

Building Sustainability Index www.basix.nsw.gov.au

# Single Dwelling

Certificate number: 1018158S

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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Thursday, 06 June 2019

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



Lot 7 Warringah Ro	ad Forestville
602 Warringah Roa	d Forestvile 2087
Northern Beaches (	Council
deposited 23583	
7	
-	
separate dwelling h	ouse
4	
<b>4</b> 0	Target 40
✓ Pass	Target Pass
<b>✓</b> 51	Target 50
	7

### **Certificate Prepared by**

Name / Company Name: Energi Thermal Assessors Pty Ltd

ABN (if applicable): 77614736284

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# Description of project

Project address	
Project name	Lot 7 Warringah Road Forestville
Street address	602 Warringah Road Forestvile 2087
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 23583
Lot no.	7
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m²)	820
Roof area (m²)	250
Conditioned floor area (m2)	258.6
Unconditioned floor area (m2)	20.66
Total area of garden and lawn (m2)	338

Assessor details and thermal I	oads			
Assessor number	101182			
Certificate number	0003919842			
Climate zone	56			
Area adjusted cooling load (MJ/m².year)	21			
Area adjusted heating load (MJ/m².year)	37			
Project score				
Water	₩ 40	Target 40		
Thermal Comfort	✓ Pass	Target Pass		
Energy	₩ 51	Target 50		

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# 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
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		~	V
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		~	V
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		<b>V</b>	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		<b>~</b>	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	<b>V</b>	~	~
The applicant must configure the rainwater tank to collect rain runoff from at least 110 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		~	V
The applicant must connect the rainwater tank to:			
all toilets in the development		~	-
the cold water tap that supplies each clothes washer in the development		<b>V</b>	~
<ul> <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>			•

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Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
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.	V	~	~
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.		~	<b>V</b>
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.	-	~	<b>V</b>

Floor and wall construction	Area
floor - concrete slab on ground	122.0 square metres
floor - suspended floor/open subfloor	3,0 square metres
floor - suspended floor above garage	All or part of floor area

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
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 6 stars.	~	~	V
Cooling system			
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 3.0 - 3.5		<b>V</b>	V
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 3.0 - 3.5		V	V
The cooling system must provide for day/night zoning between living areas and bedrooms.		~	V
Heating system			
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>V</b>	V
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: interlocked to light		<b>✓</b>	~
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		<b>→</b>	~
Laundry: natural ventilation only, or no laundry; Operation control: n/a		~	~
Artificial lighting			
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:			
at least 5 of the bedrooms / study; dedicated			

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 2 of the living / dining rooms; dedicated		<b>~</b>	
the kitchen; dedicated		~	V
all bathrooms/toilets; dedicated			V
• the laundry; dedicated		<b>V</b>	V
all hallways; dedicated		V	V
Natural lighting			
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	•	V	W
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		V	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		V	
The applicant must install a fixed outdoor clothes drying line as part of the development.			

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#### 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 win 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.

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Certificate number: 0003919842 Certificate Date: 06 Jun 2019 ★ Star rating: 5.5

BERS Pro v4.3.0.0 (3.13) cannot be used to model 'roof windows'. Roof windows are 'openable or fixed windows in a roof and do not have a shaft, as distinct from skylights which incorporate a built-in shaft and are not ventilated. BERS Pro v4.3 can only model skylights. If a roof window is present on the floor plan then this certificate is not valid.



#### Assessor details

Accreditation

number: **101182** 

Name: Daniel.Warda

Organisation: Energi Thermal Assessors Pty Ltd

Email: daniel.warda@hotmail.com

Phone: **0452504125** 

Declaration None

of interest:

