Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0007024417

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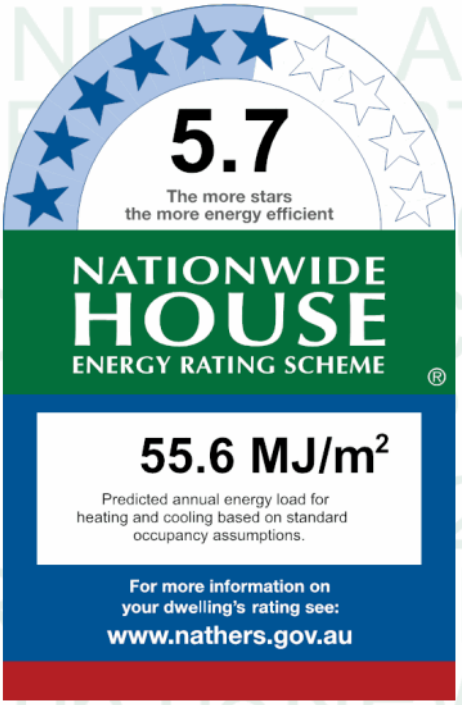

Property

Address	Unit -, 120 Prince Alfred Parade , Newport , NSW , 2106
Lot/DP	Lot 34/35 DP 13457
NCC Class*	1a
Type	New Home

Plans

Main Plan	NEWP DA01 - DA14, D18 - D19 04/02.2022,
Prepared by	Corben Architects

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**	
Conditioned*	420.6	Open	
Unconditioned*	59.4	**NatHERS climate zone**	
Total	480.0	56	
Garage	42.6		

Thermal performance

Heating	Cooling
35.2 MJ/m^2	20.5 MJ/m^2

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.

Accredited assessor

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Accreditation No.	20127
Assessor Accrediting Organisation	
ABSA	
Declaration of interest	Declaration completed: no conflicts

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=VHTRggkxy.
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? 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

Insulation, services and sealing of the building to be in accordance with BCA NSW 3.12
All downlights to be sealed or IC rated or fitted with covers
All exhaust fans to be sealed or fitted with dampers and max. 180 mm. dia.
Thermal comfort rating has been done with assumptions in regard to ceiling penetrations and it may need to be re
when final lighting layouts are available to confirm compliance with BCA 12.1.2(e)

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-001-03 A	Aluminium A SG High Solar Gain Low-E	5.4	0.49	0.47	0.51
ALM-002-03 A	Aluminium B SG High Solar Gain Low-E	5.4	0.58	0.55	0.61

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*
Gym	ALM-002-03 A	W1.03	2400	850	Louvre	90	W	None
Gym	ALM-002-03 A	W1.03	2400	2540	Sliding	90	W	None
Gym	ALM-002-03 A	W1.04	2400	1700	Other	00	N	None
GF Hall/Cellar/ Powder Room	ALM-002-03 A	W1.02	2750	1330	Other	00	S	None
GF Hall/Cellar/ Powder Room	ALM-002-03 A	W1.05	2400	1156	Other	00	W	None
GF Hall/Cellar/ Powder Room	ALM-002-03 A	W1.19	1500	1500	Other	00	E	None
Pantry	ALM-002-03 A	W1.01	2750	1100	Other	00	S	None
Pantry	ALM-002-03 A	W1.20	650	2191	Other	00	E	None
Living	ALM-002-03 A	W1.06	2400	650	Other	00	S	None
Living	ALM-002-03 A	W1.08	2400	900	Other	00	W	None
Living	ALM-002-03 A	W1.07	2400	900	Other	00	W	None
Living	ALM-002-03 A	W1.09	2400	5310	Sliding	60	N	None
Living	ALM-002-03 A	W1.10,11,12	650	5389	Other	00	N	None
Kitchen/Dining/Family	ALM-002-03 A	D1.16	2400	6132	Sliding	70	N	None
Kitchen/Dining/Family	ALM-002-03 A	D1.14,15,17,18	650	10880	Other	00	N	None
Kitchen/Dining/Family	ALM-002-03 A	D1.13	2400	4668	Sliding	60	N	None
Home Office	ALM-002-03 A	W2.07	2400	2438	Sliding	45	E	None
Home Office	ALM-001-03 A	W2.06	1800	750	Other	00	W	None
Media	ALM-002-03 A	W2.04	2400	1200	Other	00	S	None
Bath	ALM-002-03 A	W2.05	2400	1800	Other	00	S	None
FF Hall	ALM-002-03 A	W2.03	2400	2450	Other	00	S	None
FF Hall	ALM-001-03 A	W2.08	2400	860	Casement	90	W	None
FF Hall	ALM-002-03 A	W2.13	2600	3106	Other	00	N	None
Ensuite 2	ALM-002-03 A	W2.09	2400	1311	Other	00	W	None
Bed 2	ALM-002-03 A	W2.10	2400	600	Other	00	W	None
Bed 2	ALM-002-03 A	W2.11 door	2400	2400	Sliding	45	N	None
Bed 2	ALM-002-03 A	W2.11 sidelight	2400	850	Louvre	90	N	None
Bed 3/Ensuite 3	ALM-002-03 A	W2.12	2400	2400	Sliding	45	N	None
Bed 3/Ensuite 3	ALM-002-03 A	W2.12 sidelight	2400	850	Louvre	90	N	None
Bed 4/Ensuite 4	ALM-002-03 A	W2.14	2400	2400	Sliding	45	N	None
Bed 4/Ensuite 4	ALM-002-03 A	W2.14 sidelight	2400	857	Louvre	90	N	None
Bed 1	ALM-002-03 A	D2.15	2400	2927	Sliding	45	N	None
Bed 1	ALM-002-03 A	D2.15 sidelight	2400	850	Louvre	90	N	None

