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

Project summary

Single Dwelling

Certificate number: 1031267S_04

commitments set out below. Terms used in this certificate, or in the commitments, government's requirements for sustainability, if it is built in accordance with the have the meaning given by the document entitled "BASIX Definitions" dated This certificate confirms that the proposed development will meet the NSW 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Tuesday, 14 January 2020 To be valid, this certificate must be lodged within 3 months of the date of issue.



Project name	Lot 8, 600 Warringah Road Forestville_04	restville_04
Street address	600 Warringah Road Forestville 2087	e 2087
Local Government Area	Northern Beaches Council	
Plan type and plan number	deposited 23583	
Lot no.	80	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	5	
Project score		
Water	▼ 43 Ta	Target 40
Thermal Comfort	V Pass Ta	Target Pass
Energy	5 0 Ta	Target 50

Certificate Prepared by

Name / Company Name: Energi Thermal Assessors Pty Ltd

ABN (if applicable): 77614736284

Tuesday, 14 January 2020

Tuesday, 14 January 2020

Jescription of project

Display romo	Lot 8 600 Warringab Road Forestville 04
Tujeut Ilaine	Lot o, ood warnigan road i orestwing
Street address	600 Warringah Road Forestville 2087
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 23583
Lot no.	88
Section no.	1
Project type	
Project type	separate dwelling house
No. of bedrooms	5
Site details	
Site area (m²)	653
Roof area (m²)	288
Conditioned floor area (m2)	346.3
Unconditioned floor area (m2)	14.18
Total area of garden and lawn (m2)	308

Assessor details and thermal loads	ads	
Assessor number	101182	
Certificate number	0004098562-01	
Climate zone	56	
Area adjusted cooling load (MJ/m².year)	25	
Area adjusted heating load (MJ/m².year)	33	
Project score		
Water	V 43 Target 40	40
Thermal Comfort	V Pass Targe	Target Pass
Energy	50 Target 50	. 50

Tuesday, 14 January 2020

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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.		>	>
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 4 star in the kitchen in the development.		>	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		>	
Alternative water			
Rainwater fank			
The applicant must install a rainwater tank of at least 4850 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 100 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:			
• all toilets in the development		>	>
• the cold water tap that supplies each clothes washer in the development		>	>
 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.) 		>	>

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.	>	>	>
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
floor - suspended floor above garage	All or part of floor area

Certificate No.: 1031267S_04

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.	>	>	>
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		>	>
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		>	>
The cooling system must provide for day/night zoning between living areas and bedrooms.		>	3
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.		>	>
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: Individual fan, ducted to façade of foor, Operation control. Interlocked to light		>	>
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		>	>
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 6 of the bedrooms / study;		>	>

Certificate No.: 1031267S_04

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier
• at least 4 of the living / dining rooms;		>	>
• the kitchen;		>	>
• all bathrooms/toilets;		>	>
• the laundry,		>	>
• all hallways;		>	>
Natural lighting			
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 5 bathroom(s)/toilet(s) in the development for natural lighting.	>	>	>
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		>	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		>	
The applicant must install a fixed outdoor clothes drying line as part of the development.)	

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.

BASIX

Tuesday, 14 January 2020



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 v4.4.0.0 (3.21)**

AAO: ABSA

Overview

Dwelling details

Street: Warringah Road

Suburb: Forestville

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

NatHERS

Lot/DP climate zone: **56**

number: 8/23583 Exposure: Suburban

Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

Corrugated Iron

Suspended Timber Floor

Insulation: R2.0 wall insulation

R4.0 ceiling insulation R4.0 floor insulation

Glazing: STG-002-11 A Aluminium Awning

Window SG 4ET

Net floor area (m²)

 Conditioned:
 351.0

 Unconditioned:
 46.0

 Garage:
 31.0

 TOTAL:
 397.0

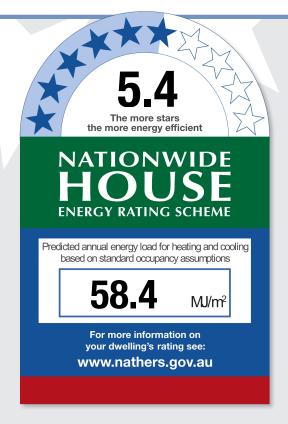
Annual thermal performance loads (MJ/m²)