Software: **BERS Pro v4.3.0.2d (3.13)** 

AAO: ABSA

#### Overview

#### **Dwelling details**

Street: 602 Warringah Road

Suburb: Forestville

State: NSW Postcode: 2087
Type: New Dwelling NCC Class: 1A

NatHERS

Lot/DP climate zone: **56** 

number: 23583 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

Corrugated Iron

Waffle pod slab 300 mm

Insulation: R2.0 wall insulation

R4.0 ceiling insulation
No floor insulation

Glazing: STG-002-01 A Aluminium Awning

Window SG 3CIr

#### Net floor area (m<sup>2</sup>)

 Conditioned:
 251.0

 Unconditioned:
 50.0

 Garage:
 31.0

 TOTAL:
 301.0

# Annual thermal performance loads (MJ/m²)

 Heating:
 36.5

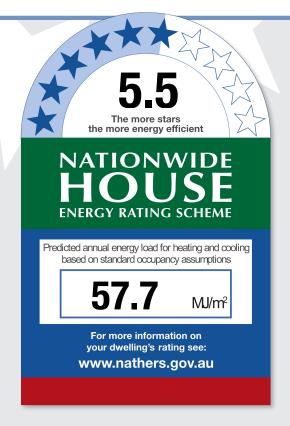
 Cooling:
 21.2

 TOTAL:
 57.7

#### Plan documents

Plan ref/date: 29800312

Prepared by: Clarendon Homes - SMC



#### **Ceiling penetrations**

(see following pages for details)

Sealed: 2
Unsealed: 0

TOTAL:\*\*

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Principle downlight type: Unknown

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



Certificate number: 0003919842 Certificate Date: 06 Jun 2019 ★ Star rating:



5.5

# **Building features**

Window type a	and performance value			
Window ID	Window type	U-value	SHGC	
STG-007-01 A	STG-007-01 A Aluminium Sliding Window SG 3Clr	6.3	0.73	
STG-058-03 A	STG-058-03 A Aluminium Bi-fold Window SG 3Clr	6.1	0.52	
STG-002-01 A	STG-002-01 A Aluminium Awning Window SG 3Clr	6.5	0.65	
STG-005-02 A	STG-005-02 A Aluminium Sliding Door SG 5Clr	6.3	0.72	

#### Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Home Theatre	STG-007-01 A	n/a	600	1800	NE	No Shading
Home Theatre	STG-007-01 A	n/a	600	1800	NE	No Shading
Kitchen/Family/	STG-058-03 A	n/a	2400	3600	NW	No Shading
Kitchen/Family/	STG-058-03 A	n/a	2400	3600	NW	No Shading
Kitchen/Family/	STG-002-01 A	n/a	1200	800	NE	No Shading
Kitchen/Family/	STG-007-01 A	n/a	2000	2600	NE	No Shading
Kitchen/Family/	STG-007-01 A	n/a	2000	2600	SW	No Shading
Butlers Pantry	STG-002-01 A	n/a	715	2410	SW	No Shading
PDR	STG-002-01 A	n/a	300	2000	NE	No Shading
Kitchen/Family/	STG-002-01 A	n/a	2000	1200	NE	No Shading
Kitchen/Family/	STG-002-01 A	n/a	2000	1400	SE	No Shading
Garage	STG-002-01 A	n/a	2400	4800	SE	No Shading
Bedroom 1	STG-002-01 A	n/a	2040	700	SE	No Shading
Bedroom 1	STG-002-01 A	n/a	2040	700	SE	No Shading
Bedroom 1	STG-002-01 A	n/a	2040	820	SE	No Shading
Bedroom 1	STG-002-01 A	n/a	2040	820	SE	No Shading
Bedroom 1	STG-002-01 A	n/a	1200	700	SE	No Shading
Bedroom 1	STG-007-01 A	n/a	1200	1500	NE	No Shading
Bedroom 2	STG-007-01 A	n/a	1200	1800	SW	No Shading
Bath	STG-007-01 A	n/a	1200	1500	SW	No Shading
Bedroom 3	STG-007-01 A	n/a	1200	1800	SW	No Shading
Bedroom 4	STG-002-01 A	n/a	1200	2400	SE	No Shading
Ensuite	STG-007-01 A	n/a	1200	1800	NE	No Shading
Leisure	STG-005-02 A	n/a	2100	2700	NW	No Shading
Leisure	STG-007-01 A	n/a	1200	1800	NE	No Shading
Leisure	STG-007-01 A	n/a	1200	1800	NE	No Shading
Leisure	STG-002-01 A	n/a	800	800	NE	No Shading