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Bed 1	ALM-002-03 A	W2.17	2100	900	Other	00	E	None
Bed 1	ALM-002-03 A	W2.16	2100	700	Louvre	90	E	None
Ensuite 1	ALM-002-03 A	W2.01	2100	900	Louvre	90	S	None
Ensuite 1	ALM-002-03 A	W2.19	1800	2000	Other	00	E	None
Bed 1 WC	ALM-002-03 A	W2.18	1200	750	Other	90	E	None
Linen	ALM-002-03 A	W2.02	2100	900	Other	00	S	None
Guest Kitchenette	ALM-002-03 A	W3.05	2100	800	Louvre	90	W	None
Guest Ensuite	ALM-002-03 A	W3.07	2100	600	Louvre	90	N	None
Guest Ensuite	ALM-002-03 A	W3.07 fixed	2100	1000	Other	00	N	None
Guest Bed	ALM-002-03 A	W3.08	2400	3407	Sliding	45	N	None
Guest Bed	ALM-002-03 A	W3.04	2600	850	Louvre	90	S	None
Entry	ALM-001-03 A	W3.01	2500	1300	Casement	90	S	None
Entry	ALM-002-03 A	W3.03	2600	2379	Other	00	S	None
Entry	ALM-002-03 A	W3.02	500	5164	Other	00	S	None
Entry	ALM-002-03 A	W3.09	2700	3107	Other	00	N	None
Entry	ALM-002-03 A	W3.06	500	4070	Other	00	W	None
Entry	ALM-002-03 A	W3.10	500	3090	Other	00	N	None
Entry	ALM-002-03 A	W3.10 louvre	500	870	Louvre	90	N	None
Entry	ALM-002-03 A	W3.12	500	2285	Other	00	E	None
Garage	ALM-002-03 A	W3.11	1800	3005	Other	00	N	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								

* Refer to glossary.

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
Storage	2400	820	90	S
Laundry	2400	820	90	S
Garage	2500	5500	90	S

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-001	Brick wall/Plasterboard	35	Light	Polystyrene extruded (k = 0.028): R1.1	Yes
EW-002	Fibre-cement sheet/Plasterboard	75	Dark	Polyester or polyester/wool blanket: R2.5	No
EW-003	Concrete wall/Plasterboard	35	Light		No
EW-004	Concrete block	50	Medium		No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Gym	EW-001	3300	5515	S		No
Gym	EW-001	3300	3990	W		Yes
Gym	EW-001	3300	1700	N	1260	Yes
Storage	EW-001	3300	2650	S		No
GF Hall/Cellar/ Powder Room	EW-001	3300	4605	S		No
GF Hall/Cellar/ Powder Room	EW-001	3300	1260	W	2000	Yes
GF Hall/Cellar/ Powder Room	EW-001	3300	1500	E		No
Pantry	EW-001	3300	1850	S		No
Pantry	EW-001	3300	3990	E		Yes
Laundry	EW-001	3300	2375	S		No
Living	EW-001	3300	1315	S	1260	Yes
Living	EW-001	3300	6140	W		Yes

