

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0008925380-01

Generated on 22 Sep 2023 using BERS Pro v4.4.1.5 (3.21)

Property

Address 63 Ramsay Road,
Picnic Point , NSW , 2213

Lot/DP 651/206678

NCC Class* 1A

Type New Dwelling

Plans

Main plan 23715-ISSUE B-05.September

Prepared by ART MADE

Construction and environment

Assessed floor area (m²)*	Exposure type
Conditioned* 436.0	Suburban
Unconditioned* 228.0	NatHERS climate zone
Total 664.0	56
Garage 149.0	



Accredited assessor

Name Abbas Chatfirouzeh

Business name Greenticko

Email info@greenticko.com.au

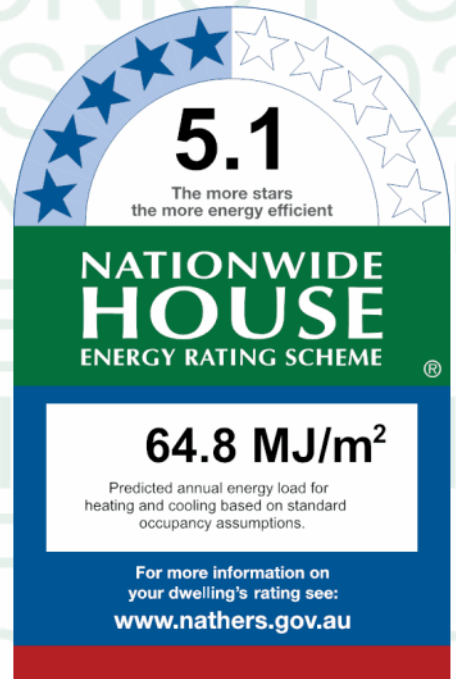
Phone 0421184414

Accreditation No. 101512

Assessor Accrediting Organisation

ABSA

Declaration of interest Declared, refer to Additional Notes on page 2



Thermal performance

Heating	Cooling
38.8	26.0
MJ/m²	MJ/m²

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=vFDrBRHtU. When using either link, ensure you are visiting hstar.com.au



National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.

Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

The garage door needs to be insulated with R1 insulation

I have modeled the shading in accordance with NatHERS principles

Window and glazed door type and performance

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
BRD-035-45 A	BRD-035-45 A SIG Sliding Door (100mm) DG 6mmSolTech_8Ar_4mmClr	3.0	0.40	0.38	0.42
BRD-125-11 A	BRD-125-11 A ESS Fixed Window External 52 Comm DG 6mmSolTech_12Ar_6mmClr	2.4	0.40	0.38	0.42
BRD-083-02 A	BRD-083-02 A Signature Entry Door 125 SG 6.38CPNtl	4.2	0.38	0.36	0.40

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
BRD-010-12 A	BRD-010-12 A ESS Casement Window SG 638CP	5.6	0.33	0.31	0.35
BRD-041-11 A	BRD-041-11 A SIG Fixed Lite Externally Glazed (125mm) SG 638CPClr	4.2	0.60	0.57	0.63
BRD-081-04 A	BRD-081-04 A Signature Awning Window 100 SG 6.38CPClr	5.5	0.51	0.48	0.54
BRD-002-18 A	BRD-002-18 A Aluminium Sliding Window DG LightBridge_ClrS0_4-8-4	3.3	0.47	0.45	0.49
BRD-111-11 A	BRD-111-11 A COM CentrePocket 100 Awning Beaded Sash DG 6mmSolTech_12Ar_6mmClr	4.4	0.28	0.27	0.29