ID	Window	type			U-value	SHGC
None Presen	t					
Roof windo	w and skyligh	nt schedule				
	w and skyligh		Area (m²)	Orientation Ou	ıtdoor shade	Indoor
Roof windo Location	w and skyligh	Roof window/skylight	Area (m²)	Orientation Ou	ıtdoor shade	Indoor shade/diffuser

Certificate number: 0003919842 Certificate Date: 06 Jun 2019 ★ Star rating:



# **Building features continued**

External v	vall type		
ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Bulk Insulation R2	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2	Yes
EW-5	Single Skin Panel	Bulk Insulation R2.6	No

#### **External wall schedule**

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Home Theatre	EW-1	500	2600	NW	No	100
Home Theatre	EW-1	4495	2600	NE	No	100
Kitchen/Family/	EW-1	8900	2943	NW	No	4400
Kitchen/Family/	EW-1	6895	2943	NE	No	100
Kitchen/Family/	EW-1	7095	2943	SW	No	100
Butlers Pantry	EW-1	2990	2943	SW	No	100
Laundry	EW-1	2090	2600	SW	No	100
PDR	EW-1	2290	2600	NE	No	100
Kitchen/Family/	EW-1	4995	2600	NE	No	1700
Kitchen/Family/	EW-1	2500	2600	SE	No	2100
Kitchen/Family/	EW-1	1900	2600	SW	No	7500
Kitchen/Family/	EW-1	1695	2600	SE	No	4000
Garage	EW-2	900	2675	NE	No	5900
Garage	EW-3	5700	2675	SE	No	100
Garage	EW-2	5500	2675	SW	No	100
Garage	EW-3	500	2675	NW	No	100
Bedroom 1	EW-4	3700	2600	SE	No	2400
Bedroom 1	EW-4	3100	2600	SW	No	600
Bedroom 1	EW-4	995	2600	SE	No	5500
Bedroom 1	EW-4	8195	2600	NE	No	600
Bedroom 2	EW-5	4195	600	NW	No	0
Bedroom 2	EW-1	4195	2000	NW	No	600
Bedroom 2	EW-1	3495	2600	SW	No	600
Bed 2 WIR	EW-1	1490	2600	SW	No	600
Bath	EW-1	2990	2600	SW	No	600
Bedroom 3	EW-1	3790	2600	SW	No	600
Bedroom 4	EW-4	4195	2600	SE	No	600
Bedroom 4	EW-4	3795	2600	SW	No	600
Ensuite	EW-4	3590	2600	NE	No	600
Leisure	EW-1	4695	2600	NW	No	4300
Leisure	EW-1	6895	2600	NE	No	600

Internal wall type			
Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	251.0	No insulation	No

<sup>\*</sup> Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

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# **Building features continued**

IW-2 - Cavity wall, direct fix plasterboard, single gap 25.0 Bulk Insulation, No Air Gap R2 No

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Home Theatre	Waffle pod slab 300 mm 100mm	13.5	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Kitchen/Family/	Waffle pod slab 300 mm 100mm	64.3	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Butlers Pantry	Waffle pod slab 300 mm 100mm	11.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	9.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
PDR	Waffle pod slab 300 mm 100mm	3.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Family/	Waffle pod slab 300 mm 100mm	29.6	None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Garage	Waffle pod slab 300 mm 100mm	30.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Home Theatre	Timber Above Plasterboard 19mm	0.9		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 1/PDR	Timber Above Plasterboard 19mm	2.3		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 1/Kitchen/Family/	Timber Above Plasterboard 19mm	16.0		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 1/Garage	Timber Above Plasterboard 19mm	2.7		Bulk Insulation R4	Carpet+Rubber Underlay 18mn
Bedroom 1	Suspended Timber Floor 19mm	3.2	Totally Open		Carpet+Rubber Underlay 18mm
Bedroom 2/Kitchen/Family/	Timber Above Plasterboard 19mm	15.2		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2 WIR/Kitchen/Famil y/	Timber Above Plasterboard 19mm	2.0		No Insulation	Carpet+Rubber Underlay 18mm
Bath/Kitchen/Famil y/	Timber Above Plasterboard 19mm	4.9		No Insulation	Ceramic Tiles 8mm
Bath/Butlers Pantry	Timber Above Plasterboard 19mm	1.6		No Insulation	Ceramic Tiles 8mm
WC/Kitchen/Family/	Timber Above Plasterboard 19mm	2.4		No Insulation	Ceramic Tiles 8mm
Bedroom 3/Butlers Pantry	Timber Above Plasterboard 19mm	8.5		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 3/Laundry	Timber Above Plasterboard 19mm	6.4		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 4/Laundry	Timber Above Plasterboard 19mm	1.4		No Insulation	Carpet+Rubber Underlay 18mn
Bedroom 4/Garage	Timber Above Plasterboard 19mm	13.6		Bulk Insulation R4	Carpet+Rubber Underlay 18mn
Bed 1 WIR/Home Theatre	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet+Rubber Underlay 18mn
Bed 1 WIR/Kitchen/Famil	Timber Above Plasterboard 19mm	5.5		No Insulation	Carpet+Rubber Underlay 18mm