Heating: **33.0** Cooling: **25.4** TOTAL: **58.4**

Plan documents

Plan ref/date: 29800313

Prepared by: Clarendon Home - 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: 0004098562-01 Certificate Date: 14 Jan 2020 ★ Star rating:



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
STG-005-10 A	STG-005-10 A Aluminium Sliding Door SG 4ET	4.5	0.63
STG-002-11 A	STG-002-11 A Aluminium Awning Window SG 4ET	5.0	0.55
STG-002-01 A	STG-002-01 A Aluminium Awning Window SG 3Clr	6.5	0.65

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	STG-005-10 A	n/a	2400	3200	SE	No Shading
Kitchen/Living	STG-005-10 A	n/a	2400	3600	NW	No Shading
Kitchen/Living	STG-005-10 A	n/a	2400	3600	NW	No Shading
Kitchen/Living	STG-002-11 A	n/a	2000	1400	NW	No Shading
Pantry	STG-002-11 A	n/a	2000	800	SW	No Shading
Kitchen/Living	STG-002-11 A	n/a	2280	1300	NE	No Shading
Kitchen/Living	STG-002-11 A	n/a	2280	1300	NE	No Shading
Kitchen/Living	STG-002-11 A	n/a	2280	1300	NE	No Shading
Kitchen/Living	STG-002-11 A	n/a	2280	1300	NE	No Shading
Living/MPR	STG-002-11 A	n/a	2000	2600	NW	No Shading
Living/MPR	STG-002-11 A	n/a	2057	2650	NE	No Shading
Living/MPR	STG-002-11 A	n/a	2057	3010	SE	No Shading
E.S	STG-002-01 A	n/a	1200	700	SW	No Shading
Guest	STG-002-11 A	n/a	2000	1800	SW	No Shading
Bedroom 3	STG-002-11 A	n/a	1200	1800	NW	No Shading
Bedroom 3	STG-002-11 A	n/a	1300	700	SW	No Shading
E.S	STG-002-01 A	n/a	1800	700	NW	No Shading
E.S	STG-002-01 A	n/a	1800	700	NW	No Shading
Bedroom 1	STG-005-10 A	n/a	2400	2700	SW	No Shading
Bedroom 1	STG-002-11 A	n/a	1200	2650	NW	No Shading
W.I.R	STG-002-11 A	n/a	1200	1400	SE	No Shading
Leisure/Study	STG-002-11 A	n/a	1200	2650	NW	No Shading
Leisure/Study	STG-002-11 A	n/a	1200	800	NE	No Shading
Leisure/Study	STG-002-11 A	n/a	1200	3290	NE	No Shading
Leisure/Study	STG-002-11 A	n/a	1200	2960	SE	No Shading
Leisure/Study	STG-002-11 A	n/a	2057	1110	SW	No Shading
Leisure/Study	STG-005-10 A	n/a	2400	3200	SE	No Shading
Leisure/Study	STG-002-11 A	n/a	1200	800	SE	No Shading
Leisure/Study	STG-002-11 A	n/a	2280	1300	NE	Vertical Louvres, Horizontal Blades
Leisure/Study	STG-002-11 A	n/a	2280	1300	NE	Vertical Louvres, Horizontal Blades
Leisure/Study	STG-002-11 A	n/a	2280	1300	NE	Vertical Louvres, Horizontal Blades
Leisure/Study	STG-002-11 A	n/a	2280	1300	NE	Vertical Louvres, Horizontal Blades
Bedroom 4	STG-002-11 A	n/a	1200	1800	SW	No Shading
Bed 3 Ensuite	STG-002-01 A	n/a	1300	700	SW	No Shading
WC	STG-002-01 A	n/a	1300	600	SW	No Shading
Bath	STG-002-01 A	n/a	1300	1500	SW	No Shading
Bedroom 2	STG-002-11 A	n/a	1200	1400	SE	No Shading
Bedroom 2	STG-002-11 A	n/a	1200	800	SW	No Shading

^{*} Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Certificate number: 0004098562-01 Certificate Date: 14 Jan 2020 ★ Star rating:



Building features continued

and skylight type	e and performance	e value			
Window type				U-value	SHGC
and skylight sch	edule				
ID	Roof window/skylight	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
	Window type v and skylight sch	Window type v and skylight schedule ID Roof	v and skylight schedule ID Roof Area (m²)	Window type v and skylight schedule ID Roof Area (m²) Orientation	Window type U-value v and skylight schedule ID Roof Area (m²) Orientation Outdoor shade