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
FORMAL LIVING	BRD-035-45 A	n/a	2700	3500	n/a	66	E	No
FORMAL LIVING	BRD-125-11 A	n/a	2700	2700	n/a	00	S	Yes
FORMAL LIVING	BRD-125-11 A	n/a	2700	600	n/a	00	W	No
FORMAL LIVING	BRD-083-02 A	n/a	2700	920	n/a	90	W	No
FORMAL LIVING	BRD-125-11 A	n/a	400	629	n/a	00	W	No
FORMAL LIVING	BRD-125-11 A	n/a	400	5200	n/a	00	W	No
FORMAL LIVING	BRD-125-11 A	n/a	400	1184	n/a	00	NW	No
FORMAL LIVING	BRD-125-11 A	n/a	2700	600	n/a	00	W	No
HALL1	BRD-125-11 A	n/a	2699	1310	n/a	00	NE	No
HALL1	BRD-035-45 A	n/a	2700	6500	n/a	66	N	No
KIT/DIN/LIV	BRD-035-45 A	n/a	3000	6600	n/a	45	E	No
KIT/DIN/LIV	BRD-035-45 A	n/a	2700	3100	n/a	33	E	No
KIT/DIN/LIV	BRD-035-45 A	n/a	2700	5700	n/a	45	S	No
KIT/DIN/LIV	BRD-125-11 A	n/a	2699	1327	n/a	00	NW	No
KIT/DIN/LIV	BRD-035-45 A	n/a	2700	3500	n/a	66	W	No
LDY	BRD-010-12 A	n/a	2700	920	n/a	90	S	No
LDY	BRD-041-11 A	n/a	400	3700	n/a	00	W	No
BUTLERS	BRD-081-04 A	n/a	2700	1500	n/a	66	S	No

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
WC	BRD-081-04 A	n/a	2700	1000	n/a	66	S	No
STUDY/COAT	BRD-081-04 A	n/a	2700	1500	n/a	66	S	No
BED3	BRD-081-04 A	n/a	2700	1000	n/a	66	N	No
BED3	BRD-081-04 A	n/a	2700	800	n/a	66	W	No
BED4	BRD-081-04 A	n/a	2700	1500	n/a	66	N	No
VOID	BRD-125-11 A	n/a	3000	6600	n/a	00	E	No
VOID	BRD-002-18 A	n/a	3300	2370	n/a	45	W	No
MASTER BED	BRD-081-04 A	n/a	2700	3000	n/a	66	E	No
MASTER BED	BRD-081-04 A	n/a	2700	800	n/a	45	E	No
WIR	BRD-081-04 A	n/a	2700	1000	n/a	66	S	No
HALL2	BRD-111-11 A	n/a	2700	1000	n/a	66	S	No
BED1	BRD-081-04 A	n/a	2700	1500	n/a	66	W	No
BED1	BRD-041-11 A	n/a	400	2200	n/a	00	W	No
BED2	BRD-041-11 A	n/a	400	700	n/a	00	W	No
BED2	BRD-081-04 A	n/a	2700	1500	n/a	66	W	No
WC/SHOWER	BRD-010-12 A	n/a	2400	920	n/a	90	N	No

Roof window type and performance

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VEL-011-01 W	Glass	2.6	0.24	0.23	0.25

Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
RUMPUS	VEL-011-01 W	n/a	0	1000	600	N	No	No

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
BATH1	VEL-011-01 W	n/a	0	870	870	N	No	No
VOID	VEL-011-01 W	n/a	0	400	4300	N	No	No
WIR	VEL-011-01 W	n/a	0	400	4300	N	No	No
ENS	VEL-011-01 W	n/a	0	1275	1275	N	No	No
BATH2	VEL-011-01 W	n/a	0	870	870	N	No	No
HALL2	VEL-011-01 W	n/a	0	5024	6400	N	No	No

