

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0005429527

Generated on 26 Nov 2020 using AccuRate Sustainability V2.4.3.21

Property

Address 33 Hillcrest Avenue , Mona Vale , NSW , 2103
Lot/DP Lot 43 DP 6195
NCC Class* 1a
Type New Home

Plans

Main Plan 2830
Prepared by The Site Foreman

Construction and environment

Assessed floor area (m²)*	Exposure Type
Conditioned* 283.9	Suburban
Unconditioned* 51.5	NatHERS climate zone
Total 335.4	56
Garage 31.2	



Accredited assessor

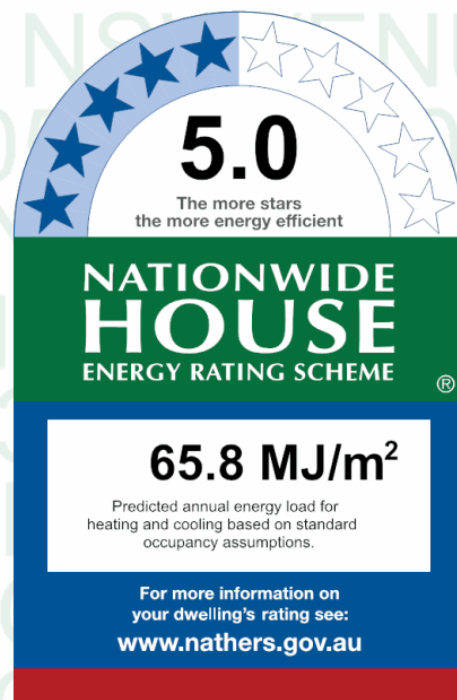
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Declaration of interest Declaration completed: no conflicts

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
39.9	25.9
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 www.hstar.com.au/QR/Generate?p=qJeXgCGGJ.

When using either link, ensure you are visiting www.hstar.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?

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

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
ALM-002-04 A	Aluminium B SG Low Solar Gain Low-E	5.6	0.41	0.39	0.43
ALM-003-03 A	Aluminium A DG Air Fill High Solar Gain low-E - Clear	4.3	0.47	0.45	0.49
ALM-004-04 A	Aluminium B DG Air Fill Low Solar Gain low-E -Clear	4.9	0.33	0.31	0.35
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
ATB-003-04 B	Al Thermally Broken A DG Air Fill Low Solar Gain low-E -Clear	3.1	0.27	0.26	0.28

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*
RUMPUS	ALM-004-04 A	W06	800	3000	Sliding	45	N	None
RUMPUS	ALM-004-04 A	W05	2400	3500	Sliding	45	W	None
BED 2	ALM-004-04 A	W04	2400	600	Other	00	W	None
BED 2	ALM-004-04 A	W03	2400	3000	Other	45	W	None
ENS 2	ALM-002-04 A	W02	800	500	Louvre	90	S	None
ENS 2	ALM-004-04 A	W02	800	1450	Other	00	S	None
BED 3	ALM-004-04 A	W08	800	3000	Sliding	45	N	None
BED 3	ALM-003-03 A	W07	1500	1450	Awning	90	W	None
BATH GF	ALM-002-04 A	W01	800	500	Louvre	90	S	None
BATH GF	ALM-004-04 A	W01	800	1300	Other	00	S	None
L/K/D	ALM-004-04 A	W24	500	3050	Sliding	45	N	None
L/K/D	ALM-003-03 A	W23	1400	1150	Awning	90	W	None
L/K/D	ALM-004-04 A	W21	2400	3500	Sliding	45	W	None
L/K/D	ALM-004-04 A	W20	2400	800	Other	00	S	None
LDY	ALM-004-04 A	W25	500	1850	Other	00	N	None
HALL FF	ATB-004-04 B	W26	2800	1200	Other	00	N	None
HALL FF	ATB-003-04 B	W10	2400	750	Awning	90	E	None
HALL FF	ATB-003-04 B	W10	2400	1000	Casement	00	E	None
BATH FF	ALM-002-04 A	W12	500	1100	Louvre	90	S	None
GUEST BED	ALM-004-04 A	W11	2400	3050	Sliding	75	E	None
GUEST BED	ALM-004-04 A	W28	800	3050	Other	00	E	None
GARAGE	ALM-004-04 A	W09	800	3000	Sliding	45	N	None
MASTERBED	ALM-004-04 A	W31	2400	3500	Sliding	45	W	None
MASTERBED	ALM-004-04 A	W30A	1400	3700	Sliding	10	S	None
ENS	ALM-004-04 A	w33a	1400	3700	Sliding	45	N	None
ENS	ALM-004-04 A	W32	1400	2850	Sliding	45	W	None
STUDY	ALM-004-04 A	W35	600	1650	Sliding	45	N	None
STUDY	ALM-004-04 A	W34	1200	900	Other	00	W	None
HALL SF	ATB-003-04 B	W37	1000	1500	Awning	90	E	None
HALL SF	ATB-003-04 B	W37	1000	2940	Awning	90	E	None
HALL SF	ALM-004-04 A	W36	2700	1200	Other	00	N	None
VOID	ALM-003-03 A	W27	2430	750	Awning	90	E	None
VOID	ALM-004-04 A	W27	2430	1000	Other	00	E	None