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

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	5900	3264	NE	No	100
Kitchen/Living	EW-1	4300	3264	SE	No	100
Kitchen/Living	EW-1	5395	3264	SW	No	800
Kitchen/Living	EW-1	11000	3264	NW	No	4300
Pantry	EW-1	2195	3264	SW	No	100
Pantry	EW-1	700	3264	NW	No	9700
Kitchen/Living	EW-1	6895	2750	NE	No	100
Kitchen/Living	EW-1	295	2750	NW	No	100
Kitchen/Living	EW-1	1990	2750	SE	No	3083
Living/MPR	EW-1	3995	2750	NW	No	100
Living/MPR	EW-1	8500	2750	NE	No	100
Living/MPR	EW-1	4000	2750	SE	No	100
Living/MPR	EW-1	2200	2750	SW	No	7800
Garage	EW-2	5700	2825	SE	No	2017
Garage	EW-3	5595	2825	SW	No	100
Garage	EW-1	200	2750	NE	No	6100
Garage	EW-3	800	2825	NE	No	6100
Laundry	EW-1	1790	2750	SW	No	100
E.S	EW-1	1990	2750	SW	No	100
Guest	EW-1	3090	2750	SW	No	100
Bedroom 3	EW-4	3595	2600	NW	No	100
Bedroom 3	EW-4	4895	2600	SW	No	100
E.S	EW-4	3890	2600	NW	No	4000
Bedroom 1	EW-4	3900	2600	SW	No	4200
Bedroom 1	EW-4	4200	2600	NW	No	100
Bedroom 1	EW-4	4495	2600	NE	No	100
W.I.R	EW-4	4895	2600	NE	No	100
W.I.R	EW-1	400	2600	NE	No	100

^{*} Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Certificate number: 0004098562-01 Certificate Date: 14 Jan 2020 ★ Star rating: 5



W.I.R	EW-1	2595	2600	SE	No	100
Leisure/Study	EW-1	4300	2600	NW	No	100
Leisure/Study	EW-4	8500	2600	NE	No	100
Leisure/Study	EW-4	3900	2600	SE	No	100
Leisure/Study	EW-4	2200	2600	SW	No	5600
Leisure/Study	EW-4	3595	2600	SE	No	2300
Leisure/Study	EW-1	1695	2600	SE	No	100
Leisure/Study	EW-1	6900	2600	NE	No	100
Bedroom 4	EW-4	3990	2600	SW	No	100
Bed 3 Ensuite	EW-4	1990	2600	SW	No	100
WC	EW-4	1790	2600	SW	No	100
Bath	EW-4	2890	2600	SW	No	100
Bedroom 2	EW-4	4195	2600	SE	No	300
Bedroom 2	EW-4	3495	2600	SW	No	100

Internal wall type				
Wall type	Area (m²)	Insulation	Wall wrap or foil	
IW-1 - Cavity wall, direct fix plasterboard, single gap	282.0	No insulation	No	
IW-2 - Cavity wall, direct fix plasterboard, single gap	28.0	Bulk Insulation, No Air Gap R2	No	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Waffle pod slab 300 mm 100mm	62.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Pantry	Waffle pod slab 300 mm 100mm	6.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Cellar	Waffle pod slab 300 mm 100mm	3.0	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	36.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Living/MPR	Waffle pod slab 300 mm 100mm	33.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage	Waffle pod slab 300 mm 100mm	31.5	None	Waffle Pod 300mm	Bare
Powder Room	Waffle pod slab 300 mm 100mm	2.9	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 300 mm 100mm	5.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
E.S	Waffle pod slab 300 mm 100mm	4.3	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Guest	Waffle pod slab 300 mm 100mm	10.6	None	Waffle Pod 300mm	Carpet 10mm
W.I.R	Waffle pod slab 300 mm 100mm	2.3	None	Waffle Pod 300mm	Carpet 10mm
Bedroom	Timber Above Plasterboard	13.5		No Insulation	Carpet 10mm

^{*} Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Certificate number: 0004098562-01 Certificate Date: 14 Jan 2020 ★ Star rating:



Building features continued

3/Kitchen/Living	19mm				
Bedroom 3	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet 10mm
E.S/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	8.6		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	16.0	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet 10mm
W.I.R/Kitchen/Living	Timber Above Plasterboard 19mm	13.4		No Insulation	Carpet 10mm
Leisure/Study/Kitc hen/Living	Timber Above Plasterboard 19mm	8.0		No Insulation	Carpet 10mm
Leisure/Study/Cell ar	Timber Above Plasterboard 19mm	2.7		No Insulation	Carpet 10mm
Leisure/Study/Kitc hen/Living	Timber Above Plasterboard 19mm	36.7		No Insulation	Carpet 10mm
Leisure/Study/Livin g/MPR	Timber Above Plasterboard 19mm	33.3		No Insulation	Carpet 10mm
Leisure/Study/Gar age	Timber Above Plasterboard 19mm	7.6		Bulk Insulation R4	Carpet 10mm
Leisure/Study/Pow der Room	Timber Above Plasterboard 19mm	3.2		No Insulation	Carpet 10mm
Leisure/Study/Lau ndry	Timber Above Plasterboard 19mm	1.6		No Insulation	Carpet 10mm
Leisure/Study/E.S	Timber Above Plasterboard 19mm	1.4		No Insulation	Carpet 10mm
Leisure/Study/W.I.R	Timber Above Plasterboard 19mm	2.4		No Insulation	Carpet 10mm
Bedroom 4/Pantry	Timber Above Plasterboard 19mm	2.2		No Insulation	Carpet 10mm
Bedroom 4/Kitchen/Living	Timber Above Plasterboard 19mm	0.7		No Insulation	Carpet 10mm
Bedroom 4/Guest	Timber Above Plasterboard 19mm	10.6		No Insulation	Carpet 10mm
Bed 3 Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	0.8		No Insulation	Ceramic Tiles 8mm
Bed 3 Ensuite/Pantry	Timber Above Plasterboard 19mm	4.2		No Insulation	Ceramic Tiles 8mm
WC/E.S	Timber Above Plasterboard 19mm	2.5		No Insulation	Ceramic Tiles 8mm
Bath/Garage	Timber Above Plasterboard 19mm	2.5		Bulk Insulation R4	Ceramic Tiles 8mm
Bath/Laundry	Timber Above Plasterboard 19mm	4.1		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Garage	Timber Above Plasterboard 19mm	15.5		Bulk Insulation R4	Carpet 10mm

Ceiling type			
Location	Construction	Added insulation	Roof space above

Certificate number: 0004098562-01 Certificate Date: 14 Jan 2020 ★ Star rating:



Building features continued

Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Pantry	Timber Above Plasterboard	No Insulation	No
Cellar	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Living/MPR	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	No insulation	Yes
Garage	Timber Above Plasterboard	Bulk Insulation R4	No
Powder Room	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
E.S	Timber Above Plasterboard	No Insulation	No
Guest	Timber Above Plasterboard	No Insulation	No
W.I.R	Timber Above Plasterboard	No Insulation	No
Bedroom 3	Plasterboard	Bulk Insulation R4	Yes
E.S	Plasterboard	Bulk Insulation R4	Yes
Bedroom 1	Plasterboard	Bulk Insulation R4	Yes
W.I.R	Plasterboard	Bulk Insulation R4	Yes
Leisure/Study	Plasterboard	Bulk Insulation R4	Yes
Bedroom 4	Plasterboard	Bulk Insulation R4	Yes
Bed 3 Ensuite	Plasterboard	Bulk Insulation R4	Yes
WC	Plasterboard	Bulk Insulation R4	Yes
Bath	Plasterboard	Bulk Insulation R4	Yes
Bedroom 2	Plasterboard	Bulk Insulation R4	Yes

Cail	lina	nonotrations
Cei	шц	penetrations

Location	Number	Туре	Diameter (mm)	Sealed/unsealed
Powder Room	1	Exhaust Fans	300	Sealed
E.S	1	Exhaust Fans	300	Sealed

Ceil	ling '	tans

Location	Number	Diameter (mm)	
None Present	•		

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Construction	Added insulation	Roof colour

Certificate number: **0004098562-01** Certificate Date: 14 Jan 2020 ★ Star rating:



Building features continued

Corrugated Iron	Bulk, Reflective Medium Side Down, No Air Gap Above R1.3
Corrugated Iron	Bulk, Reflective Medium Side Down, No Air Gap Above R1.3



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

^{*} Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au