Skylight type and performance

Skylight ID Skylight description

No Data Available

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
GARAGE	2400	3700	90	W

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Tilt up concrete, lined	0.50	Medium	Bulk Insulation R2.5	No
EW-2	Tilt up Concrete	0.50	Medium	No insulation	No
EW-3	Tilt up Concrete	0.50	Medium	Bulk Insulation R2.5	No
EW-4	Tilt up concrete, lined	0.50	Medium	Bulk Insulation R2.5	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
RUMPUS	EW-1	2800	7395	N	0	NO
RUMPUS	EW-1	2800	4545	W	7900	NO
GARAGE	EW-1	2800	11295	N	0	NO
GARAGE	EW-1	2800	10850	E	0	NO
GARAGE	EW-1	2800	4950	S	0	YES
GARAGE	EW-1	2800	474	S	1716	YES
GARAGE	EW-1	2800	335	S	1655	YES
GARAGE	EW-1	2800	461	SE	1649	YES
GARAGE	EW-1	2800	500	SE	1500	YES
GARAGE	EW-1	2800	492	SE	1175	YES
GARAGE	EW-1	2800	269	SE	348	YES
GARAGE	EW-1	2800	4000	E	0	YES
GARAGE	EW-1	2800	4650	S	0	NO
GARAGE	EW-2	2800	4000	W	1950	YES
STORAGE1	EW-3	2801	1945	S	4000	YES
STORAGE1	EW-4	2800	5450	S	0	NO
STORAGE1	EW-1	2800	3995	W	7850	NO
BATH	EW-1	2800	3990	W	7900	NO
FORMAL LIVING	EW-1	2700	4800	N	0	NO
FORMAL LIVING	EW-1	2700	472	NE	0	NO
FORMAL LIVING	EW-1	2700	427	E	0	NO
FORMAL LIVING	EW-1	2700	3700	E	8900	YES
FORMAL LIVING	EW-1	2700	3100	S	2400	YES
FORMAL LIVING	EW-1	2700	350	W	0	NO
FORMAL LIVING	EW-1	2700	300	N	2450	YES
FORMAL LIVING	EW-1	2700	2000	W	0	YES
FORMAL LIVING	EW-1	2700	949	W	0	YES
FORMAL LIVING	EW-1	2700	5250	W	0	NO
FORMAL LIVING	EW-1	2700	1204	NW	0	YES

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
FORMAL LIVING	EW-1	2700	650	W	0	YES
HALL1	EW-1	2700	1374	NE	1627	YES
HALL1	EW-1	2700	6995	N	1650	YES
KIT/DIN/LIV	EW-1	2700	4950	N	0	NO
KIT/DIN/LIV	EW-1	2700	364	NE	0	NO
KIT/DIN/LIV	EW-1	2700	320	NE	0	NO
KIT/DIN/LIV	EW-1	2700	269	E	0	NO
KIT/DIN/LIV	EW-1	3000	7150	E	0	YES
KIT/DIN/LIV	EW-1	2700	570	NE	340	YES
KIT/DIN/LIV	EW-1	2700	559	NE	581	NO
KIT/DIN/LIV	EW-1	2700	500	NE	1410	NO
KIT/DIN/LIV	EW-1	2700	472	E	2358	NO
KIT/DIN/LIV	EW-1	2700	453	E	4301	NO
KIT/DIN/LIV	EW-1	2700	3150	E	4250	NO
KIT/DIN/LIV	EW-1	2700	6350	S	4000	YES
KIT/DIN/LIV	EW-1	2700	1378	NW	1719	YES
KIT/DIN/LIV	EW-1	2700	3700	W	8900	YES
KIT/DIN/LIV	EW-1	2700	316	NW	0	NO
KIT/DIN/LIV	EW-1	2700	515	N	0	NO
LDY	EW-1	2700	3995	E	6350	YES
LDY	EW-1	2700	3150	S	0	NO
LDY	EW-1	2700	3995	W	10000	YES
BUTLERS	EW-1	2700	3845	S	4000	YES
WC	EW-1	2700	3140	S	3200	NO
STUDY/COAT	EW-1	2700	3245	S	4000	NO
STUDY/COAT	EW-1	2700	2495	W	2675	YES
BED3	EW-1	2700	2845	N	0	NO
BED3	EW-1	2700	4045	W	0	NO
BED3	EW-1	2700	918	NW	0	NO
BED3	EW-1	2700	472	N	0	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
BED3	EW-1	2700	604	N	0	NO
BATH1	EW-1	2700	2190	N	0	NO
BED4	EW-1	2700	5245	N	0	YES
VOID	EW-1	2700	403	N	0	NO
VOID	EW-1	2700	5050	N	0	NO
VOID	EW-1	2700	381	NE	0	NO
VOID	EW-1	2700	250	NE	0	NO
VOID	EW-1	2700	224	E	0	NO
VOID	EW-1	3000	6945	E	0	NO
VOID	EW-1	3300	3145	W	0	YES
VOID	EW-1	2700	335	NW	0	NO
MASTER BED	EW-1	2700	245	E	0	YES
MASTER BED	EW-1	2700	461	NE	0	YES
MASTER BED	EW-1	2700	671	NE	0	NO
MASTER BED	EW-1	2700	570	NE	0	NO
MASTER BED	EW-1	2700	403	E	0	NO
MASTER BED	EW-1	2700	453	E	0	NO
MASTER BED	EW-1	2700	4195	E	0	NO
WIR	EW-1	2700	2945	E	0	NO
WIR	EW-1	2700	6500	S	0	NO
WIR	EW-1	2700	650	W	1550	YES
WIR	EW-1	2700	1545	S	0	YES
ENS	EW-1	2700	650	E	1550	YES
ENS	EW-1	2700	3795	S	0	NO
BATH2	EW-1	2700	1895	S	0	NO
BATH2	EW-1	2700	800	W	1500	YES
HALL2	EW-1	2700	1490	S	0	YES
BED1	EW-1	2700	800	E	1500	YES
BED1	EW-1	2700	4250	S	0	NO
BED1	EW-1	2700	3695	W	0	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
BED2	EW-1	2700	3840	W	0	NO
WC/SHOWER	EW-1	2700	1400	N	0	NO
WC/SHOWER	EW-1	2700	559	NE	0	NO
WC/SHOWER	EW-1	2700	391	NE	0	NO
WC/SHOWER	EW-1	2700	335	E	0	NO
WC/SHOWER	EW-1	2700	3450	E	0	NO
WC/SHOWER	EW-1	2700	2300	S	0	NO
WC/SHOWER	EW-1	2700	4300	W	5250	NO

