Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0006377360

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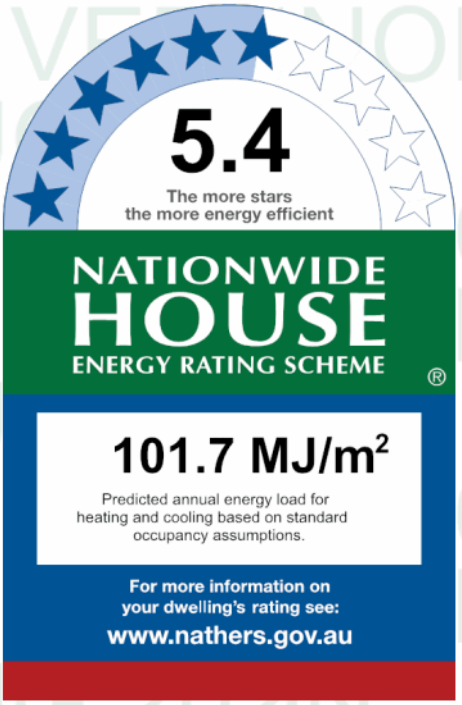

Property

Address	263 Mount Vernon Road , Mount Vernon , NSW , 2178
Lot/DP	72/32140
NCC Class*	1A
Type	New Dwelling

Plans

Main Plan	Grippaudo 20-1072
Prepared by	0

Construction and environment

Assessed floor area (m^2)*		**Exposure Type**
Conditioned*	597.0	Open
Unconditioned*	372.0	**NatHERS climate zone**
Total	969.0	28
Garage	351.0	

Thermal performance

Heating	Cooling
48.3 MJ/m^2	53.4 MJ/m^2

Accredited assessor

Name	Ian Fry
Business name	Frys Energywise
Email	comply@frysenergywise.com.au
Phone	02 9899 2825
Accreditation No.	DMN/12/1441
Assessor Accrediting Organisation	
Design Matters National	
Declaration of interest	Declaration completed: no conflicts

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=wKrzQEURz.
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?

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
TIM-001-01 W	TIM-001-01 W Timber A SG Clear	5.4	0.56	0.53	0.59

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
TND-020-01 A	TND-020-01 A Trend Al Double Hung Window SG 3Clr	6.1	0.75	0.71	0.79
TND-024-01 A	TND-024-01 A Trend Al Internal offset glazed window SG 5Clr	6.1	0.75	0.71	0.79
TND-024-04 A	TND-024-04 A Trend Al Internal offset glazed window SG 6.38CP	4.1	0.46	0.44	0.48
TND-071-04 A	TND-071-04 A Windsor Sliding Door SG 6SP10	4.4	0.55	0.52	0.58

* Refer to glossary.

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
TND-020-05 A	TND-020-05 A Trend Al Double Hung Window SG 6.38CP	4.4	0.45	0.43	0.47
TND-071-01 A	TND-071-01 A Windsor Sliding Door SG 6Clr	6.1	0.65	0.62	0.68

