

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0012292686

Generated on 12 Oct 2025 using AccuRate Sustainability V2.4.3.21 SP1

Property

Address 290 Lower Plateau Road,
Bilgola , NSW , 2107
Lot/DP Lot 17 DP 12838
NCC Class* 1a
Type New Home

Plans

Main plan 142
Prepared by Darren Campbell

Construction and environment

Assessed floor area (m²)*	Exposure type
Conditioned* 279.3	Suburban
Unconditioned* 55.3	NatHERS climate zone
Total 334.6	56
Garage 37.4	



Accredited assessor

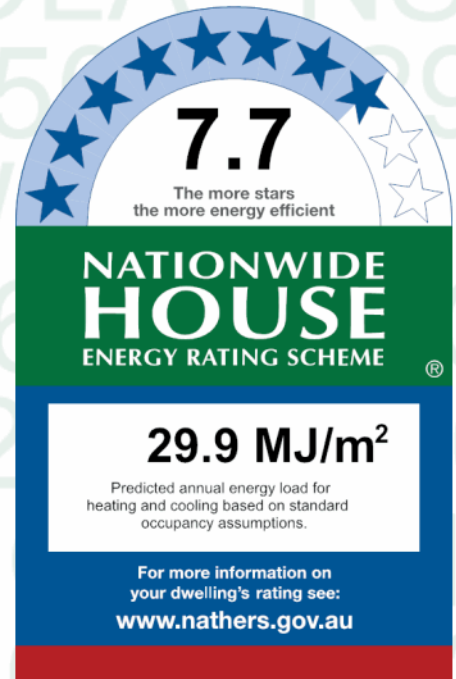
Name Peter Cumming
Business name NatHERS & BASIX Solutions
Email basixsolutions@gmail.com
Phone 0299797674
Accreditation No. 20042
Assessor Accrediting Organisation
ABSA
Declaration of interest Declaration completed: no conflicts

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
15.4	14.5
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=TzwrezJSI. When using either link, ensure you are visiting 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? 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

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
STG-055-14 W	Siteline Clad-Tim w Al Fix Wndw DG 4-12Ar-4PThrm	1.7	0.53	0.50	0.56
STG-016-52 W	Cedar Awning Window DG 4PThrm-12Ar-4ET	1.8	0.32	0.30	0.34
STG-022-24 W	Cedar Sliding Window DG 4-12Ar-4CGd	1.8	0.32	0.30	0.34

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
STG-048-06 W	Cedar Architectural Sliding Door DG 6/12Ar/6Pt	1.7	0.36	0.34	0.38
DOW-021-01 B	Thermally Broken Aluminium Awning Window DG 4Clr/12Ar/4LE	2.0	0.52	0.49	0.55
STG-046-02 W	Cedar Architectural Hinged Door DG 4/12Ar/4Pt	1.6	0.35	0.33	0.37

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Entry/foyer/lift LGF	STG-046-02 W	DL01	2100	1200	Casement	100	NW	None
Rumpus	DOW-021-01 B	WL03	600	1500	Awning	90	NE	None
Rumpus	DOW-021-01 B	WL04	600	1500	Awning	90	NE	None
Guest bedroom	STG-048-06 W	WL02	2100	2300	Sliding	45	NW	None
Guest bedroom	STG-016-52 W	WL01	2100	800	Awning	60	NW	None
Bed 1/WIR	STG-016-52 W	WG06	600	1500	Awning	90	NE	None
Bed 1/WIR	STG-048-06 W	WG05	2100	3000	Sliding	60	NW	None
Ensuite	STG-016-52 W	WG07	600	1500	Awning	90	NE	None
Bed 2	STG-016-52 W	WG04	1450	3000	Awning	60	NW	None
Bed 3	STG-016-52 W	WG03	1450	3000	Awning	60	NW	None
Bath GF	DOW-021-01 B	WG02	1300	800	Awning	90	SW	None
Hall/stair/lift GF	STG-055-14 W	WG01	2100	1400	Other	00	SW	Outdoor Venetians
Bed 4	STG-022-24 W	WG08	1600	2400	Sliding	45	SE	None
Living/dining/kitchen/pantry/stair	STG-055-14 W	WH02	500	3400	Other	00	SW	None
Living/dining/kitchen/pantry/stair	STG-048-06 W	WF02	2400	3900	Sliding	60	NW	Roller Shutters