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
WIR	ALM-003-03 A	W29	700	2300	Awning	90	E	None
LIVING	ATB-004-04 B	W19	2400	3500	Sliding	45	W	None
LIVING	ATB-004-04 B	W14	2400	800	Other	00	E	None

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
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
LDY	2100	900	90	E
GARAGE	2400	5500	90	W

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-001	Retaining Concrete block	85	Dark		No
EW-002	Brick wall/Plasterboard	30	Light	Polystyrene extruded (k = 0.028): R1.1	No
EW-003	Plasterboard	30	Light	Polystyrene expanded (k = 0.039): R1.9/Polystyrene extruded: R2.0	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
STORAGE	EW-001	2700	2900	S		No
STORAGE	EW-001	2700	100	E		No
STORAGE	EW-001	2700	2200	S		No
STORAGE	EW-001	2700	5650	E		No
STORAGE	EW-001	2700	5400	N		No
STORAGE	EW-001	2700	2900	W		No
GF HALL	EW-001	1700	3000	N		No
GF HALL	EW-002	1000	3000	N		No
GF HALL	EW-001	2700	3000	S		No
GF HALL	EW-001	2700	1800	E		No
GF HALL	EW-001	2700	1800	S		No
GF HALL	EW-001	1111	2800	E		No
RUMPUS	EW-002	2700	4300	N		Yes
RUMPUS	EW-002	2700	3900	W		Yes
BED 2	EW-002	2700	4900	W		Yes
BED 2	EW-002	2200	3700	S		Yes
BED 2	EW-001	500	3700	S		No
ENS 2	EW-002	1700	2000	S		Yes
ENS 2	EW-001	1000	2000	S		No
BED 3	EW-001	1200	5200	N		No
BED 3	EW-002	1500	5200	N		No
BED 3	EW-001	1800	1600	E		No
BED 3	EW-002	900	1600	E		No
BED 3	EW-001	700	1700	W		No
BED 3	EW-002	2000	1700	W		No
BATH GF	EW-002	1300	1800	S		Yes
BATH GF	EW-001	1400	1800	S		No
BATH GF	EW-002	700	700	E		No
BATH GF	EW-001	2000	700	E		No