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Mia	TND-020-01 A	n/a	2400	730	n/a	45	SW	No
Mia	TND-020-01 A	n/a	2400	730	n/a	45	SW	No
Mia	TND-024-01 A	n/a	2400	1210	n/a	00	SE	No
Ensuite Mia	TND-020-01 A	n/a	2400	1090	n/a	45	SW	No
Paris	TND-020-01 A	n/a	2340	1810	n/a	45	NW	No
Paris	TND-020-01 A	n/a	2400	730	n/a	45	NW	No
Paris	TND-020-01 A	n/a	2400	730	n/a	45	SW	No
Paris	TND-020-01 A	n/a	2400	730	n/a	45	SW	No
Ensuite Paris	TND-020-01 A	n/a	2400	1090	n/a	45	SW	No
Games Room	TND-024-04 A	n/a	2400	3260	n/a	00	SW	No
Games Room	TND-024-04 A	n/a	1457	850	n/a	00	NW	No
Games Room	TND-024-04 A	n/a	1457	850	n/a	00	NW	No
Games Room	TND-071-04 A	n/a	2400	4248	n/a	45	NE	No
Games Room	TND-020-05 A	n/a	2400	1090	n/a	45	NE	No
Hall 1	TIM-001-01 W	n/a	2340	1200	n/a	90	SW	No
Activity	TIM-001-01 W	n/a	2340	1200	n/a	90	SW	No
Sienna	TND-020-01 A	n/a	2340	1810	n/a	45	SE	No
Sienna	TND-024-01 A	n/a	2400	1210	n/a	00	NW	No
Ensuite Sienna	TND-020-01 A	n/a	2060	850	n/a	45	SE	No
Ensuite Ava	TND-020-01 A	n/a	2060	850	n/a	45	SE	No
Ava	TND-020-01 A	n/a	2340	1810	n/a	45	SE	No
Office/Gym	TIM-001-01 W	n/a	2600	1930	n/a	90	SE	No
Media	TND-020-01 A	n/a	1910	1450	n/a	45	SW	No
Media	TND-020-01 A	n/a	1910	730	n/a	45	SE	No
Media	TND-020-01 A	n/a	1910	730	n/a	45	SE	No
Media	TND-020-01 A	n/a	1910	730	n/a	45	SE	No
Media	TND-020-01 A	n/a	1910	730	n/a	45	SE	No
Sebastian	TND-020-01 A	n/a	2340	1810	n/a	45	SE	No
Ensuite Sebasti	TND-020-01 A	n/a	2060	850	n/a	45	SE	No
Ensuite Pierro	TND-020-01 A	n/a	2060	850	n/a	45	SE	No
Pierro	TND-020-01 A	n/a	2340	1810	n/a	45	SE	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Laundry	TND-071-01 A	n/a	2400	2290	n/a	45	NW	No
Master Suite	TND-024-01 A	n/a	2700	400	n/a	00	SW	No
Master Suite	TND-024-01 A	n/a	3500	2100	n/a	00	NW	No
Master Suite	TND-024-01 A	n/a	3500	2100	n/a	00	NW	No
Master Suite	TND-024-01 A	n/a	2700	400	n/a	00	NE	No
Ensuite Master	TND-020-01 A	n/a	1800	1810	n/a	45	NW	No
Ensuite Master	TND-024-01 A	n/a	1800	2170	n/a	00	NE	No
Ensuite Master	TND-020-01 A	n/a	1800	1810	n/a	45	SE	No
Ensuite Master	TND-020-01 A	n/a	1910	730	n/a	45	SE	No
WC Ensuite Mast	TND-020-01 A	n/a	1457	850	n/a	45	NE	No
Kitchen/Living	TND-071-04 A	n/a	2400	7090	n/a	45	NW	No
Kitchen/Living	TND-020-05 A	n/a	2400	1090	n/a	45	NW	No
Kitchen/Living	TND-020-05 A	n/a	2400	1090	n/a	45	NW	No
Kitchen/Living	TIM-001-01 W	n/a	2400	1930	n/a	90	NW	No
Garage	TND-020-01 A	n/a	2050	1210	n/a	45	SE	No
Garage	TND-020-01 A	n/a	2050	1210	n/a	45	SE	No
Garage	TND-020-01 A	n/a	2050	1210	n/a	45	SE	No
Garage	TND-020-01 A	n/a	2050	1210	n/a	45	SE	No
Garage	TND-024-01 A	n/a	1060	6920	n/a	00	NE	No Shading
Garage	TND-024-01 A	n/a	355	3075	n/a	00	NE	No Shading

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
Basement	2400	5050	90	SW
Basement	2400	5050	90	SW
Entry	2340	2120	90	SE
Garage	2400	4810	90	NE
Garage	2400	5050	90	NE
Garage	2400	2410	90	NE

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Concrete Block	0.50	Medium	No insulation	No
EW-2	Brick Veneer	0.50	Medium	Bulk Insulation R2.5	No
EW-3	Fibro Cavity Panel Direct Fix	0.50	Medium	Bulk Insulation R2.5	No
EW-4	Fibro Cavity Panel Direct FixZ:38W2:6	0.50	Medium	Bulk Insulation R2.5	No
EW-5	Fibro Cavity Panel Direct FixZ:38W2:7	0.50	Medium	Bulk Insulation R2.5	No
EW-6	Fibro Cavity Panel Direct FixZ:38W2:8	0.50	Medium	Bulk Insulation R2.5	No
EW-7	Fibro Cavity Panel Direct FixZ:38W2:9	0.50	Medium	Bulk Insulation R2.5	No
EW-8	Fibro Cavity Panel Direct FixZ:38W2:10	0.50	Medium	Bulk Insulation R2.5	No
EW-9	Brick Veneer	0.50	Medium	Bulk Insulation R2.5	No
EW-10	Fibro Cavity Panel Direct FixZ:39W2:2	0.50	Medium	Bulk Insulation R2.5	No
EW-11	Brick Veneer	0.50	Medium	No insulation	No
EW-12	Single Skin Brick	0.50	Medium	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)
Basement	EW-1	3500	17500	NW	800	NO