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Living/dining/kitchen/pantry/stair	STG-048-06 W	WF03	2400	3900	Sliding	60	NW	Roller Shutters
Living/dining/kitchen/pantry/stair	STG-055-14 W	WH01	500	3400	Other	00	NE	None
Living/dining/kitchen/pantry/stair	STG-055-14 W	WF04	1725	500	Other	00	NE	Outdoor Venetians
Living/dining/kitchen/pantry/stair	STG-022-24 W	WF05	1200	3856	Sliding	45	SE	None
Hall 2	STG-048-06 W	WF06	2400	2300	Sliding	45	NE	None
Family	DOW-021-01 B	WF08 awn	1200	900	Awning	90	SE	None
Family	STG-055-14 W	WF08 F	1200	1800	Other	00	SE	None
Family	STG-048-06 W	WF07	2400	2400	Sliding	45	NE	None
Shower FF	DOW-021-01 B	WF09	1300	800	Awning	90	SW	None
Laundry	DOW-021-01 B	WF10	1300	800	Awning	90	SW	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
Garage	2300	5400	100	NW
Rumpus	2100	900	100	SE

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-001	Plywood/Plasterboard	75	Dark	Polystyrene expanded (k = 0.039): R0.8/Rockwool batt: R2.5	Yes
EW-002	Plasterboard	75	Dark	Polystyrene expanded (k = 0.039): R1.0/Rockwool batt: R2.5	No
EW-003	Retaining Concrete block	50	Medium		No
EW-004	Sandstone/Concrete block	50	Medium		No
EW-005	Fibre-cement sheet/Plasterboard	50	Medium		No
EW-006	Concrete block	50	Medium		No
EW-007	Plasterboard	75	Dark	Rockwool batt: R2.5	Yes
EW-008	Retaining Concrete block/Plasterboard	50	Medium	Rockwool batt: R2.5	Yes
EW-009	Retaining Concrete block/Plasterboard	50	Medium	Polystyrene expanded (k = 0.039): R1.0/Rockwool batt: 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)
Garage	EW-004	2600	5700	SW	1500	Yes
Garage	EW-004	3600	5810	NW	1200	Yes
Garage	EW-003	900	1200	SW		No
Garage	EW-003	900	3600	SE		No
Garage	EW-003	900	7000	NE		No
Garage	EW-003	900	5700	SW		No
Garage	EW-003	900	2100	SE		No
Entry/foyer/lift LGF	EW-002	2600	1410	NW	6900	Yes
Entry/foyer/lift LGF	EW-002	2600	4660	SW		Yes
Entry/foyer/lift LGF	EW-008	2600	3700	SE	9000	No
Entry/foyer/lift LGF	EW-009	2600	600	NE	9000	Yes
Rumpus	EW-002	2600	1110	SE	9000	Yes
Rumpus	EW-002	2600	600	SW	1110	Yes
Rumpus	EW-007	2600	3410	SE	9000	Yes
Rumpus	EW-002	2600	5400	NE		Yes
Guest bedroom	EW-002	2600	4000	NE		Yes
Guest bedroom	EW-002	2600	3910	NW	900	No
Guest bedroom	EW-002	2600	400	SW	7600	Yes
Bed 1/WIR	EW-001	2600	4000	NE		Yes
Bed 1/WIR	EW-001	2600	3910	NW	2300	Yes
Bed 1/WIR	EW-002	2600	2400	SE	9000	Yes
Ensuite	EW-002	2600	2120	SE	9000	Yes
Ensuite	EW-001	2600	4290	NE		Yes
Bed 2	EW-001	2600	1545	NE		Yes
Bed 2	EW-001	2600	3910	NW	675	No
Bed 3	EW-001	2600	3710	NW	675	No
Bed 3	EW-001	2600	4330	SW		No
Bath GF	EW-001	2600	3219	SW		No
Hall/stair/lift GF	EW-001	2600	3900	SW		No

