

Nationwide House Energy Rating Scheme

NatHERS Certificate No. #HR-JMCN8P-01

Generated on 28 Sep 2023 using Hero 3.0.1

Property

Address 6 Watkin Avenue, Earlwood, NSW, 2206
Lot/DP 22/10802
NCC Class* 1a
Type New

Plans

Main Plan 2302
Prepared by JW

Construction and environment

Assessed floor area (m²)*		Exposure Type
Conditioned*	543.9	Suburban
Unconditioned*	20.3	NatHERS climate zone
Total	750.6	56 - Mascot AMO
Garage	186.4	



Accredited assessor

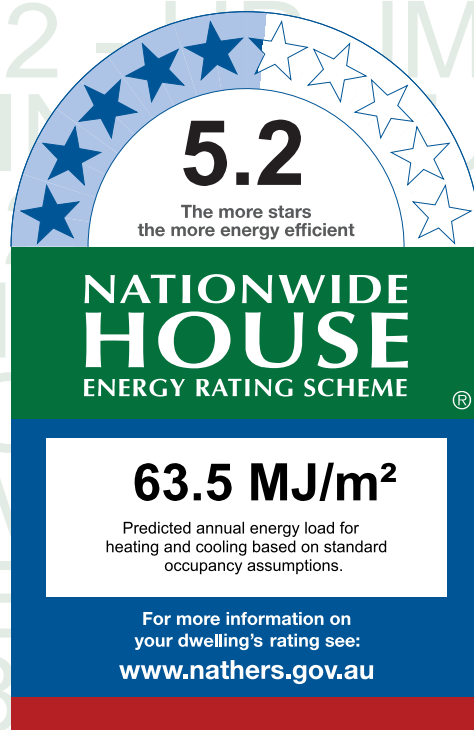
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Assessor Accrediting Organisation	DMN
Declaration of interest	No Conflict of Interest

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.



Thermal Performance

Heating	Cooling
38.1	25.4
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 <http://www.hero-software.com.au/pdf/HR-JMCN8P-01>. When using either link, ensure you are visiting <http://www.hero-software.com.au>



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?

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
ALS-009-21 A	Commercial Sliding Door SG AGG 6EA	4.97	0.53	0.50	0.56
BRD-026-19 A	ESS Awning Window (52mm) SG 638CPClr	4.93	0.52	0.49	0.55

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bath	BRD-026-19 A	1.04	2700	900	Awning	45	E	None

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bath	BRD-026-19 A	2.04	2100	600	Awning	10	E	None
Bedroom 1	ALS-009-21 A	2.02	3000	3841	Sliding	45	N	None
Bedroom 2	ALS-009-21 A	3.03	600	4000	Sliding	45	E	None
Bedroom 3	ALS-009-21 A	3.06	2700	5700	Fixed	0	S	OP-100%
Bedroom 3	ALS-009-21 A	3.05	600	3400	Sliding	45	E	None
Ensuite 1	BRD-026-19 A	2.03	2100	600	Awning	10	E	None
Ensuite 2	BRD-026-19 A	3.02	1500	800	Awning	10	E	None
Ensuite 3	ALS-009-21 A	3.04	1500	1800	Sliding	10	E	None
Ensuite Guest	BRD-026-19 A	1.06	2700	900	Awning	45	W	None
Ensuite Master	ALS-009-21 A	3.07	2100	4100	Fixed	0	S	OP-100%
Foyer	BRD-026-19 A	1.05	2100	1250	Awning	45	W	None
Foyer	BRD-026-19 A	1.03	2100	1250	Awning	45	E	None
Guest Bedroom	ALS-009-21 A	1.07	2100	3600	Sliding	45	N	None
Hall	ALS-009-21 A	3.01-F	2250	5200	Fixed	0	N	None
Kitchen/Living	ALS-009-21 A	2.09	2400	500	Fixed	0	N	None
Kitchen/Living	ALS-009-21 A	2.10	800	4636	Fixed	0	W	None
Kitchen/Living	ALS-009-21 A	2.11	2400	500	Fixed	0	S	None
Kitchen/Living	ALS-009-21 A	2.05	3000	2810	Fixed	0	E	None
Kitchen/Living	ALS-009-21 A	2.08	3000	8350	Sliding	70	S	None
Kitchen/Living	ALS-009-21 A	2.12	3000	4200	Sliding	45	N	None
Laundry	BRD-026-19 A	2.06	3000	1240	Casement	90	S	None
Master Bedroom	ALS-009-21 A	3.08	600	4900	Sliding	45	W	None
Master Bedroom	ALS-009-21 A	3.01-S	2250	4711	Sliding	10	N	None
Study	ALS-009-21 A	1.02	2700	3741	Sliding	60	N	None
Foyer	ALS-009-21 A	2.01	2400	2100	Fixed	0	N	None

* Refer to glossary.



