Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0006474928-04

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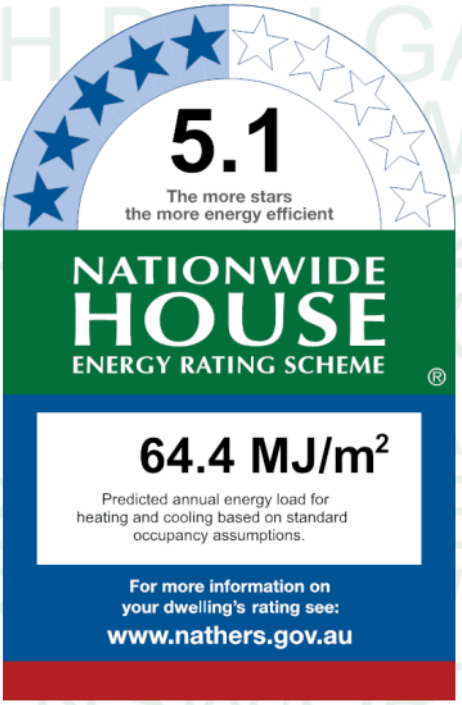

Property

Address	55 Woolgoolga Street , North Balgowlah , NSW , 2093
Lot/DP	23/23447
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	Rev A Issue date : 29/07/21
Prepared by	Ursino Architects

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	440.0	Suburban
Unconditioned*	76.0	**NatHERS climate zone**
Total	516.0	56
Garage	52.0	

Thermal performance

Heating	**Cooling**
39.4 MJ/m^2	**25.0** MJ/m^2

Accredited assessor

Name	Jamie Bonnefin
Business name	Certified Energy
Email	jobs@certifiedenergy.com.au
Phone	1300 443 674
Accreditation No.	10056

Assessor Accrediting Organisation

HERA

Declaration of interest None

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=xoAOPhOlP.
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.

* Refer to glossary.

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?

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 dwelling has been assessed without recessed light fittings as no lighting or electrical plan has been provided.

*Obscure glazing has been modelled as clear glass as it has similar thermal properties.

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
ATB-004-04 B	ATB-004-04 B Al Thermally Broken B DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27	0.26	0.28
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57	0.54	0.60
ATB-004-03 B	ATB-004-03 B Al Thermally Broken B DG Air Fill High Solar Gain low-E -Clear	3.1	0.49	0.47	0.51
ALM-002-04 A	ALM-002-04 A Aluminium B SG Low Solar Gain Low-E	5.6	0.41	0.39	0.43