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Hall/stair/lift GF	EW-007	2600	3700	SE	9000	Yes
Hall/stair/lift GF	EW-002	2600	600	NE	4500	No
Bed 4	EW-002	2600	2910	SE	9000	Yes
Bed 4	EW-002	2600	800	NE	4500	Yes
Living/dining/kitchen/pantry/stair	EW-001	3250	6600	SW	200	No
Living/dining/kitchen/pantry/stair	EW-001	2700	11300	NW	1400	Yes
Living/dining/kitchen/pantry/stair	EW-001	3250	6600	NE	200	No
Living/dining/kitchen/pantry/stair	EW-001	2400	800	NE	300	No
Living/dining/kitchen/pantry/stair	EW-002	2400	4610	SE	5700	Yes
Living/dining/kitchen/pantry/stair	EW-002	2400	800	NE	5000	Yes
Living/dining/kitchen/pantry/stair	EW-002	2400	1700	SE		Yes
Living/dining/kitchen/pantry/stair	EW-001	2400	300	SW		No
Lift FF	EW-001	2400	1600	SW		No
Hall 2	EW-002	2400	2400	NE	1800	Yes
Family	EW-001	2400	5360	SW	300	No
Family	EW-001	2950	4910	SE		No
Family	EW-002	3500	4800	NE	1800	No
Family	EW-002	2400	2300	NE	1800	No
Shower FF	EW-001	2400	1700	SW	300	No
Laundry	EW-001	2400	1700	SW	300	No
Roofspace living	EW-001	1400	1500	SW	200	No
Roofspace living	EW-001	800	11400	SE		No
Roofspace living	EW-001	1400	1500	NE	200	No
Roofspace shower/laundry/hall	EW-001	1100	4700	NE		No
Subfloor family/hall 2	EW-005	1100	8300	NE		No
Subfloor family/hall 2	EW-005	1100	8300	SW		No
Subfloor family/hall 2	EW-006	1800	4800	NW		No
Shower LGF	EW-009	2600	2910	SE	9000	Yes
Shower LGF	EW-002	2600	1500	NE	4500	Yes

Internal wall type

Wall ID Wall type Area (m²) Bulk insulation

IW-001	Plasterboard	215.52	Rockwool batt: R2.5
IW-002	Plasterboard	19.80	Glass fibre batt (k = 0.057 density = 7 kg/m3): R5.0

Floor type

Location	Construction	Area Sub-floor (m ²)	Added insulation (R-value)	Covering
Garage/Ground	Concrete Slab 150 mm: bare	37.38		
Entry/foyer/lift LGF/Ground	concrete slab/timber flooring + R2.0	17.24	R2.0	
Rumpus/Ground	concrete slab/timber flooring + R2.0	21.63	R2.0	
Guest bedroom/Ground	concrete slab/timber flooring + R2.0	15.44	R2.0	
Bed 1/WIR/Rumpus	Timber frame: carpet/ply/75mm Hebel/air gap/plasterboard	12.54		Carpet 10 + felt underlay 10
Bed 1/WIR/Outdoor Air	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	0.60	R3.0	Carpet 10 + felt underlay 10
Bed 1/WIR/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	2.71	R3.0	Carpet 10 + felt underlay 10
Bed 1/WIR/Guest bedroom	Timber frame: carpet/ply/75mm Hebel/air gap/plasterboard	11.05		Carpet 10 + felt underlay 10
Ensuite/Rumpus	Timber frame: ceramic tiles/fc/Hebel/air gap/plasterboard	9.09		Ceramic tile
Bed 2/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	11.57	R3.0	Carpet 10 + felt underlay 10
Bed 2/Outdoor Air	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	4.06	R3.0	Carpet 10 + felt underlay 10
Bed 3/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	6.83	R3.0	Carpet 10 + felt underlay 10
Bed 3/Outdoor Air	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	9.23	R3.0	Carpet 10 + felt underlay 10
Bath GF/Entry/foyer/lift LGF	Timber frame: ceramic tiles/fc/Hebel/air gap/plasterboard	1.70		Ceramic tile