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1	Cavity wall, direct fix plasterboard, single gap	104.00	Bulk Insulation, No Air Gap R2
IW-2	Cavity wall, direct fix plasterboard, single gap	287.00	No insulation

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation (R-value)	Added insulation (R-value)	Covering
RUMPUS	Concrete Slab on Ground 600mm	33.10	None	No Insulation	Cork Tiles or Parquetry 8mm
GARAGE	Concrete Slab on Ground 600mm	149.40	None	No Insulation	Bare
STORAGE1	Concrete Slab on Ground 600mm	32.00	None	No Insulation	Bare
BATH	Concrete Slab on Ground 600mm	8.40	None	No Insulation	Ceramic Tiles 8mm
STORAGE2	Concrete Slab on Ground 600mm	6.50	None	No Insulation	Bare
FOYER	Concrete Slab on Ground 600mm	10.20	None	No Insulation	Bare
FORMAL LIVING	Concrete Slab on Ground 600mm	55.50	None	No Insulation	Cork Tiles or Parquetry 8mm
HALL1/STORAGE1	Concrete Above Plasterboard 600mm	13.10		No Insulation	Cork Tiles or Parquetry 8mm
HALL1/BATH	Concrete Above Plasterboard 600mm	7.00		No Insulation	Cork Tiles or Parquetry 8mm