Custom* windows

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

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Store	ATB-004-04 B	n/a	600	1800	n/a	45	E	No
Laundry	ALM-001-01 A	n/a	2400	850	n/a	90	E	No
Kitchen/Living	ATB-004-04 B	n/a	3000	1100	n/a	45	E	No
Kitchen/Living	ATB-004-04 B	n/a	600	5510	n/a	45	E	No
Kitchen/Living	ATB-004-04 B	n/a	3000	3365	n/a	60	S	No
Kitchen/Living	ATB-004-04 B	n/a	3000	4110	n/a	60	S	No
Kitchen/Living	ATB-004-04 B	n/a	3000	5368	n/a	80	E	No
Kitchen/Living	ATB-004-04 B	n/a	3000	3260	n/a	60	S	No
Bath	ATB-004-03 B	n/a	1700	1250	n/a	45	E	No
Master Bedroom	ATB-004-03 B	n/a	900	4250	n/a	45	E	No
Master Bedroom	ATB-004-03 B	n/a	2700	4770	n/a	45	S	Yes
Master ENS	ATB-004-03 B	n/a	900	2580	n/a	45	E	No
Bedroom 3	ATB-004-03 B	n/a	1700	3600	n/a	45	E	No
Bedroom 3	ATB-004-03 B	n/a	1700	3600	n/a	45	E	No
Void FF	ATB-004-03 B	n/a	2700	3365	n/a	00	S	No
Study FF	ATB-004-03 B	n/a	1700	2688	n/a	45	N	No
Family	ATB-004-03 B	n/a	1700	4000	n/a	45	W	No
Void	ATB-004-03 B	n/a	1700	4500	n/a	45	E	No
Void	ATB-004-03 B	n/a	1700	4000	n/a	45	S	No
Void	ATB-004-03 B	n/a	1700	4500	n/a	45	W	No
Stairs_Ff	ATB-004-03 B	n/a	2380	1000	n/a	00	N	No
Corridor FF	ATB-004-03 B	n/a	1980	2420	n/a	45	W	No
Bedroom 2	ATB-004-03 B	n/a	2700	3810	n/a	45	W	No
Master Bedroom	ATB-004-03 B	n/a	2400	2790	n/a	45	S	No
Master Bedroom	ALM-002-04 A	n/a	1700	720	n/a	90	W	No
Master Bedroom	ALM-002-04 A	n/a	1700	720	n/a	90	W	No
Master ENS 2	ALM-002-04 A	n/a	1700	720	n/a	90	W	No
Rumpus	ATB-004-04 B	n/a	1400	1200	n/a	45	E	No
Rumpus	ATB-004-04 B	n/a	1400	4250	n/a	45	E	No
Rumpus	ATB-004-04 B	n/a	2400	4790	n/a	45	S	No
Garage	ATB-004-04 B	n/a	1000	4000	n/a	45	E	No
Study SF	ATB-004-03 B	n/a	1700	1500	n/a	45	E	No
Entry TF	ATB-004-04 B	n/a	1700	1000	n/a	00	N	No

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Entry TF	ATB-004-04 B	n/a	1700	3660	n/a	45	E	No
Entry TF	ATB-004-04 B	n/a	1150	5425	n/a	45	S	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
No Data Available					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
No Data Available								

Skylight *type and performance*

Skylight ID	Skylight description
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
Rumpus	GEN-04-008a	n/a	50	1.10	E	None	No	0.50

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Linen	2700	820	90	W
Garage	2400	7500	90	N
Entry TF	2700	1500	90	W