Location	Construction	Area Sub-floor (m ²)	Added insulation ventilation (R-value)	Covering
Bath GF/Garage	Timber frame: tile/fc/Hebel/R3.0/PB	2.62	R3.0	Ceramic tile
Bath GF/Outdoor Air	Timber frame: tile/fc/Hebel/R3.0/PB	3.24	R3.0	Ceramic tile
Hall/stair/lift GF/Garage	Timber frame: timber/ply/Hebel/R3.0/airgap/PB	7.97	R3.0	
Hall/stair/lift GF/Entry/foyer/lift LGF	Timber frame: timber/ply/Hebel/air gap/plasterboard	15.54		
Bed 4/Garage	Timber frame: timber/ply/Hebel/R3.0/airgap/PB	5.68	R3.0	
Bed 4/Shower LGF	Timber frame: timber/ply/Hebel/air gap/plasterboard	4.37		
Bed 4/Hall to rumpus	Timber frame: timber/ply/Hebel/air gap/plasterboard	3.19		
Living/dining/kitchen/pantry/stair/Bath GF	Timber frame: timber/ply/Hebel/air gap/plasterboard	7.56		
Living/dining/kitchen/pantry/stair/Bed 3	Timber frame: timber/ply/Hebel/air gap/plasterboard	6.86		
Living/dining/kitchen/pantry/stair/Bed 2	Timber frame: timber/ply/Hebel/air gap/plasterboard	6.68		
Living/dining/kitchen/pantry/stair/Ensuite	Timber frame: timber/ply/Hebel/air gap/plasterboard	9.09		
Living/dining/kitchen/pantry/stair/Bed 1/WIR	Timber frame: timber/ply/Hebel/air gap/plasterboard	23.38		
Living/dining/kitchen/pantry/stair/Bed 4	Timber frame: timber/ply/Hebel/air gap/plasterboard	13.24		
Living/dining/kitchen/pantry/stair/Hall/stair/lift GF	Timber frame: timber/ply/Hebel/air gap/plasterboard	21.27		
Lift FF/Hall/stair/lift GF	Timber frame: timber/ply/Hebel/air gap/plasterboard	2.24		
Hall 2/Outdoor Air	Timber frame: timber/ply/Hebel/R3.0/airgap/PB	1.79	R3.0	
Hall 2/Subfloor family/hall 2	Timber frame/timber insulated to subfloor	2.79	R3.0	
Family/Subfloor family/hall 2	Timber frame/timber insulated to subfloor	28.48	R3.0	
Shower FF/Subfloor family/hall 2	Timber framed/tile insulated to subfloor	6.12	R3.0	Ceramic tile
Laundry/Subfloor family/hall 2	Timber framed/tile insulated to subfloor	3.25	R3.0	Ceramic tile
Laundry/Outdoor Air	Timber frame: tile/fc/Hebel/R3.0/PB	1.00	R3.0	Ceramic tile
Roofspace living/Living/dining/kitchen/pantry/stair	Plasterboard 10 mm + R5.0 bulk insulation	12.04	R5.0	
Roofspace living/Lift FF	Plasterboard 10 mm + R5.0 bulk insulation	2.24	R5.0	