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Living	EW-001	3300	6480	N	830	No
Kitchen/Dining/Family	EW-001	3300	12070	N	830	No
Kitchen/Dining/Family	EW-001	3300	6000	E		Yes
Home Office	EW-001	2700	3800	S		No
Home Office	EW-001	2700	4045	E		Yes
Home Office	EW-001	2700	3960	W		Yes
Media	EW-001	2700	3985	S		No
Bath	EW-001	2700	1800	S		No
FF Hall	EW-001	2700	3880	S		No
FF Hall	EW-001	2700	1220	W		Yes
FF Hall	EW-001	2700	3106	N	830	Yes
Ensuite 2	EW-001	2700	1500	W		Yes
Bed 2	EW-001	2700	4600	W		Yes
Bed 2	EW-001	2700	3600	N	830	Yes
Bed 3/Ensuite 3	EW-001	2700	3600	N	830	Yes
Bed 4/Ensuite 4	EW-001	2700	3600	N	830	Yes
Bed 4/Ensuite 4	EW-001	2700	326	E	4660	Yes
Bed 1	EW-001	2700	4360	N	1450	Yes
Bed 1	EW-001	2700	7630	E		Yes
Ensuite 1	EW-001	2700	4527	S		No
Ensuite 1	EW-001	2700	2300	E		Yes
Bed 1 WC	EW-001	2700	950	E		Yes
Linen	EW-001	2700	1490	S		No
Guest Kitchenette	EW-002	2700	1800	S		No
Guest Kitchenette	EW-001	2700	1800	W		Yes
Guest Ensuite	EW-002	2700	1800	N	940	Yes
Guest Ensuite	EW-001	2700	3560	W		Yes
Guest Bed	EW-002	2700	3410	N	940	Yes
Guest Bed	EW-002	2700	3800	S		No
Entry	EW-001	3700	5174	S	545	Yes
Entry	EW-002	2700	315	N		Yes
Entry	EW-001	2700	640	W	5800	Yes
Entry	EW-001	2700	5336	N		No
Entry	EW-003	600	3990	W	730	Yes
Entry	EW-003	600	4140	N	770	No
Entry	EW-003	600	2290	E	1520	No
Lift Entrly level	EW-004	600	1550	N	770	No
Lift Entrly level	EW-004	600	1500	E	675	No
Lift Entrly level	EW-004	600	624	N	5694	No

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage	EW-002	2700	6000	N		No
Garage	EW-001	2700	7500	E		No
Garage	EW-001	2700	6660	S		No
Garage	EW-001	2700	770	W		Yes

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-001	Plasterboard	27.00	
IW-002	Plasterboard/Brick wall	366.77	
IW-003	Plasterboard/Brick wall	78.42	
IW-004	Timber	6.08	
IW-005	Glass	6.08	
IW-006	Concrete block/Plasterboard	62.36	