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
HALL1/STORAGE2	Concrete Above Plasterboard 600mm	5.00		No Insulation	Cork Tiles or Parquetry 8mm
HALL1/FOYER	Concrete Above Plasterboard 600mm	6.80		No Insulation	Cork Tiles or Parquetry 8mm
HALL1	Concrete Slab on Ground 600mm	8.10	None	No Insulation	Cork Tiles or Parquetry 8mm
KIT/DIN/LIV/RUMPUS	Concrete Above Plasterboard 600mm	1.10		No Insulation	20/80 Ceramic/Cork
KIT/DIN/LIV/GARAGE	Concrete Above Plasterboard 600mm	76.40		Bulk Insulation R2	20/80 Ceramic/Cork
KIT/DIN/LIV/STORAGE1	Concrete Above Plasterboard 600mm	1.40		No Insulation	20/80 Ceramic/Cork
KIT/DIN/LIV/FOYER	Concrete Above Plasterboard 600mm	2.40		No Insulation	20/80 Ceramic/Cork
KIT/DIN/LIV	Concrete Slab on Ground 600mm	4.00	None	No Insulation	20/80 Ceramic/Cork
LDY/GARAGE	Concrete Above Plasterboard 600mm	4.70		Bulk Insulation R2	Ceramic Tiles 8mm
LDY	Concrete Slab on Ground 600mm	7.70	None	No Insulation	Ceramic Tiles 8mm
BUTLERS/STORAGE1	Concrete Above Plasterboard 600mm	13.30		No Insulation	Cork Tiles or Parquetry 8mm
WC/STORAGE1	Concrete Above Plasterboard 600mm	3.80		No Insulation	Ceramic Tiles 8mm
WC	Concrete Slab on Ground 600mm	3.70	None	No Insulation	Ceramic Tiles 8mm
STUDY/COAT	Concrete Slab on Ground 600mm	12.40	None	No Insulation	Cork Tiles or Parquetry 8mm
BED3/FORMAL LIVING	Concrete Above Plasterboard 600mm	11.70		No Insulation	Cork Tiles or Parquetry 8mm
BED3/HALL1	Concrete Above Plasterboard 600mm	5.40		No Insulation	Cork Tiles or Parquetry 8mm
BED3/STUDY/COAT	Concrete Above Plasterboard 600mm	2.60		No Insulation	Cork Tiles or Parquetry 8mm
BED3	Suspended Concrete Slab 600mm	1.90	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
BATH1/HALL1	Concrete Above Plasterboard 600mm	2.10		No Insulation	Ceramic Tiles 8mm
BATH1	Suspended Concrete Slab 600mm	3.40	Totally Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
BED4/HALL1	Concrete Above Plasterboard 600mm	10.50		No Insulation	Cork Tiles or Parquetry 8mm
BED4/KIT/DIN/LIV	Concrete Above Plasterboard 600mm	3.90		No Insulation	Cork Tiles or Parquetry 8mm
BED4	Suspended Concrete Slab 600mm	8.00	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
VOID/KIT/DIN/LIV	Concrete Above Plasterboard 600mm	42.60		No Insulation	Bare
MASTER BED/KIT/DIN/LIV	Concrete Above Plasterboard 600mm	37.80		No Insulation	Cork Tiles or Parquetry 8mm
MASTER BED/LDY	Concrete Above Plasterboard 600mm	1.70		No Insulation	Cork Tiles or Parquetry 8mm
MASTER BED/BUTLERS	Concrete Above Plasterboard 600mm	1.00		No Insulation	Cork Tiles or Parquetry 8mm
MASTER BED	Suspended Concrete Slab 600mm	6.60	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WIR/LDY	Concrete Above Plasterboard 600mm	3.90		No Insulation	Cork Tiles or Parquetry 8mm
WIR	Suspended Concrete Slab 600mm	18.40	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
ENS/LDY	Concrete Above Plasterboard 600mm	4.10		No Insulation	Ceramic Tiles 8mm
ENS	Suspended Concrete Slab 600mm	6.40	Totally Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
BATH2	Suspended Concrete Slab 600mm	5.30	Totally Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
HALL2/HALL1	Concrete Above Plasterboard 600mm	20.40		No Insulation	Cork Tiles or Parquetry 8mm
HALL2/LDY	Concrete Above Plasterboard 600mm	1.50		No Insulation	Cork Tiles or Parquetry 8mm
HALL2/BUTLERS	Concrete Above Plasterboard 600mm	12.90		No Insulation	Cork Tiles or Parquetry 8mm
HALL2/WC	Concrete Above Plasterboard 600mm	4.60		No Insulation	Cork Tiles or Parquetry 8mm
HALL2	Suspended Concrete Slab 600mm	9.30	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
BED1	Suspended Concrete Slab 600mm	15.40	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