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Basement	EW-1	3500	12200	NE	800	NO
Basement	EW-1	3500	7000	SE	800	YES
Basement	EW-1	3500	1000	NE	7800	YES
Basement	EW-1	3500	2800	SE	600	NO
Basement	EW-1	3500	1000	SW	7800	YES
Basement	EW-1	3500	7700	SE	800	YES
Basement	EW-1	3500	12200	SW	100	NO
Mia	EW-2	3000	4095	SW	600	YES
Mia	EW-2	3000	2500	SE	7600	YES
Ensuite Mia	EW-2	3000	1300	SE	600	YES
Ensuite Mia	EW-2	3000	1300	SW	600	NO
Ensuite Mia	EW-2	3000	3195	NW	8000	NO
WIR Mia	EW-2	3000	595	NW	8000	YES
Paris	EW-2	3000	3700	NW	600	NO
Paris	EW-2	3000	1600	NE	0	YES
Paris	EW-2	3000	1395	NW	5200	YES
Paris	EW-2	3000	4195	SW	600	YES
Ensuite Paris	EW-2	3000	3195	SE	14900	NO
Ensuite Paris	EW-2	3000	1300	SW	600	NO
Ensuite Paris	EW-2	3000	1300	NW	600	YES
WIR Paris	EW-2	3000	595	SE	14900	YES
Games Room	EW-2	3000	4600	SW	1600	YES
Games Room	EW-2	3000	6000	NW	600	NO
Games Room	EW-2	3000	8595	NE	0	YES
Hall 1	EW-2	3000	195	NW	9200	YES
Hall 1	EW-2	3000	1890	SW	4400	YES
Activity	EW-2	3000	1890	SW	3100	YES
Sienna	EW-2	3000	3995	SE	1800	YES
Sienna	EW-2	3000	3900	SW	600	NO
Sienna	EW-2	3000	2500	NW	15300	YES
Ensuite Sienna	EW-2	3000	1395	SE	600	NO
Ensuite Sienna	EW-2	3000	1200	SW	4600	YES
Ensuite Ava	EW-2	3000	1200	NE	0	YES
Ensuite Ava	EW-2	3000	1395	SE	600	NO
Ava	EW-2	3000	4190	SE	1800	YES
Office/Gym	EW-2	3000	900	NE	0	YES
Office/Gym	EW-2	3000	4000	SE	4400	NO
Office/Gym	EW-2	3000	1200	SW	11600	YES
Media	EW-2	3000	1800	SW	18400	YES

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Media	EW-2	3000	2100	NE	19400	YES
Media	EW-2	3000	800	SE	8200	YES
Media	EW-3	3000	1100	NE	1400	YES
Media	EW-3	3000	3900	SE	7100	NO
Media	EW-3	3000	1100	SW	8400	YES
Media	EW-2	3000	900	SE	8200	YES
Sebastian	EW-2	3000	3590	SE	1800	YES
Ensuite Sebasti	EW-2	3000	1395	SE	600	NO
Ensuite Sebasti	EW-2	3000	1200	SW	0	YES
Ensuite Pierro	EW-2	3000	1200	NE	13100	YES
Ensuite Pierro	EW-2	3000	1295	SE	600	NO
Pierro	EW-2	3000	3590	SE	1800	YES
Entry	EW-2	3000	2790	SE	10000	YES
Laundry	EW-2	3000	3895	NW	3800	YES
Laundry	EW-2	3000	5395	SW	0	YES
WIR Master Suit	EW-2	3000	1800	SW	0	YES
WIR Master Suit	EW-2	3000	3195	NW	2000	YES
Hall 3	EW-2	3000	195	NW	9200	YES
Hall 3	EW-2	3000	1790	NE	3300	YES
Master Suite	EW-2	4000	700	SW	0	YES
Master Suite	EW-2	4000	2100	NW	1300	YES
Master Suite	EW-2	4000	900	SW	0	YES
Master Suite	EW-2	4000	2100	NW	400	NO
Master Suite	EW-2	4000	900	NE	6700	YES
Master Suite	EW-2	4000	2100	NW	1300	YES
Master Suite	EW-2	4000	700	NE	4600	YES
Master Suite	EW-2	3000	1595	SE	17400	YES
Ensuite Master	EW-2	3000	1495	NW	2000	YES
Ensuite Master	EW-2	3000	700	SW	0	YES
Ensuite Master	EW-2	3000	1200	NW	1300	NO
Ensuite Master	EW-2	3000	700	NE	1900	YES
Ensuite Master	EW-2	3000	1300	NW	2000	YES
Ensuite Master	EW-2	600	1900	NE	0	YES
Ensuite Master	EW-4	2400	1900	NE	600	YES
Ensuite Master	EW-2	600	2100	NW	0	YES
Ensuite Master	EW-5	2400	2100	NW	600	YES
Ensuite Master	EW-2	600	2700	NE	0	NO
Ensuite Master	EW-6	2400	2700	NE	600	NO
Ensuite Master	EW-2	600	2100	SE	0	YES

* Refer to glossary.