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Gym/Ground	Tiles on 150 concrete slab on ground	26.76			Ceramic tile
Storage/Ground	Tiles on 150 concrete slab on ground	5.97			Ceramic tile
GF Hall/Cellar/ Powder Room/Ground	Tiles on 150 concrete slab on ground	47.01			Ceramic tile
Pantry/Ground	Tiles on 150 concrete slab on ground	7.38			Ceramic tile
Laundry/Ground	Tiles on 150 concrete slab on ground	9.57			Ceramic tile
GF Lift/Ground	150 concrete slab on ground	3.13			
Living/Ground	Tiles on 150 concrete slab on ground	38.94			Ceramic tile
Kitchen/Dining/Family/Ground	Tiles on 150 concrete slab on ground	72.64			Ceramic tile
Home Office/Gym	carpet on 200 concrete plasterboard ceiling	4.76			Carpet 10 + rubber underlay 8
Home Office/Outdoor Air	carpet on 200 concrete plasterboard ceiling	15.20			Carpet 10 + rubber underlay 8
Media/Storage	carpet on 200 concrete plasterboard ceiling	3.31			Carpet 10 + rubber underlay 8
Media/Gym	carpet on 200 concrete plasterboard ceiling	12.23			Carpet 10 + rubber underlay 8
Bath/Storage	Tiles on 200 concrete plasterboard ceiling	7.20			Ceramic tile
FF Hall/Outdoor Air	Tiles on 200 concrete plasterboard ceiling	2.31			Ceramic tile
FF Hall/GF Hall/Cellar/ Powder Room	Tiles on 200 concrete plasterboard ceiling	31.06			Ceramic tile
FF Hall/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling	19.00			Ceramic tile
Ensuite 2/Living	Tiles on 200 concrete plasterboard ceiling	3.55			Ceramic tile
Bed 2/Living	carpet on 200 concrete plasterboard ceiling	18.35			Carpet 10 + rubber underlay 8

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Bed 3/Ensuite 3/Living	carpet on 200 concrete plasterboard ceiling	16.11			Carpet 10 + rubber underlay 8
Bed 3/Ensuite 3/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling	1.98			Carpet 10 + rubber underlay 8
Bed 3/Ensuite 3/Living	Tiles on 200 concrete plasterboard ceiling	2.92			Ceramic tile
Bed 3/Ensuite 3/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling	0.64			Ceramic tile
Bed 4/Ensuite 4/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling	18.85			Carpet 10 + rubber underlay 8
Bed 4/Ensuite 4/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling	3.72			Ceramic tile
Bed 1/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling	24.36			Carpet 10 + rubber underlay 8
Bed 1/GF Hall/Cellar/ Powder Room	carpet on 200 concrete plasterboard ceiling	6.79			Carpet 10 + rubber underlay 8
Bed 1/Pantry	carpet on 200 concrete plasterboard ceiling	1.55			Carpet 10 + rubber underlay 8
Bed 1/Laundry	carpet on 200 concrete plasterboard ceiling	0.40			Carpet 10 + rubber underlay 8
Ensuite 1/Laundry	Tiles on 200 concrete plasterboard ceiling	8.51			Ceramic tile
Ensuite 1/Laundry	Tiles on 200 concrete plasterboard ceiling	4.25			Ceramic tile
Bed 1 WC/Pantry	Tiles on 200 concrete plasterboard ceiling	1.76			Ceramic tile
Bed 1 WC/Laundry	Tiles on 200 concrete plasterboard ceiling	0.54			Ceramic tile
Linen/GF Hall/Cellar/ Powder Room	Tiles on 200 concrete plasterboard ceiling	5.94			Ceramic tile
FF Lift/GF Lift	150 concrete slab on ground	3.13			
Guest Kitchenette/Bath	Tiles on 200 concrete plasterboard ceiling	3.24			Ceramic tile
Guest Ensuite/Bath	Tiles on 200 concrete plasterboard ceiling	3.73			Ceramic tile
Guest Ensuite/FF Hall	Tiles on 200 concrete plasterboard ceiling	2.45			Ceramic tile
Guest Bed/Media	carpet on 200 concrete plasterboard ceiling	15.20			Carpet 10 + rubber underlay 8
Guest Bed/FF Hall	carpet on 200 concrete plasterboard ceiling	4.75			Carpet 10 + rubber underlay 8
Entry/FF Hall	Tiles on 200 concrete plasterboard ceiling	17.23			Ceramic tile
Entry/FF Lift	Tiles on 200 concrete plasterboard ceiling	0.36			Ceramic tile
Entry/Bed 4/Ensuite 4	Tiles on 200 concrete plasterboard ceiling	1.54			Ceramic tile
Lift Entrly level/FF Lift	200 concrete plasterboard ceiling	2.33			
Garage/Ensuite 1	200 concrete plasterboard ceiling	12.82			
Garage/Bed 1 WC	200 concrete plasterboard ceiling	2.10			
Garage/Bed 1	200 concrete plasterboard ceiling	11.04			
Garage/Bed 4/Ensuite 4	200 concrete plasterboard ceiling	1.35			
Garage/Linen	200 concrete plasterboard ceiling	5.94			
Garage/FF Hall	200 concrete plasterboard ceiling	4.00			
Garage/FF Lift	200 concrete plasterboard ceiling	0.25			

