	Target 40

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 3500 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 135 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>• all toilets in the development</li> <li>• the cold water tap that supplies each clothes washer in the development</li> <li>• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		✓	✓

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Simulation Method</b>			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	✓	✓	✓

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Hot water</b>			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5 stars.	✓	✓	✓
<b>Cooling system</b>			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 2.5 - 3.0		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
<b>Heating system</b>			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
<b>Ventilation</b>			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	✓
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✓	✓
<b>Artificial lighting</b>			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• all bathrooms/toilets;		✓	✓
• the laundry;		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	✓	✓	✓
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Other</b>			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		✓	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✓	

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.



# NatHERS Certificate

## New Dwelling

Project **13-14297**  
Location **WERRINGTON COUNTY**  
Climate **climat28.TXT**

Run **1**  
PC **2747**  
6/05/2013

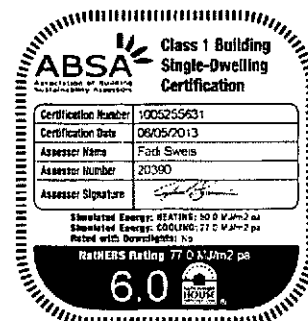


**BERS Pro 4.2**  
Release/Version 110811  
CHENATH V2.13

Area Adjusted  
**6.0** Stars



Conditioned Area **153.50** m<sup>2</sup>  
Unconditioned Area **39.85** m<sup>2</sup>  
Adjusted Cooling **26.8** MJ/m<sup>2</sup>  
Adjusted Heating **50.4** MJ/m<sup>2</sup>  
Adjusted Total **77.2** MJ/m<sup>2</sup>



### Dwelling Details

D P Number *Unreg* Unit Number |  
Lot Number *2035* OR House Number or Name  
Street Name *Elimatta Ave*  
Development OR  
Name *J002713 - Mr Su & Mrs Zhuo*  
Suburb or  
Town *Jordan Springs*  
State *NSW* Post Code *2747*

### Client Details

Name *Rawson Homes*  
Phone *02 9764 6442* Fax *02 9764 6992* Email  
Postal Address *Unit 34/11-21 Underwood Road, Homebush NSW 2140*  
Street Address *Unit 34/11-21 Underwood Road, Homebush NSW 2140*

### Assessor Details

Name *Fadi Sweis* Assessor *20390*  
Number  
Phone *02 9629 4688* Fax *02 9629 9722* Email *fsweis@eraservices.com.au*  
Postal Address *PO Box 7446, Baulkham Hills BC NSW 2153*  
Street Address *Suit 2.01, 20A Lexington Drive, Bella Vista NSW 2153*

Signed by the assessor Date / /

*Tilted roof windows with blinds cannot be modelled using this version of BERS Pro  
All windows are modelled with Holland Blinds for Regulatory Purposes*



# Building Element Details

BERS V4.2 Building Element Details for 13-14297 Run 1

WERRINGTON COUNTY PC 2747 Lat -33.70 Long 150.70 Climate File climat28.TXT

Project 13-14297 Run 1  
WERRINGTON COUNTY PC 2747 Lat -33.70 Long 150.70 Climate File climat28.TXT

Summary

Conditioned Area	153.5 m <sup>2</sup>
Unconditioned Area	39.9 m <sup>2</sup>
Total Floor Area	193.4 m <sup>2</sup>
Total Glazed Area	29.0 m <sup>2</sup>
Total External Solid door Area	12.8 m <sup>2</sup>
Glass to Floor Area	15.0 %
Gross External Wall Area	188.9 m <sup>2</sup>
Net External Wall Area	147.1 m <sup>2</sup>

Window

29.0 m <sup>2</sup>	GGG-05-001a	Generics	Uval 6.57	SHGC 0.74
	Glass	Single Glazed	Clear	
	Frame	Aluminium		

External Wall

120.7 m <sup>2</sup>	Brick Veneer	Bulk Insulation	R 2.0
26.4 m <sup>2</sup>	Brick Veneer	No Insulation	

Internal Wall

149.9 m <sup>2</sup>	Cavity Panel	70mm gap	No Insulation
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External Floor

38.0 m <sup>2</sup>	Concrete Slab on Ground	Carpet 10mm	No Insulation
24.3 m <sup>2</sup>	Concrete Slab on Ground	Ceramic Tiles 8mm	No Insulation
29.2 m <sup>2</sup>	Concrete Slab on Ground	80/20 Carpet 10mm/Ceramic	No Insulation
30.0 m <sup>2</sup>	Concrete Slab on Ground	Bare	No Insulation
71.9 m <sup>2</sup>	Concrete Slab on Ground	20/80 Carpet 10mm/Ceramic	No Insulation

External Ceiling

163.4 m <sup>2</sup>	Plasterboard	Bulk Insulation	R3.5 Unventilated roofspace
30.0 m <sup>2</sup>	Plasterboard	No Insulation	Unventilated roofspace

Roof (Horizontal area)

193.4 m <sup>2</sup>	Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	23° slope	Hip roof
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