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
BATH GF	EW-001	700	2900	E		No
L/K/D	EW-003	2800	3100	N		No
L/K/D	EW-003	2800	1400	W		No
L/K/D	EW-003	2800	3300	N		No
L/K/D	EW-003	2800	4600	W		Yes
L/K/D	EW-003	2800	1300	S		Yes
LDY	EW-003	2800	1700	E		No
LDY	EW-003	2800	1900	N		No
HALL FF	EW-003	2800	2800	N		No
HALL FF	EW-003	2800	1750	E		Yes
HALL FF	EW-003	1200	3000	E		No
HALL FF	EW-003	1200	1500	N		No
BATH FF	EW-003	2800	3100	S		No
GUEST BED	EW-003	2800	500	W		No
GUEST BED	EW-003	3800	3800	S		No
GUEST BED	EW-003	4000	3700	E		Yes
GARAGE	EW-003	2700	5400	N		No
GARAGE	EW-003	2700	2900	W		No
GARAGE	EW-003	2700	1500	S		Yes
GARAGE	EW-003	2700	200	N		No
GARAGE	EW-003	2700	2000	S		No
GARAGE	EW-003	2700	5800	W		Yes
MASTERBED	EW-003	2400	4500	W		Yes
MASTERBED	EW-003	2000	4000	S		No
ENS	EW-003	1700	4500	N		No
ENS	EW-003	2400	2900	W		Yes
STUDY	EW-003	2900	1000	E		No
STUDY	EW-003	1700	2400	N		No
STUDY	EW-003	1700	1000	W		No
STUDY	EW-003	1700	500	N		No
HALL SF	EW-003	1000	1800	E		No
HALL SF	EW-003	1700	3000	E		No
HALL SF	EW-003	2700	3000	N		No
HALL SF	EW-003	1700	3000	S		No
VOID	EW-003	2700	1750	E		Yes
VOID	EW-003	1000	1500	N		No
VOID	EW-003	1700	3500	S		No
WIR	EW-003	2000	1500	S		No
WIR	EW-003	1700	2400	E		No

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
LIVING	EW-003	2800	5000	W		Yes
LIVING	EW-003	2800	5300	S		No
LIVING	EW-003	2800	1200	E		No

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-001	Plasterboard	237.70	
IW-002	Plasterboard	15.13	Glass fibre batt: R2.0

Floor type

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
STORAGE/Ground	as_FLOR-B002 #1006 © 200mm Concrete Floor slab + R2.5	31.23		R2.5	
GF HALL/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	18.75		R2.5	
RUMPUS/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	22.86		R2.5	
BED 2/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	19.84		R2.5	
ENS 2/Ground	as_FLOR-B002 #1005 © 200mm Concrete Floor slab with ceramic tiles + R2.5	7.14		R2.5	Ceramic tile
BED 3/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	21.60		R2.5	
BATH GF/Ground	as_FLOR-B002 #1005 © 200mm Concrete Floor slab with ceramic tiles + R2.5	6.57		R2.5	Ceramic tile
L/K/D/BED 3	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	12.60		R2.0	
L/K/D/RUMPUS	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	19.76		R2.0	
L/K/D/GF HALL	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	6.35		R2.0	
L/K/D/BED 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	1.32		R2.0	
L/K/D/Outdoor Air	as_FLOR-B011 #1002 © Framed flr with parquet timber floor - no ceiling + r2	0.97		R2.0	
LDY/BED 3	as_FLOR-B010 #2063 © Framed flr with ceramic tiles on comp FC - PB ceiling - R2.0 insul	9.00		R2.0	Ceramic tile
HALL FF/GF HALL	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	12.40		R2.0	
HALL FF/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	10.61		R2.5	
LINEN/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	2.87		R2.5	
BATH FF/Ground	as_FLOR-B002 #1005 © 200mm Concrete Floor slab with ceramic tiles + R2.5	4.67		R2.5	Ceramic tile
GUEST BED/Ground	as_FLOR-B003 #2024 © 200mm Concrete Floor slab with parquet timber floor (R2.5 insul underl)	13.77		R2.5	
GARAGE/STORAGE	as_FLOR-B002 #1006 © 200mm Concrete Floor slab + R2.5	31.23		R2.5	
MASTERBED/L/K/D	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	10.02		R2.0	
MASTERBED/LIVING	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	9.02		R2.0	