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Concrete block, lined	0.50	Medium	Anti-glare foil with bulk no gap R3.8	No
EW-2	Concrete block, lined	0.50	Medium	Anti-glare foil with bulk no gap R3.8	No
EW-3	Concrete block, linedZ:3W2:4	0.50	Medium	Anti-glare foil with bulk no gap R3.8	No
EW-4	Fibro Cavity Panel Direct Fix	0.85	Dark	Anti-glare foil with bulk no gap R3.8	No
EW-5	Fibro Cavity Panel Direct Fix	0.50	Medium	Anti-glare foil with bulk no gap R3.8	No
EW-6	Fibro Cavity Panel Direct Fix	0.85	Dark	Anti-glare foil with bulk no gap R3.8	No
EW-7	Concrete block, lined	0.85	Dark	Anti-glare foil with bulk no gap R3.8	No
EW-8	Concrete block, lined	0.85	Dark	Anti-glare foil with bulk no gap R3.8	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Store	EW-1	3000	5370	E	1003	NO
Store	EW-1	3000	4473	N	50	NO
Laundry	EW-1	3000	2418	E	1028	YES
Kitchen/Living	EW-1	3000	6674	E	1053	NO
Kitchen/Living	EW-1	3000	8230	S	4943	YES
Kitchen/Living	EW-1	3000	5533	E	4528	YES
Kitchen/Living	EW-1	3000	4020	S	0	NO
Kitchen/Living	EW-1	1500	10821	W	0	YES
Kitchen/Living	EW-3	1500	10821	W	25	YES
Lift_Ff	EW-4	2700	1806	W	202	YES
Lift_Ff	EW-5	2700	2403	N	1806	YES
Bath	EW-6	2700	2299	E	853	YES
Master Bedroom	EW-7	2700	4921	W	727	YES
Master Bedroom	EW-6	2700	4314	E	828	YES
Master Bedroom	EW-6	2700	5415	S	1304	NO
Master ENS	EW-6	2700	2697	E	851	YES
Bedroom 3	EW-6	2700	3702	E	828	NO
Bedroom 3	EW-6	2700	3802	E	828	NO
Void FF	EW-6	2700	3902	S	1453	YES
Study FF	EW-6	2700	2821	N	804	YES
Study FF	EW-6	2700	4423	W	754	NO
Family	EW-6	2700	4010	W	754	YES
Family	EW-6	2700	1005	E	10403	YES
Void	EW-8	2700	4523	E	955	NO
Void	EW-6	2700	4020	S	1458	NO
Void	EW-6	2700	4622	W	754	YES
Stairs_Ff	EW-1	2700	2503	N	0	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Stairs_Ff	EW-6	2700	2802	E	276	YES
Corridor FF	EW-6	2700	3403	W	652	YES
Corridor FF	EW-6	2700	1811	W	6446	YES
Corridor FF	EW-1	2700	4264	N	0	NO
Lift_Sf	EW-6	2700	1801	W	127	YES
Bedroom 2	EW-4	2700	4572	W	0	NO
Bedroom 2	EW-5	2700	3169	N	1381	NO
Linen	EW-6	2700	495	S	100	YES
Linen	EW-4	2700	1766	W	0	NO
Master Bedroom	EW-6	2700	1010	E	6684	YES
Master Bedroom	EW-6	2700	3812	S	727	NO
Master Bedroom	EW-6	2700	4106	W	752	YES
Master WIR 2	EW-6	2700	1900	W	729	YES
Master ENS 2	EW-6	2700	1798	W	727	NO
Master ENS 2	EW-6	2700	603	N	736	YES
Rumpus	EW-6	2700	6767	E	779	NO
Rumpus	EW-6	2700	5962	S	1730	YES
Stairs_Sf	EW-6	2700	1359	N	100	YES
Stairs_Sf	EW-6	2700	3807	E	226	NO
Bath	EW-5	2700	2119	N	1306	NO
Garage	EW-6	2700	597	S	4215	YES
Garage	EW-6	2700	4667	W	1933	NO
Garage	EW-6	2700	1404	W	202	NO
Garage	EW-6	2700	8322	N	501	NO
Garage	EW-6	2700	5926	E	125	YES
Lift_Tf	EW-6	2700	2254	S	428	NO
Lift_Tf	EW-6	2700	2005	W	453	NO
Study SF	EW-5	2700	2862	N	1304	NO
Study SF	EW-4	2700	4572	E	0	YES
PWD	EW-1	3000	3373	W	0	YES
Pantry	EW-1	3000	2164	W	25	YES
Pantry	EW-1	3000	2822	N	25	YES
Lift GF	EW-1	3000	1766	W	0	YES
Lift GF	EW-1	3000	2164	N	1983	NO
Entry TF	EW-6	2700	1399	N	401	YES
Entry TF	EW-6	2700	3812	E	476	NO
Entry TF	EW-6	2700	6871	S	453	NO
Entry TF	EW-6	2700	1793	W	2554	YES
Corridor GF	EW-1	3000	155	N	1950	YES

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Corridor GF	EW-1	3000	1806	W	2433	YES
Corridor GF	EW-1	3000	1209	N	125	YES

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Concrete Block		170.00	No insulation
IW-2 - Cavity wall, direct fix plasterboard, single gap		364.00	Bulk Insulation, No Air Gap R2.7

