

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

## Single Dwelling

Certificate number: 1002814S 02

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: Friday, 12 April 2019

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



Project summary				
Project name	SOMMER - 29913455_02			
Street address	Proposed Road WARRIEWOOD 2102			
Local Government Area	Northern Beaches Council			
Plan type and plan number	deposited UNREG			
Lot no.	17			
Section no.	n/a			
Project type	separate dwelling house			
No. of bedrooms	4			
Project score				
Water	✓ 50 Target 40			
Thermal Comfort	✓ Pass Target Pass			
Energy	√ 51 Target 50			

Certificate Prepared by
Name / Company Name: Frys Energywise
ABN (if applicable): 61012522051

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# **Description of project**

Project address	
Project name	SOMMER - 29913455_02
Street address	n/a Proposed Road WARRIEWOOD 2102
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan UNREG
Lot no.	17
Section no.	n/a
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m²)	330
Roof area (m²)	171
Conditioned floor area (m2)	206.0
Unconditioned floor area (m2)	19.0
Total area of garden and lawn (m2)	113

Assessor details and thermal loads							
Assessor number	BDAV/12/1441						
Certificate number	0003694460						
Climate zone	56						
Area adjusted cooling load (MJ/m².year)	20						
Area adjusted heating load (MJ/m².year)	38						
Project score							
Water	✓ 50 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.		<b>~</b>	-
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.		~	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		~	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 4000 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 171.1 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		<b>~</b>	-
The applicant must connect the rainwater tank to:			
all toilets in the development		<b>~</b>	•
the cold water tap that supplies each clothes washer in the development		<b>~</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>		<b>~</b>	~

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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.	~	~	~
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.	V	~	V

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

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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 5 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>→</b>	~
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		<b>y</b>	~
The cooling system must provide for day/night zoning between living areas and bedrooms.		<b>✓</b>	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		<b>→</b>	~
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		<b>V</b>	V
The heating system must provide for day/night zoning between living areas and bedrooms.		~	V
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		<b>✓</b>	V
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		•	V
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 4 of the bedrooms / study;		•	

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Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 5 of the living / dining rooms;		<u> </u>	~
• the kitchen;			
• all bathrooms/toilets;			
• the laundry;			
• all hallways;			
Natural lighting			
The applicant must install a window and/or skylight in 4 bathroom(s)/toilet(s) in the development for natural lighting.		<b>~</b>	-
Other	1		
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		<b>→</b>	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		<b>~</b>	
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.

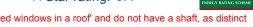
Commitments identified with a in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a 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.

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Certificate number: 0003694460 Certificate Date: 15 Mar 2019 ★ Star rating: **5.4** 



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

VIC/BDAV/12/1441 number:

Name: Ian Fry

Organisation: Frys Energywise

Email: comply@frysenergywise.com.au

Phone: 02 9899 2825

Declaration The Assessor has provided design

of interest: advice to the Applicant BERS Pro v4.3.0.2d (3.13) Software:

**BDAV** AAO:

#### Overview

#### **Dwelling details**

Street: **Proposed Road** Suburb: Warriewood

State: Postcode: 2102 **NSW** NCC Class: **New Dwelling 1A** Type:

**NatHERS** 

climate zone: 56 Lot/DP

number: 17/0 Exposure: Suburban

#### Key construction and insulation materials

(see following pages for details)

Construction: Brick Veneer

**Roof Tiles** 

Suspended Timber Floor

Insulation: **R2.0** wall insulation

> R4.0 ceiling insulation No floor insulation

STG-007-01 A Aluminium Sliding Glazing:

Window SG 3CIr

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

Conditioned: 206.0 Unconditioned: 40.0 Garage: 21.0 TOTAL: 246.0

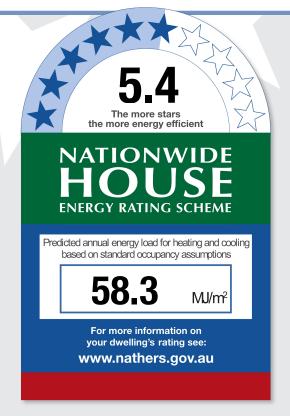
### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

Heating: 38.3 Cooling: 20.1 TOTAL: 58.3

#### Plan documents

29913455 Plan ref/date:

Prepared by:



#### Ceiling penetrations

(see following pages for details)