Certificate number: 0003919842 Certificate Date: 06 Jun 2019 ★ Star rating:



# **Building features continued**

y/				
Ensuite/Home Theatre	Timber Above Plasterboard 19mm	9.0	No Insulation	Ceramic Tiles 8mm
Ensuite/Kitchen/Fa mily/	Timber Above Plasterboard 19mm	3.6	No Insulation	Ceramic Tiles 8mm
Leisure/Kitchen/Fa mily/	Timber Above Plasterboard 19mm	35.2	No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Kitchen/Fa mily/	Timber Above Plasterboard 19mm	0.6	No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Butlers Pantry	Timber Above Plasterboard 19mm	1.2	No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Laundry	Timber Above Plasterboard 19mm	1.8	No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Kitchen/Fa mily/	Timber Above Plasterboard 19mm	1.8	No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Garage	Timber Above Plasterboard 19mm	1.0	Bulk Insulation R4	Carpet+Rubber Underlay 18mm
WIL/Kitchen/Family/	Timber Above Plasterboard 19mm	2.0	No Insulation	Carpet+Rubber Underlay 18mm

Ceiling type
Location

Location	Construction	Added insulation	Roof space above
Home Theatre	Plasterboard	Bulk Insulation R4	Yes
Home Theatre	Timber Above Plasterboard	No Insulation	No
Kitchen/Family/	Timber Above Plasterboard	No Insulation	No
Butlers Pantry	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
PDR	Plasterboard	Bulk Insulation R4	Yes
PDR	Timber Above Plasterboard	No Insulation	No
Kitchen/Family/	Plasterboard	Bulk Insulation R4	Yes
Kitchen/Family/	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	No insulation	Yes
Garage	Timber Above Plasterboard	Bulk Insulation R4	No
Bedroom 1	Plasterboard	Bulk Insulation R4	Yes
Bedroom 2	Plasterboard	Bulk Insulation R4	Yes
Bed 2 WIR	Plasterboard	Bulk Insulation R4	Yes
Bath	Plasterboard	Bulk Insulation R4	Yes
WC	Plasterboard	Bulk Insulation R4	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4	Yes
Bedroom 4	Plasterboard	Bulk Insulation R4	Yes
Bed 1 WIR	Plasterboard		Yes

Certificate number: **0003919842** Certificate Date:

06 Jun 2019

★ Star rating:



# **Building features continued**

		Bulk Insulation R4
Ensuite	Plasterboard	Bulk Insulation Yes R4
Leisure	Plasterboard	Bulk Insulation Yes R4
Leisure	Plasterboard	Bulk Insulation Yes R4
WIL	Plasterboard	Bulk Insulation Yes R4

Ceiling penetrations					
Number	Туре	Diameter (mm)	Sealed/unsealed		
1	Exhaust Fans	300	Sealed		
1	Exhaust Fans	300	Sealed		
		NumberType1Exhaust Fans	NumberTypeDiameter (mm)1Exhaust Fans300		

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Construction	Added Roof colour insulation
Corrugated Iron	Foil, Gap Above, Medium Reflective Side Down, Anti-glare Up



Additional information	

# **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in the report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using the underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance.

The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au For more information on energy efficient design and insulation visit www.yourhome.gov.au

<sup>\*</sup> Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au