Roof window type and performance value

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
VEL-011-01 W	Velux FS - Fixed Skylight DG 3mm LoE 366 / 8.5mm Argon Gap / 5.36mm Clear La	2.58	0.24	0.23	0.25

Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
Ensuite 2	VEL-011-01 W	SKYRW 07	0	849	872	N	None	None
Ensuite 3	VEL-011-01 W	SKYRW 06	0	2382	716	N	None	None
Ensuite Master	VEL-011-01 W	SKYRW 04	0	717	2389	N	None	None
Hall	VEL-011-01 W	SKYRW 05	0	698	2380	N	None	None
Hall	VEL-011-01 W	SKYRW 08	0	2611.60	2611.60	N	None	None
Kitchen/Living	VEL-011-01 W	SKYRW 09	0	419	6802	N	None	None
Kitchen/Living	VEL-011-01 W	SKYRW 11	0	480	7762	N	None	None
Master Bedroom	VEL-011-01 W	SKYRW 03	0	1113.03	1113.03	N	None	None
Foyer	VEL-011-01 W	SKYRW 12	0	2400.00	2400.00	N	None	None
WIR	VEL-011-01 W	SKYRW 02	0	708	2380	N	None	None

Skylight type and performance

Skylight ID	Skylight description
None	

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m ²)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Foyer	2700	2055	90	N
Garage	2500	3900	90	N

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
CONC-100-PB-A	Precast 100mm Concrete - Plasterboard Internally	0.50	Medium	2.50	No
CONC-100-PB-B	Precast 100mm Concrete - Plasterboard Internally	0.30	Light	2.50	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bath	CONC-100-PB-B	2700	1935	E	600	Yes
Bath	CONC-100-PB-B	2700	800	S		Yes
Bath	CONC-100-PB-B	3000	1814	E	600	Yes
Bath	CONC-100-PB-B	3000	749	S		Yes
Bedroom 1	CONC-100-PB-B	3000	4464	N	3670	Yes
Bedroom 1	CONC-100-PB-B	3000	4290	E	600	Yes
Bedroom 2	CONC-100-PB-B	2700	4577	E	800	Yes
Bedroom 3	CONC-100-PB-B	2700	5759	S	1500	Yes
Bedroom 3	CONC-100-PB-B	2700	1775	W	800	Yes
Bedroom 3	CONC-100-PB-B	2700	3408	E	800	Yes
Butlers	CONC-100-PB-B	3000	4926	E	600	Yes
Butlers	CONC-100-PB-B	3000	749	N		Yes
Cinema	CONC-100-PB-B	1350	6749	W	600	Yes
Cinema	CONC-100-PB-A	2700	4111	S		No
Cinema	CONC-100-PB-A	1350	6749	W		No