Sealed: 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

0

### 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: 0003694460 Certificate Date: 15 Mar 2019 ★ Star rating:



### **Building features**

window type and performance value						
Window ID	Window type	U-value	SHGC			
STG-002-01 A	STG-002-01 A Aluminium Awning Window SG 3Clr	6.5	0.65			
STG-007-01 A	STG-007-01 A Aluminium Sliding Window SG 3Clr	6.3	0.73			
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
Study	STG-002-01 A	n/a	1800	600	S	No Shading
Study	STG-002-01 A	n/a	1800	600	S	No Shading
Living	STG-007-01 A	n/a	600	2600	W	No Shading
Powder	STG-007-01 A	n/a	1800	800	W	No Shading
Fam/Meal/Kitche	STG-007-01 A	n/a	1800	800	W	No Shading
Fam/Meal/Kitche	STG-007-01 A	n/a	1800	800	W	No Shading
Fam/Meal/Kitche	STG-005-02 A	n/a	2100	2300	N	No Shading
Fam/Meal/Kitche	STG-005-02 A	n/a	2100	2300	W	No Shading
Fam/Meal/Kitche	STG-007-01 A	n/a	600	1210	N	No Shading
Fam/Meal/Kitche	STG-007-01 A	n/a	1800	1800	Е	No Shading
Laundry	STG-005-02 A	n/a	1000	820	Е	No Shading
Bed 1	STG-007-01 A	n/a	600	2400	W	No Shading
Bed 1	STG-007-01 A	n/a	1000	2600	N	No Shading
Ensuite	STG-007-01 A	n/a	1000	800	Е	No Shading
Leisure	STG-002-01 A	n/a	1300	800	Е	No Shading
Leisure	STG-002-01 A	n/a	1300	800	Е	No Shading
Bed 3	STG-002-01 A	n/a	1000	2100	S	No Shading
Bed 2	STG-007-01 A	n/a	1000	1200	Е	No Shading
Bed 2	STG-002-01 A	n/a	1000	1400	S	No Shading
Bed 2	STG-002-01 A	n/a	1000	1400	S	No Shading
WC	STG-007-01 A	n/a	1000	600	W	No Shading
Bath	STG-007-01 A	n/a	1300	800	W	No Shading
Bed 4	STG-007-01 A	n/a	600	1800	W	No Shading

Roof windo	w and skylig	ht type and performanc	e value			
ID None Presen	Window	type			U-value	SHGC
	w and skyligl	ht schedule				
Location	ID	Roof window/skylight no.	Area (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Presen	t					

External wall type						
ID	Wall type	Insulation	Wall wrap or foil			
EW-1	Brick Veneer	Bulk Insulation R2	No			
EW-2	Fibro Cavity Panel Direct Fix	Bulk Insulation R2	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

Certificate number: 0003694460 Certificate Date: 15 Mar 2019 ★ Star rating: 5.4



### **Building features continued**

EW-3 **Brick Veneer** No insulation No EW-4 Single Skin Brick No No insulation

External wall schedule						
Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Entry	EW-1	1490	2600	S	No	1500
Study	EW-1	1500	2600	Е	No	1600
Study	EW-1	3100	2600	S	No	100
Study	EW-1	2795	2600	W	No	0
Living	EW-1	4490	2600	W	No	0
Powder	EW-1	1590	2600	W	No	0
Fam/Meal/Kitche	EW-1	4895	2600	W	No	0
Fam/Meal/Kitche	EW-1	3400	2600	N	No	3100
Fam/Meal/Kitche	EW-1	3100	2600	W	No	3400
Fam/Meal/Kitche	EW-1	4900	2600	N	No	0
Fam/Meal/Kitche	EW-1	6095	2600	Е	No	0
Laundry	EW-1	3790	2600	Е	No	0
Bed 1	EW-1	5095	635	W	No	0
Bed 1	EW-2	5095	1815	W	No	700
Bed 1	EW-1	5095	635	N	No	0
Bed 1	EW-2	5095	1815	N	No	700
Ensuite	EW-1	3195	635	N	No	0
Ensuite	EW-2	3195	1815	N	No	700
Ensuite	EW-1	2895	635	E	No	0
Ensuite	EW-2	2895	1815	E	No	700
Leisure	EW-1	8090	635	E	No	0
Leisure	EW-2	8090	1815	E	No	700
Bed 3	EW-1	4395	635	E	No	0
Bed 3	EW-2	4395	1815	E	No	700
Bed 3	EW-1	3800	635	S	No	0
Bed 3	EW-2	3800	1815	S	No	700
Bed 2	EW-1	1495	635	E	No	0
Bed 2	EW-2	1495	1815	E	No	700
Bed 2	EW-1	1400	635	S	No	0
Bed 2	EW-2	1400	1815	S	No	700
Bed 2	EW-1	2000	1070	S	No	0
Bed 2	EW-2	2000	1380	S	No	700
Bed 2	EW-1	700	635	S	No	0
Bed 2	EW-2	700	1815	S	No	700
Bed 2	EW-1	400	810	S	No	0
Bed 2	EW-2	400	1640	S	No	700
Bed 2	EW-1	400	810	W	No	0
Bed 2	EW-2	400	1640	W	No	700
Bed 2	EW-1	2795	635	W	No	0
Bed 2	EW-2		1815	W	No	700
WC	EW-1	2795 1590	635	W	No	0
WC						
	EW-2	1590	1815	W	No	700
Bath	EW-1	3190	635	W	No	0

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: 0003694460 Certificate Date: 15 Mar 2019 ★ Star rating: 5.4



Building features continued						
Bath	EW-2	3190	1815	W	No	700
Bed 4	EW-1	3790	635	W	No	0
Bed 4	EW-2	3790	1815	W	No	700
Garage	EW-3	200	2675	N	No	0
Garage	EW-3	5500	2675	Е	No	0
Garage	EW-4	3895	2675	S	No	0