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Garage/Outdoor Air	200 concrete plasterboard ceiling	5.12			

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Home Office/Gym	carpet on 200 concrete plasterboard ceiling		No
Media/Gym	carpet on 200 concrete plasterboard ceiling		No
Media/Storage	carpet on 200 concrete plasterboard ceiling		No
Bath/Storage	Tiles on 200 concrete plasterboard ceiling		No
FF Hall/GF Hall/Cellar/ Powder Room	Tiles on 200 concrete plasterboard ceiling		No
Bed 1/GF Hall/Cellar/ Powder Room	carpet on 200 concrete plasterboard ceiling		No
Linen/GF Hall/Cellar/ Powder Room	Tiles on 200 concrete plasterboard ceiling		No
Bed 1/Pantry	carpet on 200 concrete plasterboard ceiling		No
Bed 1 WC/Pantry	Tiles on 200 concrete plasterboard ceiling		No
Bed 1/Laundry	carpet on 200 concrete plasterboard ceiling		No
Ensuite 1/Laundry	Tiles on 200 concrete plasterboard ceiling		No
Ensuite 1/Laundry	Tiles on 200 concrete plasterboard ceiling		No
Bed 1 WC/Laundry	Tiles on 200 concrete plasterboard ceiling		No
FF Lift/GF Lift	150 concrete slab on ground		No
Ensuite 2/Living	Tiles on 200 concrete plasterboard ceiling		No
Bed 2/Living	carpet on 200 concrete plasterboard ceiling		No
Bed 3/Ensuite 3/Living	carpet on 200 concrete plasterboard ceiling		No
Bed 3/Ensuite 3/Living	Tiles on 200 concrete plasterboard ceiling		No
FF Hall/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling		No
Bed 3/Ensuite 3/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling		No
Bed 4/Ensuite 4/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling		No
Bed 4/Ensuite 4/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling		No
Bed 1/Kitchen/Dining/Family	carpet on 200 concrete plasterboard ceiling		No
Bed 3/Ensuite 3/Kitchen/Dining/Family	Tiles on 200 concrete plasterboard ceiling		No
Guest Bed/Media	carpet on 200 concrete plasterboard ceiling		No
Guest Kitchenette/Bath	Tiles on 200 concrete plasterboard ceiling		No
Guest Ensuite/Bath	Tiles on 200 concrete plasterboard ceiling		No
Guest Ensuite/FF Hall	Tiles on 200 concrete plasterboard ceiling		No
Guest Bed/FF Hall	carpet on 200 concrete plasterboard ceiling		No
Entry/FF Hall	Tiles on 200 concrete plasterboard ceiling		No
Garage/FF Hall	200 concrete plasterboard ceiling		No
Garage/Bed 4/Ensuite 4	200 concrete plasterboard ceiling		No
Entry/Bed 4/Ensuite 4	Tiles on 200 concrete plasterboard ceiling		No
Garage/Bed 1	200 concrete plasterboard ceiling		No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage/Ensuite 1	200 concrete plasterboard ceiling		No
Garage/Bed 1 WC	200 concrete plasterboard ceiling		No
Garage/Linen	200 concrete plasterboard ceiling		No
Lift Entrly level/FF Lift	200 concrete plasterboard ceiling		No
Entry/FF Lift	Tiles on 200 concrete plasterboard ceiling		No
Garage/FF Lift	200 concrete plasterboard ceiling		No

Ceiling *penetrations**

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

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Pebble ballast on R3 ext polystyrene WPM 200 th. concrete plasterboard ceiling	R3.0	65	Medium
Metal roof on battens breatnable membrane R4 plasyterboard ceiling	R4.0	73	Dark
Tiles on screed on R3 ext polystyrene WPM 200 th. concrete plasterboard ceiling	R3.0	65	Paint: light grey

* 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).