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Ensuite 1	CONC-100-PB-B	3000	1466	E	600	Yes
Ensuite 2	CONC-100-PB-B	2700	1784	E	802	Yes
Ensuite 3	CONC-100-PB-B	2700	1813	E	802	Yes
Ensuite Guest	CONC-100-PB-B	2700	3161	W	600	Yes
Ensuite Master	CONC-100-PB-B	2700	3538	W	800	Yes
Ensuite Master	CONC-100-PB-B	2700	4117	S	1500	Yes
Foyer	CONC-100-PB-B	2700	1350	W	600	Yes
Foyer	CONC-100-PB-B	2700	2692	N	4904	Yes
Foyer	CONC-100-PB-B	2700	1350	E	600	Yes
Foyer	CONC-100-PB-B	2700	3153	E	1400	Yes
Foyer	CONC-100-PB-A	2700	2692	S		No
Foyer	CONC-100-PB-A	2700	1800	S		No
Garage	CONC-100-PB-A	2700	20759	W		No
Garage	CONC-100-PB-B	2700	4310	N	2705	Yes
Garage	CONC-100-PB-B	2700	3923	W	4090	Yes
Garage	CONC-100-PB-A	2700	9162	NNE		No
Garage	CONC-100-PB-A	2700	6509	E		No
Garage	CONC-100-PB-A	2700	5997	S		No
Guest Bedroom	CONC-100-PB-B	2700	5200	W	600	Yes
Guest Bedroom	CONC-100-PB-B	2700	3625	N	1878	Yes
Guest Bedroom	CONC-100-PB-B	2700	4496	E	3940	Yes
Guest Bedroom	CONC-100-PB-B	2700	591	N	4984	Yes
Gym	CONC-100-PB-A	2700	4450	S		No
Hall	CONC-100-PB-B	2700	5310	N	800	Yes
Hall	CONC-100-PB-B	2700	3178	E	800	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Kitchen/Living	CONC-100-PB-B	3000	6891	W	600	Yes
Kitchen/Living	CONC-100-PB-B	3000	811	N	5187	Yes
Kitchen/Living	CONC-100-PB-B	3000	5636	W		Yes
Kitchen/Living	CONC-100-PB-B	3000	811	S	5181	Yes
Kitchen/Living	CONC-100-PB-B	3000	7877	W	600	Yes
Kitchen/Living	CONC-100-PB-B	3000	3216	E	1349	Yes
Kitchen/Living	CONC-100-PB-B	3000	9096	S	7328	Yes
Kitchen/Living	CONC-100-PB-B	3000	420	S		Yes
Kitchen/Living	CONC-100-PB-B	3000	4283	N	4940	Yes
Laundry	CONC-100-PB-B	3000	4126	E	600	Yes
Laundry	CONC-100-PB-B	3000	2457	S	5981	Yes
Lift	CONC-100-PB-A	2700	1353	E		No
Lift	CONC-100-PB-A	2700	1864	S		No
Master Bedroom	CONC-100-PB-B	2700	4986	W	800	Yes
Master Bedroom	CONC-100-PB-B	2700	4711	N	800	Yes
Steam	CONC-100-PB-A	2700	3511	E		No
Steam	CONC-100-PB-A	2700	1793	S		No
Storage	CONC-100-PB-A	2700	7562	E		No
Study	CONC-100-PB-B	2700	605	N	4984	Yes
Study	CONC-100-PB-B	2700	2002	W	6663	Yes
Study	CONC-100-PB-B	2700	3744	N	2982	Yes
Study	CONC-100-PB-B	2700	6027	E	600	Yes
Foyer	CONC-100-PB-B	3000	2692	N	3670	Yes
WC	CONC-100-PB-A	2700	2708	E		No
WIR	CONC-100-PB-B	2700	4733	W	800	Yes

* Refer to glossary.

Internal wall type

Wall ID	Wall Type	Area (m ²)	Bulk insulation
INT-CONCRETE-PB	Concrete with plasterboard	38.8	0.00
INT-PB	Internal Plasterboard Stud Wall	68.4	2.50
INT-PB	Internal Plasterboard Stud Wall	344.4	0.00

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bath	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	10.1	N/A	0.00	Tile
Bath	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.1	N/A	0.00	Carpet
Bedroom 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	25.1	N/A	0.00	Carpet
Bedroom 2	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	17.0	N/A	0.00	Timber
Bedroom 3	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	7.3	N/A	0.00	Timber
Bedroom 3	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	16.0	N/A	1.10	Timber
Butlers	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	3.5	N/A	0.00	Carpet
Butlers	CSOG-100: Concrete Slab on Ground (100mm)	8.6	N/A	0.00	Carpet
Cinema	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	27.7	N/A	4.00	Carpet
Ensuite 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	3.9	N/A	0.00	Tile
Ensuite 2	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	3.0	N/A	0.00	Timber
Ensuite 2	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.5	N/A	0.00	Tile
Ensuite 3	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	6.7	N/A	0.00	Tile
Ensuite Guest	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	6.2	N/A	4.00	Tile
Ensuite Master	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	10.5	N/A	0.00	Tile
Ensuite Master	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	4.1	N/A	1.10	Tile
Foyer	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	31.3	N/A	4.00	Carpet
Foyer	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	26.4	N/A	0.00	Carpet
Garage	CSOG-100: Concrete Slab on Ground (100mm)	186.4	N/A	0.00	Exposed