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Store	Concrete Slab on Ground 200mm	23.80	None	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Laundry	Concrete Slab on Ground 200mm	10.60	None	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Kitchen/Living	Concrete Slab on Ground 200mm	92.50	None	Bulk Insulation in Contact with Floor R4	40/60 Ceramic/Cork
Lift_Ff/Lift GF	Timber Above Plasterboard 200mm	3.80		No Insulation	Bare
Bath/Store	Timber Above Plasterboard 200mm	6.60		No Insulation	Ceramic Tiles 8mm
Bath	Suspended Concrete Slab 200mm	2.20	Totally Open	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Master Bedroom/Kitchen/Living	Timber Above Plasterboard 200mm	3.80		No Insulation	Carpet 10mm
Master Bedroom	Suspended Concrete Slab 200mm	24.00	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet 10mm
Master ENS/Kitchen/Living	Timber Above Plasterboard 200mm	4.70		No Insulation	Ceramic Tiles 8mm
Master ENS	Suspended Concrete Slab 200mm	4.30	Totally Open	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 200mm	10.30		No Insulation	Carpet 10mm
Bedroom 3	Suspended Concrete Slab 200mm	3.80	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet 10mm
Bedroom 3/Store	Timber Above Plasterboard 200mm	1.00		No Insulation	Carpet 10mm
Bedroom 3/Laundry	Timber Above Plasterboard 200mm	7.30		No Insulation	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 200mm	2.10		No Insulation	Carpet 10mm
Bedroom 3	Suspended Concrete Slab 200mm	3.80	Totally Open	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Void FF/Kitchen/Living	Timber Above Plasterboard 200mm	19.10		No Insulation	Ceramic Tiles 8mm
Study FF/Kitchen/Living	Timber Above Plasterboard 200mm	6.60		No Insulation	Cork Tiles or Parquetry 8mm
Study FF/Pantry	Timber Above Plasterboard 200mm	6.50		No Insulation	Cork Tiles or Parquetry 8mm
Family/Kitchen/Living	Timber Above Plasterboard 200mm	15.90		No Insulation	Cork Tiles or Parquetry 8mm
Void/Kitchen/Living	Timber Above Plasterboard 200mm	18.20		No Insulation	Ceramic Tiles 8mm

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Stairs_Ff/Store	Timber Above Plasterboard 200mm	4.30		No Insulation	Cork Tiles or Parquetry 8mm
Stairs_Ff	Suspended Concrete Slab 200mm	2.70	Totally Open	Bulk Insulation in Contact with Floor R4	Cork Tiles or Parquetry 8mm
Corridor FF/Store	Timber Above Plasterboard 200mm	11.30		No Insulation	Cork Tiles or Parquetry 8mm
Corridor FF/Laundry	Timber Above Plasterboard 200mm	3.40		No Insulation	Cork Tiles or Parquetry 8mm
Corridor FF/Kitchen/Living	Timber Above Plasterboard 200mm	9.30		No Insulation	Cork Tiles or Parquetry 8mm
Corridor FF/PWD	Timber Above Plasterboard 200mm	5.20		No Insulation	Cork Tiles or Parquetry 8mm
Corridor FF/Pantry	Timber Above Plasterboard 200mm	1.90		No Insulation	Cork Tiles or Parquetry 8mm
Corridor FF/Corridor GF	Timber Above Plasterboard 200mm	9.20		No Insulation	Cork Tiles or Parquetry 8mm
Lift_Sf/Lift_Ff	Timber Above Plasterboard 200mm	3.70		No Insulation	Bare
Bedroom 2	Concrete Slab on Ground 200mm	14.50	None	Bulk Insulation in Contact with Floor R4	Carpet 10mm
Linen/Corridor FF	Timber Above Plasterboard 200mm	0.50		No Insulation	Cork Tiles or Parquetry 8mm
Linen	Suspended Concrete Slab 200mm	5.10	Totally Open	Bulk Insulation in Contact with Floor R4	Cork Tiles or Parquetry 8mm
Master Bedroom /Void FF	Timber Above Plasterboard 200mm	5.40		No Insulation	Carpet 10mm
Master Bedroom /Study FF	Timber Above Plasterboard 200mm	1.90		No Insulation	Carpet 10mm
Master Bedroom /Corridor FF	Timber Above Plasterboard 200mm	4.10		No Insulation	Carpet 10mm
Master Bedroom /Stairs FF	Timber Above Plasterboard 200mm	3.90		No Insulation	Carpet 10mm
Master WIR 2/Void FF	Timber Above Plasterboard 200mm	0.70		No Insulation	Carpet 10mm
Master WIR 2/Corridor FF	Timber Above Plasterboard 200mm	3.40		No Insulation	Carpet 10mm
Master WIR 2/Stairs FF	Timber Above Plasterboard 200mm	1.60		No Insulation	Carpet 10mm
Master WIR 2	Suspended Concrete Slab 200mm	0.90	Totally Open	Bulk Insulation in Contact with Floor R4	Carpet 10mm
Master ENS 2/Corridor FF	Timber Above Plasterboard 200mm	5.60		No Insulation	Ceramic Tiles 8mm
Master ENS 2	Suspended Concrete Slab 200mm	1.10	Totally Open	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Rumpus/Bath	Timber Above Plasterboard 200mm	7.70		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Bedroom 3	Timber Above Plasterboard 200mm	6.70		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Bedroom 3	Timber Above Plasterboard 200mm	14.50		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Void FF	Timber Above Plasterboard 200mm	2.10		No Insulation	Cork Tiles or Parquetry 8mm
Rumpus/Corridor FF	Timber Above Plasterboard 200mm	12.00		No Insulation	Cork Tiles or Parquetry 8mm
Stairs_Sf/Bath	Timber Above Plasterboard 200mm	1.40		No Insulation	Cork Tiles or Parquetry 8mm
Stairs_Sf/Stairs_Ff	Timber Above Plasterboard 200mm	7.00		No Insulation	Cork Tiles or Parquetry 8mm
Stairs_Sf/Corridor FF	Timber Above Plasterboard 200mm	5.80		No Insulation	Cork Tiles or Parquetry 8mm