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	150.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	43.0	Bulk Insulation, No Air Gap R1.7	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	25.0	Bulk Insulation, No Air Gap R2	No

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Entry	Waffle pod slab 225 mm 100mm	11.7	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Study	Waffle pod slab 225 mm 100mm	8.5	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Living	Waffle pod slab 225 mm 100mm	13.5	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Powder	Waffle pod slab 225 mm 100mm	3.3	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Fam/Meal/Kitche	Waffle pod slab 225 mm 100mm	56.0	None	Waffle Pod 225mm	80/20 Carpet 10mm/Ceramic
Laundry	Waffle pod slab 225 mm 100mm	5.9	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Bed 1/Fam/Meal/Kitche	Timber Above Plasterboard 19mm	20.1		No Insulation	Carpet+Rubber Underlay 18mm
Bed 1	Suspended Timber Floor 19mm	10.3	Open	No Insulation	Carpet+Rubber Underlay 18mm
Ensuite/Fam/Meal/ Kitche	Timber Above Plasterboard 19mm	8.6		No Insulation	Ceramic Tiles 8mm
Leisure/Entry	Timber Above Plasterboard 19mm	0.9		No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Fam/Meal/ Kitche	Timber Above Plasterboard 19mm	14.6		No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Laundry	Timber Above Plasterboard 19mm	6.1		No Insulation	Carpet+Rubber Underlay 18mm
Leisure/Garage	Timber Above Plasterboard 19mm	4.0		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Bed 3/Entry	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Garage	Timber Above Plasterboard 19mm	15.9		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Bed 2/Entry		2.7		No Insulation	

<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

Certificate number: 0003694460 Certificate Date: 15 Mar 2019 ★ Star rating:



### **Building features continued**

	Timber Above Plasterboard 19mm				Carpet+Rubber Underlay 18mm
Bed 2/Study	Timber Above Plasterboard 19mm	8.5		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Living	Timber Above Plasterboard 19mm	2.1		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2	Suspended Timber Floor 19mm	2.1	Open	No Insulation	Carpet+Rubber Underlay 18mm
WC/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Bath/Living	Timber Above Plasterboard 19mm	5.7		No Insulation	Ceramic Tiles 8mm
Bath/Powder	Timber Above Plasterboard 19mm	1.1		No Insulation	Ceramic Tiles 8mm
Bed 4/Powder	Timber Above Plasterboard 19mm	1.6		No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Fam/Meal/Kitche	Timber Above Plasterboard 19mm	8.9		No Insulation	Carpet+Rubber Underlay 18mm
Passage/Entry	Timber Above Plasterboard 19mm	6.7		No Insulation	Carpet+Rubber Underlay 18mm
Passage/Living	Timber Above Plasterboard 19mm	2.4		No Insulation	Carpet+Rubber Underlay 18mm
Passage/Powder	Timber Above Plasterboard 19mm	0.6		No Insulation	Carpet+Rubber Underlay 18mm
Passage/Fam/Mea I/Kitche	Timber Above Plasterboard 19mm	2.6		No Insulation	Carpet+Rubber Underlay 18mm
Garage	Waffle pod slab 175 mm 19mm	21.0	None	Waffle Pod 175mm	Bare

Ceiling type				
Location	Construction	Added insulation	Roof space above	
Entry	Timber Above Plasterboard	No Insulation	No	
Study	Timber Above Plasterboard	No Insulation	No	
Living	Timber Above Plasterboard	No Insulation	No	
Powder	Timber Above Plasterboard	No Insulation	No	
Fam/Meal/Kitche	Timber Above Plasterboard	No Insulation	No	
Laundry	Timber Above Plasterboard	No Insulation	No	
Bed 1	Plasterboard	Bulk Insulation R4	Yes	
Ensuite	Plasterboard	Bulk Insulation R4	Yes	
Leisure	Plasterboard	Bulk Insulation R4	Yes	
Bed 3	Plasterboard	Bulk Insulation R4	Yes	
Bed 2	Plasterboard	Bulk Insulation R4	Yes	
WC	Plasterboard	Bulk Insulation R4	Yes	
Bath	Plasterboard	Bulk Insulation R4	Yes	
Bed 4	Plasterboard	Bulk Insulation	Yes	

<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





### **Building features continued**

		R4
Passage	Plasterboard	Bulk Insulation Yes R4
Garage	Plasterboard	No insulation Yes
Garage	Timber Above Plasterboard	Bulk Insulation No R2

Ceiling penet	trations		
Location	Number	Туре	Diameter (mm) Sealed/unsealed
None Present	-	-	

Ceiling fans			
Location	Number	Diameter (mm)	
None Present			

Construction	Added Roof colou insulation
Roof Tiles	Foil, Gap Above, Dark Reflective Side Down, Anti-glare Up
Roof Tiles	Foil, Gap Above, Dark Reflective Side Down, Anti-glare Up
Corrugated Iron	Foil, Gap Above, Dark 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