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
Guest Bedroom	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	15.6	N/A	4.00	Carpet
Guest Bedroom	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	10.6	N/A	1.10	Carpet
Gym	CSOG-100: Concrete Slab on Ground (100mm)	28.7	N/A	0.00	Carpet
Hall	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	26.8	N/A	0.00	Timber
Kitchen/Living	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	79.5	N/A	0.00	Carpet
Kitchen/Living	CSOG-100: Concrete Slab on Ground (100mm)	69.8	N/A	0.00	Carpet
Laundry	CSOG-100: Concrete Slab on Ground (100mm)	10.1	N/A	0.00	Tile
Lift	CSOG-100: Concrete Slab on Ground (100mm)	2.6	N/A	0.00	Exposed
Lift	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	4.6	N/A	0.00	Exposed
Lift	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.1	N/A	0.00	Carpet
Lift	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	2.9	N/A	0.00	Timber
Master Bedroom	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	30.5	N/A	0.00	Timber
Mudroom	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	2.9	N/A	0.00	Carpet
Stairway	CSOG-100: Concrete Slab on Ground (100mm)	20.1	N/A	0.00	Carpet
Steam	CSOG-100: Concrete Slab on Ground (100mm)	6.3	N/A	0.00	Tile
Storage	CSOG-100: Concrete Slab on Ground (100mm)	22.1	N/A	0.00	Carpet
Study	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	25.0	N/A	4.00	Carpet
WC	CSOG-100: Concrete Slab on Ground (100mm)	4.9	N/A	0.00	Tile
WIR	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	14.9	N/A	0.00	Timber

Ceiling type

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bath	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Bedroom 1	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Bedroom 2	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No

Ceiling type

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Bedroom 3	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Butlers	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Cinema	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Ensuite 1	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Ensuite 2	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Ensuite 3	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Ensuite Master	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Garage	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Guest Bedroom	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Gym	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Hall	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Kitchen/Living	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Laundry	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Lift	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Master Bedroom	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Stairway	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Steam	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Storage	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Study	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
Foyer	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
WC	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No
WIR	SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	0.00	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
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* Refer to glossary.

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Bath	2	Exhaust Fan	250	Sealed
Bath	5	Downlight	150	Sealed
Bedroom 1	11	Downlight	150	Sealed
Bedroom 2	5	Downlight	150	Sealed
Bedroom 3	10	Downlight	150	Sealed
Butlers	5	Downlight	150	Sealed
Cinema	10	Downlight	150	Sealed
Ensuite 1	1	Exhaust Fan	250	Sealed
Ensuite 1	2	Downlight	150	Sealed
Ensuite 2	1	Exhaust Fan	250	Sealed
Ensuite 2	2	Downlight	150	Sealed
Ensuite 3	1	Exhaust Fan	250	Sealed
Ensuite 3	3	Downlight	150	Sealed
Ensuite Guest	1	Exhaust Fan	250	Sealed
Ensuite Guest	3	Downlight	150	Sealed
Ensuite Master	1	Exhaust Fan	250	Sealed
Ensuite Master	6	Downlight	150	Sealed
Foyer	16	Downlight	150	Sealed
Garage	25	Downlight	150	Sealed
Guest Bedroom	11	Downlight	150	Sealed
Gym	12	Downlight	150	Sealed
Hall	11	Downlight	150	Sealed
Kitchen/Living	1	Exhaust Fan	250	Sealed
Kitchen/Living	61	Downlight	150	Sealed
Laundry	5	Downlight	150	Sealed
Laundry	1	Exhaust Fan	250	Sealed

* Refer to glossary.

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Master Bedroom	13	Downlight	150	Sealed
Mudroom	2	Downlight	150	Sealed
Stairway	7	Downlight	150	Sealed
Steam	3	Downlight	150	Sealed
Storage	9	Downlight	150	Sealed
Study	10	Downlight	150	Sealed
Void	7	Downlight	150	Sealed
WC	1	Exhaust Fan	250	Sealed
WC	2	Downlight	150	Sealed
WIR	6	Downlight	150	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen/Living	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
SLAB-100-CEIL-01: Concrete Slab (100mm) with Suspended PB Ceiling	4.10	0.50	Medium

* 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).