Location	Construction	AreaSub-floor (m ²) ventilation	Added insulation (R-value)	Covering
Roofspace living/Outdoor Air	Plasterboard 10 mm + R5.0 bulk insulation	3.60	R5.0	
Roofspace shower/laundry/hall/Shower FF	Plasterboard 10 mm + R5.0 bulk insulation	6.12	R5.0	
Roofspace shower/laundry/hall/Laundry	Plasterboard 10 mm + R5.0 bulk insulation	4.25	R5.0	
Roofspace shower/laundry/hall/Hall 2	Plasterboard 10 mm + R5.0 bulk insulation	4.58	R5.0	
Roofspace shower/laundry/hall/Family	Plasterboard 10 mm + R5.0 bulk insulation	4.51	R5.0	
Subfloor family/hall 2/Ground	Bare ground	40.80	Enclosed	
Hall to rumpus/Ground	concrete slab/timber flooring + R2.0	3.19	R2.0	
Shower LGF/Ground	Concrete slab/tile + R2.0	4.37	R2.0	Ceramic tile

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Bed 1/WIR/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	R3.0	No
Bed 2/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	R3.0	No
Bed 3/Garage	Timber frame: carpet/ply/Hebel/R3.0/airgap/PB	R3.0	No
Bath GF/Garage	Timber frame: tile/fc/Hebel/R3.0/PB	R3.0	No
Hall/stair/lift GF/Garage	Timber frame: timber/ply/Hebel/R3.0/airgap/PB	R3.0	No
Bed 4/Garage	Timber frame: timber/ply/Hebel/R3.0/airgap/PB	R3.0	No
Bath GF/Entry/foyer/lift LGF	Timber frame: ceramic tiles/fc/Hebel/air gap/plasterboard		No
Hall/stair/lift GF/Entry/foyer/lift LGF	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Bed 1/WIR/Rumpus	Timber frame: carpet/ply/75mm Hebel/air gap/plasterboard		No
Ensuite/Rumpus	Timber frame: ceramic tiles/fc/Hebel/air gap/plasterboard		No
Bed 1/WIR/Guest bedroom	Timber frame: carpet/ply/75mm Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Bed 1/WIR	Timber frame: timber/ply/Hebel/air gap/plasterboard		No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Living/dining/kitchen/pantry/stair/Ensuite	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Bed 2	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Bed 3	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Bath GF	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Hall/stair/lift GF	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Lift FF/Hall/stair/lift GF	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Living/dining/kitchen/pantry/stair/Bed 4	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Roofspace living/Living/dining/kitchen/pantry/stair	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Roofspace living/Lift FF	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Roofspace shower/laundry/hall/Hall 2	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Roofspace shower/laundry/hall/Family	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Roofspace shower/laundry/hall/Shower FF	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Roofspace shower/laundry/hall/Laundry	Plasterboard 10 mm + R5.0 bulk insulation	R5.0	No
Hall 2/Subfloor family/hall 2	Timber frame/timber insulated to subfloor	R3.0	No
Family/Subfloor family/hall 2	Timber frame/timber insulated to subfloor	R3.0	No
Shower FF/Subfloor family/hall 2	Timber framed/tile insulated to subfloor	R3.0	No
Laundry/Subfloor family/hall 2	Timber framed/tile insulated to subfloor	R3.0	No
Bed 4/Hall to rumpus	Timber frame: timber/ply/Hebel/air gap/plasterboard		No
Bed 4/Shower LGF	Timber frame: timber/ply/Hebel/air gap/plasterboard		No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Ensuite	1	Ceiling exhaust fan	160	Sealed
Bath GF	1	Ceiling exhaust fan	160	Sealed
Living/dining/kitchen/pantry/stair	1	Ceiling exhaust fan	160	Sealed
Shower FF	1	Ceiling exhaust fan	160	Sealed

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Shower LGF	1	Ceiling exhaust fan	160	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
Rumpus	1	1200
Guest bedroom	1	1200
Bed 1/WIR	1	1200
Bed 2	1	1200
Bed 3	1	1200
Living/dining/kitchen/pantry/stair	2	1200
Family	1	1200

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Metal deck raked ceiling	R4.5	50	Medium
Balcony	R3.0	50	Medium
Metal deck to roof space	R4.5	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 operability 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).