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bath	Concrete Slab on Ground 200mm	7.40	None	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Corridor SF/Corridor FF	Timber Above Plasterboard 200mm	6.40		No Insulation	Cork Tiles or Parquetry 8mm
Corridor SF	Concrete Slab on Ground 200mm	2.40	None	Bulk Insulation in Contact with Floor R4	Cork Tiles or Parquetry 8mm
Garage/Bedroom 2	Timber Above Plasterboard 200mm	14.70		No Insulation	Bare
Garage/Stairs_Sf	Timber Above Plasterboard 200mm	2.40		No Insulation	Bare
Garage/Bath	Timber Above Plasterboard 200mm	7.70		No Insulation	Bare
Garage/Corridor SF	Timber Above Plasterboard 200mm	2.50		No Insulation	Bare
Garage/Study SF	Timber Above Plasterboard 200mm	13.40		No Insulation	Bare
Garage	Suspended Concrete Slab 200mm	11.00	Totally Open	Bulk Insulation in Contact with Floor R4	Bare
Lift_Tf/Lift_Sf	Timber Above Plasterboard 200mm	3.80		No Insulation	Bare
Study SF	Concrete Slab on Ground 200mm	13.20	None	Bulk Insulation in Contact with Floor R4	Cork Tiles or Parquetry 8mm
Stairs GF	Concrete Slab on Ground 200mm	5.20	None	Bulk Insulation in Contact with Floor R4	Cork Tiles or Parquetry 8mm
PWD	Concrete Slab on Ground 200mm	5.10	None	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Pantry	Concrete Slab on Ground 200mm	8.40	None	Bulk Insulation in Contact with Floor R4	Ceramic Tiles 8mm
Void Garage/Stairs_Sf	Timber Above Plasterboard 200mm	3.20		No Insulation	Carpet 10mm
Stairs FF/Stairs GF	Timber Above Plasterboard 200mm	4.90		No Insulation	Ceramic Tiles 8mm
Lift GF	Concrete Slab on Ground 200mm	3.80	None	Bulk Insulation in Contact with Floor R4	Bare
Entry TF/Linen	Timber Above Plasterboard 19mm	4.70		No Insulation	Cork Tiles or Parquetry 8mm
Entry TF/Rumpus	Timber Above Plasterboard 19mm	3.50		No Insulation	Cork Tiles or Parquetry 8mm
Entry TF/Stairs_Sf	Timber Above Plasterboard 19mm	8.60		No Insulation	Cork Tiles or Parquetry 8mm
Entry TF/Corridor SF	Timber Above Plasterboard 19mm	6.90		No Insulation	Cork Tiles or Parquetry 8mm
Corridor GF	Concrete Slab on Ground 200mm	9.40	None	Bulk Insulation in Contact with Floor R4	Bare

