

Nationwide House Energy Rating Scheme

NatHERS Certificate No. 0009565193

Generated on 26 Jun 2024 using BERS Pro v4.4.1.5 (3.21)

Property

Address 120a Prince Alfred Parade,
NEWPORT, NSW, 2106

Lot/DP 34-35/13457

NCC Class* 1A

Type New Dwelling

Plans

Main plan 120 Prince Alfred

Prepared by BRFD No 1 Pty Ltd

Construction and environment

Assessed floor area (m²)*		Exposure type
Conditioned*	379.0	Suburban
Unconditioned*	66.0	NatHERS climate zone
Total	445.0	56
Garage	49.0	



Accredited assessor

Name Terry Chapman

Business name CHAPMAN ENVIRONMENTAL SERVICES
PTY LTD

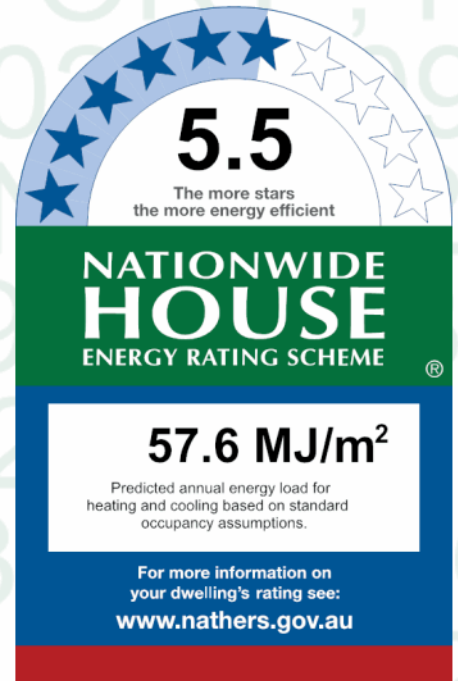
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Accreditation No. 20920

Assessor Accrediting Organisation
ABSA

Declaration of interest Declaration completed: no conflicts



Thermal performance

Heating	Cooling
41.9	15.6
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=KOHyyMhrl. 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.

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

I have modeled the shading in accordance with NatHERS principles

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-002-03 A	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
ALS-037-29 A	ALS-037-29 A 92mm Carinya Classic Sliding Door DG AGG Is SI EA Cl 4/10Ar/4	3.0	0.59	0.56	0.62
ALS-031-29 A	ALS-031-29 A 92mm Carinya Classic Fixed Window DG 001_AGG PRIME Clr 4_10_4	2.8	0.51	0.48	0.54

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALS-027-05 A	ALS-027-05 A 50mm Carinya Classic Fixed Window SG 6EVClr	4.1	0.57	0.54	0.60
ALS-022-07 A	ALS-022-07 A Airflow Aluminium Louvre SG 6LE	4.5	0.53	0.50	0.56
ALS-044-05 A	ALS-044-05 A Carinya Select 125 Hinged Door SG 6EVClr	4.6	0.45	0.43	0.47

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALS-037-29 A	n/a	2400	4100	n/a	60	N	No
Kitchen/Living	ALS-031-29 A	n/a	250	3800	n/a	00	N	No
Kitchen/Living	ALS-031-29 A	n/a	250	6150	n/a	00	N	No
Kitchen/Living	ALS-037-29 A	n/a	2400	6150	n/a	60	N	No
Kitchen/Living	ALS-027-05 A	n/a	870	2840	n/a	00	E	No
Living 1	ALS-022-07 A	n/a	2700	1200	n/a	90	S	No
Living 1	ALS-037-29 A	n/a	2400	3800	n/a	60	N	No
Living 1	ALS-031-29 A	n/a	250	3800	n/a	00	N	No
Hall	ALS-027-05 A	n/a	2700	1450	n/a	00	S	No
Home Office	ALS-037-29 A	n/a	2700	2400	n/a	45	W	No
Gym	ALS-037-29 A	n/a	2700	1750	n/a	45	S	No
Gym	ALS-022-07 A	n/a	2700	1440	n/a	90	W	No
Gym	ALS-022-07 A	n/a	2700	1200	n/a	90	N	No
Pantry	ALS-022-07 A	n/a	2400	670	n/a	90	S	No
Laundry	ALS-022-07 A	n/a	1800	1220	n/a	90	E	No
Laundry	ALS-022-07 A	n/a	2400	670	n/a	90	S	No
Entry Hall	ALS-022-07 A	n/a	1800	2500	n/a	30	E	No
Entry Hall	ALS-022-07 A	n/a	552	2396	n/a	30	E	No
Entry Hall	ALS-044-05 A	n/a	3450	2400	n/a	30	S	No
Entry Hall	ALM-002-03 A	n/a	600	600	n/a	00	N	No Shading