Location	Construction	Area (m ²)	Sub-floor ventilation	Added insulation (R-value)	Covering
ENS/L/K/D	as_FLOR-B010 #2063 © Framed flr with ceramic tiles on comp FC - PB ceiling - R2.0 insul	12.60		R2.0	Ceramic tile
STUDY/LDY	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	7.20		R2.0	
STUDY/L/K/D	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	4.90		R2.0	
HALL SF/HALL FF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	17.04		R2.0	
VOID/HALL FF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	5.97		R2.0	
ROOF/LINEN	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	2.87		R5.0	
ROOF/L/K/D	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	8.68		R5.0	
ROOF/LDY	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	1.80		R5.0	
ROOF/BATH FF	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	4.67		R5.0	
ROOF/GUEST BED	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	13.77		R5.0	
ROOF/LIVING	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	8.29		R5.0	
WIR/LIVING	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	4.76		R2.0	
LIVING/Outdoor Air	as_FLOR-B011 #1002 © Framed flr with parquet timber floor - no ceiling + r2	5.36		R2.0	
LIVING/ENS 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	7.14		R2.0	
LIVING/BATH GF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	6.57		R2.0	
LIVING/BED 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	6.96		R2.0	

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
GARAGE/STORAGE	as_FLOR-B002 #1006 © 200mm Concrete Floor slab + R2.5	R2.5	No
L/K/D/GF HALL	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
HALL FF/GF HALL	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
L/K/D/RUMPUS	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
L/K/D/BED 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
LIVING/BED 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
LIVING/ENS 2	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
LDY/BED 3	as_FLOR-B010 #2063 © Framed flr with ceramic tiles on comp FC - PB ceiling - R2.0 insul	R2.0	No
L/K/D/BED 3	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
LIVING/BATH GF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
MASTERBED/L/K/D	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
ENS/L/K/D	as_FLOR-B010 #2063 © Framed flr with ceramic tiles on comp FC - PB ceiling - R2.0 insul	R2.0	No
STUDY/L/K/D	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
ROOF/L/K/D	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No
STUDY/LDY	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
ROOF/LDY	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No
VOID/HALL FF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
HALL SF/HALL FF	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
ROOF/LINEN	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No
ROOF/BATH FF	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No
ROOF/GUEST BED	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No
WIR/LIVING	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
MASTERBED/LIVING	as_FLOR-B010 #2023 © Framed flr with parquet timber floor - PB ceiling under - R2.0 insul	R2.0	No
ROOF/LIVING	as_CEIL-A001.flr - 2017 © 10mm Plasterboard ceiling fixed to ceiling joists above + R5.0 bulk insulation	R5.0	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm ²)	Sealed/unsealed
GF HALL	6	Downlight		Sealed
RUMPUS	9	Downlight		Sealed
BED 2	6	Downlight		Sealed
ENS 2	2	Downlight		Sealed
ENS 2	1	Ceiling exhaust fan	300	Sealed
BED 3	9	Downlight		Sealed
BATH GF	2	Downlight		Sealed
BATH GF	1	Ceiling exhaust fan	300	Sealed
L/K/D	26	Downlight		Sealed
L/K/D	1	Ceiling exhaust fan	300	Sealed
LDY	2	Downlight		Sealed
LDY	1	Ceiling exhaust fan	300	Sealed
HALL FF	6	Downlight		Sealed
LINEN	1	Downlight		Sealed
BATH FF	1	Downlight		Sealed
BATH FF	1	Ceiling exhaust fan	300	Sealed
GUEST BED	5	Downlight		Sealed
MASTERBED	6	Downlight		Sealed

* Refer to glossary.

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
ENS	5	Downlight		Sealed
ENS	1	Ceiling exhaust fan	300	Sealed
STUDY	5	Downlight		Sealed
HALL SF	6	Downlight		Sealed
VOID	2	Downlight		Sealed
WIR	1	Downlight		Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
as_ROOF-A021 #G017 © Horiz pitch Colourbond steel roof + Anticon R3.0 insul with R4.0 bulk insul + Plasterb'd ceiling under	R8.0	50	Medium
as_ROOF-B026 #1004 © Framed roof with w/p membrane and tiles-R5.0 bulk ins_pb ceiling under	R5.0	50	Medium
as_ROOF-A051 #3017 © 5-10 deg Colourbond steel roof + Anticon R3.0 insul with no ceiling under	R3.0	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) 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 10m 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).