BED2/FORMAL LIVING	Concrete Above Plasterboard 600mm	1.10		No Insulation	Cork Tiles or Parquetry 8mm
BED2/HALL1	Concrete Above Plasterboard 600mm	1.30		No Insulation	Cork Tiles or Parquetry 8mm
BED2/WC	Concrete Above Plasterboard 600mm	3.00		No Insulation	Cork Tiles or Parquetry 8mm
BED2/STUDY/COAT	Concrete Above Plasterboard 600mm	9.20		No Insulation	Cork Tiles or Parquetry 8mm
BED2	Suspended Concrete Slab 600mm	1.20	Totally Open	Bulk Insulation in Contact with Floor R2	Cork Tiles or Parquetry 8mm
WC/SHOWER	Concrete Slab on Ground 200mm	9.60	None	No Insulation	Ceramic Tiles 8mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
RUMPUS	Concrete, Plasterboard	Bulk Insulation R5	No
RUMPUS	Concrete Above Plasterboard	No Insulation	No
GARAGE	Concrete, Plasterboard	Bulk Insulation R5	No
GARAGE	Concrete Above Plasterboard	Bulk Insulation R2	No
STORAGE1	Concrete Above Plasterboard	No Insulation	No
BATH	Concrete, Plasterboard	Bulk Insulation R5	No
BATH	Concrete Above Plasterboard	No Insulation	No
STORAGE2	Concrete, Plasterboard	Bulk Insulation R5	No
STORAGE2	Concrete Above Plasterboard	No Insulation	No
FOYER	Concrete, Plasterboard	Bulk Insulation R5	No
FOYER	Concrete Above Plasterboard	No Insulation	No
FORMAL LIVING	Concrete, Plasterboard	Bulk Insulation R5	No
FORMAL LIVING	Concrete Above Plasterboard	No Insulation	No
HALL1	Concrete Above Plasterboard	No Insulation	No
KIT/DIN/LIV	Concrete Above Plasterboard	No Insulation	No
LDY	Concrete, Plasterboard	Bulk Insulation R5	No
LDY	Concrete Above Plasterboard	No Insulation	No
BUTLERS	Concrete Above Plasterboard	No Insulation	No
WC	Concrete Above Plasterboard	No Insulation	No
STUDY/COAT	Concrete, Plasterboard	Bulk Insulation R5	No
STUDY/COAT	Concrete Above Plasterboard	No Insulation	No
BED3	Concrete, Plasterboard	Bulk Insulation R5	No
BATH1	Concrete, Plasterboard	Bulk Insulation R5	No
BED4	Concrete, Plasterboard	Bulk Insulation R5	No
VOID	Concrete, Plasterboard	Bulk Insulation R5	No
MASTER BED	Concrete, Plasterboard	Bulk Insulation R5	No
WIR	Concrete, Plasterboard	Bulk Insulation R5	No
ENS	Concrete, Plasterboard	Bulk Insulation R5	No
BATH2	Concrete, Plasterboard	Bulk Insulation R5	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
HALL2	Concrete, Plasterboard	Bulk Insulation R5	No
BED1	Concrete, Plasterboard	Bulk Insulation R5	No
BED2	Concrete, Plasterboard	Bulk Insulation R5	No
WC/SHOWER	Concrete, Plasterboard	Bulk Insulation R5	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
BATH	1	Exhaust Fans	300	Sealed
KIT/DIN/LIV	1	Exhaust Fans	300	Sealed
BATH1	1	Exhaust Fans	300	Sealed
ENS	1	Exhaust Fans	300	Sealed
BATH2	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
FORMAL LIVING	1	1400
BED3	1	1200
BED4	1	1200
VOID	1	1400
MASTER BED	1	1200
BED1	1	1200
BED2	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Concrete	No Insulation, Only an Air Gap	0.50	Medium
Concrete	No Insulation, Only an Air Gap	0.50	Medium

Explanatory notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licenced assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

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 ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NatHERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHERS accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate.

Not all assumptions that may have been made by the assessor while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and heating and cooling ducts.
Conditioned	a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some circumstances it will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
Exposure category – open	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au .
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for NatHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).