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Entry Hall	ALM-002-03 A	n/a	552	3383	n/a	00	N	No Shading
Entry Hall	ALM-002-03 A	n/a	552	7509	n/a	00	E	No Shading
Entry Hall	ALM-002-03 A	n/a	552	6962	n/a	00	W	No Shading
Hall 2	ALS-022-07 A	n/a	2700	900	n/a	90	E	No
Bedroom 1	ALS-037-29 A	n/a	2700	3542	n/a	45	N	No
Bedroom 1	ALS-022-07 A	n/a	2700	600	n/a	90	N	No
WIR	ALS-022-07 A	n/a	2700	700	n/a	90	W	No
Bed 1 Ens	ALS-027-05 A	n/a	1600	1600	n/a	00	W	No
Bed 1 Ens	ALS-022-07 A	n/a	1450	700	n/a	90	W	No
Void	ALS-031-29 A	n/a	2700	2500	n/a	00	N	No
Bedroom 2	ALS-037-29 A	n/a	2700	3542	n/a	45	N	No
Bedroom 2	ALS-022-07 A	n/a	2700	600	n/a	90	N	No
Bedroom 3	ALS-037-29 A	n/a	2700	3242	n/a	45	N	No
Bedroom 3	ALS-022-07 A	n/a	2700	600	n/a	90	N	No
Bedroom 3	ALS-022-07 A	n/a	900	2100	n/a	90	E	No
Ens 3	ALS-022-07 A	n/a	700	700	n/a	90	E	No
Bedroom 4	ALS-022-07 A	n/a	2700	600	n/a	90	N	No
Bedroom 4	ALS-044-05 A	n/a	2700	800	n/a	90	N	No
Bedroom 4	ALS-022-07 A	n/a	1800	1200	n/a	90	E	No
Bedroom 4	ALS-022-07 A	n/a	1800	1200	n/a	90	S	No
Bath	ALS-022-07 A	n/a	1800	1900	n/a	30	S	No
Media	ALS-022-07 A	n/a	1800	2500	n/a	30	S	No

Roof window type and performance

Default* roof windows

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

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
VEL-011-01 W	Glass	2.6	0.24	0.23	0.25

Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade
Bed 1 Ens	VEL-011-01 W	n/a	0	606	461	N	No	No
Bed 1 Ens	VEL-011-01 W	n/a	0	806	461	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Void	VEL-011-01 W	n/a	0	1406	206	N	No	No
Bath	VEL-011-01 W	n/a	0	1056	461	N	No	No

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 1	2400	5500	90	E
Garage 1	2700	810	90	W

Location	Height (mm)	Width (mm)	Opening %	Orientation
Laundry	2700	900	90	N

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Tilt up concrete, lined	0.30	Light	Bulk Insulation R1.2	No
EW-2	Tilt up Concrete	0.30	Light	No insulation	No
EW-3	Tilt up concrete, lined	0.30	Light	No insulation	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Kitchen/Living	EW-1	2900	11750	N	900	NO
Kitchen/Living	EW-1	2900	6050	E	400	YES
Living 1	EW-1	2900	1600	S	7300	YES
Living 1	EW-1	2900	6100	W	0	NO
Living 1	EW-1	2900	4950	N	900	NO
Hall	EW-1	2900	2500	S	0	YES
Home Office	EW-1	2900	3300	W	1200	YES
Gym	EW-1	2900	3500	S	0	YES
Gym	EW-1	2900	3900	W	0	NO
Gym	EW-1	2900	1600	N	10400	YES
Lift	EW-1	2900	1750	S	0	NO
Lift	EW-1	2900	1850	W	0	YES
Garage 1	EW-2	2900	6050	E	0	YES
Garage 1	EW-3	2900	7200	S	0	NO
Garage 1	EW-1	2900	1100	W	0	YES
Pantry	EW-1	2900	1450	S	3000	YES
Laundry	EW-1	2900	1800	N	0	YES
Laundry	EW-1	2900	4200	E	500	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Laundry	EW-1	2900	1950	S	3000	NO
Entry Hall	EW-1	4000	2450	E	0	YES
Entry Hall	EW-1	4000	3150	S	0	NO
Hall 2	EW-1	2900	1800	E	0	YES
Bedroom 1	EW-1	2900	5850	W	0	NO
Bedroom 1	EW-1	2900	4750	N	1700	YES
WIR	EW-1	2900	3000	W	0	NO
Bed 1 Ens	EW-1	2900	3000	S	0	YES
Bed 1 Ens	EW-1	2900	3550	W	0	NO
Void	EW-1	2900	800	W	4800	YES
Void	EW-1	2900	2650	N	900	NO
Bedroom 2	EW-1	2900	4500	N	900	NO
Bedroom 3	EW-1	2900	4450	N	900	NO
Bedroom 3	EW-1	2900	4850	E	0	NO
Ens 3	EW-1	2900	1600	E	0	NO
Bedroom 4	EW-1	2900	2300	N	0	YES
Bedroom 4	EW-1	2900	4300	E	0	NO
Bedroom 4	EW-1	2900	4350	S	0	NO
Bath	EW-1	2900	1900	S	0	NO
Media	EW-1	2900	4450	S	0	YES
Lift	EW-1	2900	1750	S	0	NO
Lift	EW-1	2900	1850	W	0	YES