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Store	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Lift_Ff	Timber Above Plasterboard	No Insulation	No
Bath	Timber Above Plasterboard	No Insulation	No
Master Bedroom	Plasterboard	Bulk Insulation R7	No
Master ENS	Plasterboard	Bulk Insulation R7	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bedroom 3	Plasterboard	Bulk Insulation R7	No
Bedroom 3	Timber Above Plasterboard	No Insulation	No
Bedroom 3	Timber Above Plasterboard	No Insulation	No
Void FF	Plasterboard	Bulk Insulation R7	No
Void FF	Timber Above Plasterboard	No Insulation	No
Study FF	Plasterboard	Bulk Insulation R7	No
Study FF	Timber Above Plasterboard	No Insulation	No
Family	Plasterboard	Bulk Insulation R7	No
Void	Plasterboard	Bulk Insulation R7	No
Stairs_Ff	Timber Above Plasterboard	No Insulation	No
Corridor FF	Plasterboard	Bulk Insulation R7	No
Corridor FF	Timber Above Plasterboard	No Insulation	No
Lift_Sf	Timber Above Plasterboard	No Insulation	No
Bedroom 2	Timber Above Plasterboard	No Insulation	No
Linen	Plasterboard	Bulk Insulation R7	No
Linen	Timber Above Plasterboard	No Insulation	No
Master Bedroom	Plasterboard	Bulk Insulation R7	No
Master WIR 2	Plasterboard	Bulk Insulation R7	No
Master ENS 2	Plasterboard	Bulk Insulation R7	No
Master ENS 2	Timber Above Plasterboard	No Insulation	No
Rumpus	Plasterboard	Bulk Insulation R7	No
Rumpus	Timber Above Plasterboard	No Insulation	No
Stairs_Sf	Timber Above Plasterboard	No Insulation	No
Bath	Timber Above Plasterboard	No Insulation	No
Corridor SF	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	Bulk Insulation R7	No
Lift_Tf	Plasterboard	Bulk Insulation R7	No
Study SF	Timber Above Plasterboard	No Insulation	No
Stairs GF	Timber Above Plasterboard	No Insulation	No
PWD	Timber Above Plasterboard	No Insulation	No
Pantry	Timber Above Plasterboard	No Insulation	No
Void Garage	Plasterboard	Bulk Insulation R7	No
Stairs FF	Timber Above Plasterboard	No Insulation	No
Lift GF	Timber Above Plasterboard	No Insulation	No
Entry TF	Plasterboard	Bulk Insulation R7	No
Corridor GF	Timber Above Plasterboard	No Insulation	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
No Data Available				

Ceiling *fans*

Location	Quantity	Diameter (mm)
Kitchen/Living	3	1400
Master Bedroom	1	1400
Bedroom 3	1	1400
Bedroom 3	1	1400
Study FF	1	1400
Family	1	1400
Bedroom 2	1	1400
Master Bedroom	1	1400
Rumpus	1	1400
Study SF	1	1400

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R3.6	0.85	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R3.6	0.85	Dark

* Refer to glossary.

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) licensed 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).