Internal wall type

Wall ID	Wall type	Area (m ²)	Bulk insulation
IW-1 - Tilt Concrete		466.00	No insulation

Floor type

Location	Construction	Area Sub-floor ventilation (m ²) (R-value)	Added insulation	Covering
Kitchen/Living	Suspended Concrete Slab 150mm	71.10 Enclosed	Bulk Insulation in Contact with Floor R1.2	Cork Tiles or Parquetry 8mm
Living 1	Suspended Concrete Slab 150mm	30.00 Enclosed	Bulk Insulation in Contact with Floor R1.2	Cork Tiles or Parquetry 8mm
Hall	Suspended Concrete Slab 150mm	39.80 Enclosed	Bulk Insulation in Contact with Floor R1.2	Cork Tiles or Parquetry 8mm
Home Office	Suspended Concrete Slab 150mm	12.10 Enclosed	Bulk Insulation in Contact with Floor R1.2	Cork Tiles or Parquetry 8mm
Gym	Concrete Slab on Ground 100mm	20.20 None	No Insulation	Cork Tiles or Parquetry 8mm
Lift	Suspended Concrete Slab 150mm	3.20 Enclosed	Bulk Insulation in Contact with Floor R1.2	Cork Tiles or Parquetry 8mm
Pdr	Suspended Concrete Slab 150mm	4.50 Enclosed	No Insulation	Ceramic Tiles 8mm
Garage 1	Concrete Slab on Ground 100mm	49.30 None	No Insulation	Bare
Pantry	Suspended Concrete Slab 150mm	7.10 Enclosed	No Insulation	Ceramic Tiles 8mm
Laundry	Suspended Concrete Slab 150mm	8.20 Enclosed	No Insulation	Ceramic Tiles 8mm
Entry Hall/Hall	Concrete Above Plasterboard 150mm	23.40	Bulk Insulation R1.2	Cork Tiles or Parquetry 8mm
Entry Hall/Garage 1	Concrete Above Plasterboard 150mm	1.70	Bulk Insulation R2	Cork Tiles or Parquetry 8mm
Hall 2/Hall	Concrete Above Plasterboard 150mm	9.80	Bulk Insulation R1.2	Cork Tiles or Parquetry 8mm
Hall 2/Pdr	Concrete Above Plasterboard 150mm	1.70	Bulk Insulation R1.2	Cork Tiles or Parquetry 8mm
Hall 2/Pantry	Concrete Above Plasterboard 150mm	2.70	Bulk Insulation R1.2	Cork Tiles or Parquetry 8mm
Hall 2/Laundry	Concrete Above Plasterboard 150mm	0.90	Bulk Insulation R1.2	Cork Tiles or Parquetry 8mm
Bedroom 1/Kitchen/Living	Concrete Above Plasterboard 150mm	1.60	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 1/Living 1	Concrete Above Plasterboard 150mm	23.40	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 1/Home Office	Concrete Above Plasterboard 150mm	3.70	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 1	Suspended Concrete Slab 150mm	0.60 Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
WIR/Home Office	Concrete Above Plasterboard 150mm	8.40	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
WIR/Gym	Concrete Above Plasterboard 150mm	1.40	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm

Location	Construction	Area Sub-floor (m ²)	Added insulation (R-value)	Covering
WIR	Suspended Concrete Slab 150mm	2.90	Totally Open No Insulation	Carpet+Rubber Underlay 18mm
Bed 1 Ens/Gym	Concrete Above Plasterboard 150mm	16.80	Bulk Insulation R1.2	Ceramic Tiles 8mm
Void/Kitchen/Living	Concrete Above Plasterboard 150mm	15.80	Bulk Insulation R1.2	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Concrete Above Plasterboard 150mm	23.20	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 2/Hall	Concrete Above Plasterboard 150mm	1.40	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Ens 2/Kitchen/Living	Concrete Above Plasterboard 150mm	3.60	Bulk Insulation R1.2	Ceramic Tiles 8mm
Ens 2/Hall	Concrete Above Plasterboard 150mm	1.20	Bulk Insulation R1.2	Ceramic Tiles 8mm
Bedroom 3/Kitchen/Living	Concrete Above Plasterboard 150mm	21.40	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 3/Hall	Concrete Above Plasterboard 150mm	1.30	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 3	Suspended Concrete Slab 150mm	1.40	Totally Open No Insulation	Carpet+Rubber Underlay 18mm
Ens 3/Kitchen/Living	Concrete Above Plasterboard 150mm	3.30	Bulk Insulation R1.2	Ceramic Tiles 8mm
Ens 3/Hall	Concrete Above Plasterboard 150mm	1.30	Bulk Insulation R1.2	Ceramic Tiles 8mm
Bedroom 4/Pantry	Concrete Above Plasterboard 150mm	2.80	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 4/Laundry	Concrete Above Plasterboard 150mm	3.50	Bulk Insulation R1.2	Carpet+Rubber Underlay 18mm
Bedroom 4	Suspended Concrete Slab 150mm	12.00	Totally Open No Insulation	Carpet+Rubber Underlay 18mm
Bath/Garage 1	Concrete Above Plasterboard 150mm	6.10	Bulk Insulation R2	Ceramic Tiles 8mm
Bath/Pantry	Concrete Above Plasterboard 150mm	1.70	Bulk Insulation R1.2	Ceramic Tiles 8mm
Media/Hall	Concrete Above Plasterboard 150mm	1.20	Bulk Insulation R1.2	Ceramic Tiles 8mm
Media/Pdr	Concrete Above Plasterboard 150mm	3.00	Bulk Insulation R1.2	Ceramic Tiles 8mm
Media/Garage 1	Concrete Above Plasterboard 150mm	16.60	Bulk Insulation R2	Ceramic Tiles 8mm
Lift/Lift	Concrete Above Plasterboard 150mm	3.20	Bulk Insulation R1.2	Ceramic Tiles 8mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Kitchen/Living	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Living 1	Concrete, Plasterboard	Bulk Insulation R2	No
Living 1	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Hall	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Home Office	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Gym	Concrete, Plasterboard	Bulk Insulation R2	No
Gym	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Lift	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Pdr	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Garage 1	Concrete, Plasterboard	Bulk Insulation R2	No
Garage 1	Concrete Above Plasterboard	Bulk Insulation R2	No
Pantry	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Laundry	Concrete, Plasterboard	Bulk Insulation R2	No
Laundry	Concrete Above Plasterboard	Bulk Insulation R1.2	No
Entry Hall	Plasterboard	Bulk Insulation R3	No
Hall 2	Concrete, Plasterboard	Bulk Insulation R2	No
Bedroom 1	Concrete, Plasterboard	Bulk Insulation R2	No
WIR	Concrete, Plasterboard	Bulk Insulation R2	No
Bed 1 Ens	Concrete, Plasterboard	Bulk Insulation R2	No
Void	Concrete, Plasterboard	Bulk Insulation R2	No
Bedroom 2	Concrete, Plasterboard	Bulk Insulation R2	No
Ens 2	Concrete, Plasterboard	Bulk Insulation R2	No
Bedroom 3	Concrete, Plasterboard	Bulk Insulation R2	No
Ens 3	Concrete, Plasterboard	Bulk Insulation R2	No
Bedroom 4	Concrete, Plasterboard	Bulk Insulation R2	No
Bath	Concrete, Plasterboard	Bulk Insulation R2	No
Media	Concrete, Plasterboard	Bulk Insulation R2	No
Lift	Concrete, Plasterboard	Bulk Insulation R2	No

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
Kitchen/Living	24	Downlights - LED	150	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Living 1	8	Downlights - LED	150	Sealed
Hall	7	Downlights - LED	150	Sealed
Home Office	4	Downlights - LED	150	Sealed
Gym	6	Downlights - LED	150	Sealed
Pdr	2	Downlights - LED	150	Sealed
Pdr	1	Exhaust Fans	300	Sealed
Pantry	2	Downlights - LED	150	Sealed
Laundry	2	Downlights - LED	150	Sealed
Entry Hall	6	Downlights - LED	150	Sealed
Hall 2	4	Downlights - LED	150	Sealed
Bedroom 1	5	Downlights - LED	150	Sealed
WIR	2	Downlights - LED	150	Sealed
Bed 1 Ens	4	Downlights - LED	150	Sealed
Bed 1 Ens	1	Exhaust Fans	300	Sealed
Bedroom 2	5	Downlights - LED	150	Sealed
Ens 2	1	Downlights - LED	150	Sealed
Ens 2	1	Exhaust Fans	300	Sealed
Bedroom 3	5	Downlights - LED	150	Sealed
Ens 3	1	Downlights - LED	150	Sealed
Ens 3	1	Exhaust Fans	300	Sealed
Bedroom 4	4	Downlights - LED	150	Sealed
Bath	3	Downlights - LED	150	Sealed
Bath	1	Exhaust Fans	300	Sealed
Media	6	Downlights - LED	150	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.30	Light

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).