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Ensuite Master	EW-7	2400	2100	SE	600	YES
Ensuite Master	EW-2	600	795	NE	0	YES
Ensuite Master	EW-8	2400	795	NE	2700	YES
Ensuite Master	EW-2	3000	1090	SE	17400	NO
WC Ensuite Mast	EW-9	600	1195	NE	0	NO
WC Ensuite Mast	EW-10	2400	1195	NE	600	NO
WC Ensuite Mast	EW-2	3000	2895	SE	600	NO
Kitchen/Living	EW-2	4000	13190	NW	9200	NO
Garage	EW-11	3172	2700	NW	10400	YES
Garage	EW-12	3172	5900	NE	600	YES
Garage	EW-11	3172	2700	NW	600	YES
Garage	EW-12	3172	6000	NE	900	YES
Garage	EW-11	3172	300	NW	6600	YES
Garage	EW-12	3172	3100	NE	600	NO
Garage	EW-11	3172	8900	SE	600	NO
Garage	EW-11	3172	3195	SW	0	YES

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		656.00	No insulation
IW-2 - Cavity wall, direct fix plasterboard, single gap		98.00	Bulk Insulation, No Air Gap R2

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Basement	Waffle pod slab 225 mm 100mm	216.30	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Mia/Basement	Concrete Above Plasterboard 100mm	15.20		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Ensuite Mia/Basement	Concrete Above Plasterboard 150mm	2.40		Bulk Insulation R2	Ceramic Tiles 8mm
Ensuite Mia	Suspended Concrete Slab 150mm	1.60	Open	No Insulation	Ceramic Tiles 8mm
WIR Mia/Basement	Concrete Above Plasterboard 100mm	2.20		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Paris/Basement	Concrete Above Plasterboard 100mm	16.70		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Paris	Waffle pod slab 225 mm 100mm	2.20	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Ensuite Paris/Basement	Concrete Above Plasterboard 150mm	2.40		Bulk Insulation R2	Ceramic Tiles 8mm
Ensuite Paris	Suspended Concrete Slab 150mm	1.60	Open	No Insulation	Ceramic Tiles 8mm
WIR Paris/Basement	Concrete Above Plasterboard 100mm	2.20		Bulk Insulation R2	Carpet+Rubber Underlay 18mm

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Games Room/Basement	Concrete Above Plasterboard 100mm	29.70		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Games Room	Waffle pod slab 225 mm 100mm	21.40	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Hall 1/Basement	Concrete Above Plasterboard 100mm	16.80		Bulk Insulation R2	Ceramic Tiles 8mm
Stairs to Basem/Basement	Concrete Above Plasterboard 100mm	4.30		Bulk Insulation R2	Ceramic Tiles 8mm
PDR/Basement	Concrete Above Plasterboard 100mm	4.80		Bulk Insulation R2	Ceramic Tiles 8mm
WIL/Basement	Concrete Above Plasterboard 100mm	3.60		Bulk Insulation R2	Ceramic Tiles 8mm
Activity/Basement	Concrete Above Plasterboard 100mm	24.10		Bulk Insulation R2	Ceramic Tiles 8mm
Activity	Waffle pod slab 225 mm 100mm	13.40	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Sienna	Waffle pod slab 225 mm 100mm	15.40	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
WIR Sienna	Waffle pod slab 225 mm 100mm	2.40	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
WIR Ava	Waffle pod slab 225 mm 100mm	2.40	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Ensuite Sienna	Waffle pod slab 225 mm 100mm	4.20	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Ensuite Ava	Waffle pod slab 225 mm 100mm	4.20	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Ava	Waffle pod slab 225 mm 100mm	15.80	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Office/Gym	Waffle pod slab 225 mm 100mm	19.90	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Media	Waffle pod slab 225 mm 100mm	37.30	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Sebastian	Waffle pod slab 225 mm 100mm	13.50	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Ensuite Sebasti	Waffle pod slab 225 mm 100mm	4.20	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WIR Sebastian	Waffle pod slab 225 mm 100mm	2.40	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Ensuite Pierro	Waffle pod slab 225 mm 100mm	3.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WIR Pierro	Waffle pod slab 225 mm 100mm	2.20	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Pierro	Waffle pod slab 225 mm 100mm	13.50	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Entry	Waffle pod slab 225 mm 100mm	11.30	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Hall 2	Waffle pod slab 225 mm 100mm	8.40	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Cool Room	Waffle pod slab 225 mm 100mm	6.30	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WIL	Waffle pod slab 225 mm 100mm	7.20	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Scullery	Waffle pod slab 225 mm 100mm	15.70	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WIL	Waffle pod slab 225 mm 100mm	5.80	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Laundry	Waffle pod slab 225 mm 100mm	20.60	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WIR Master Suit	Waffle pod slab 225 mm 100mm	22.30	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm

* Refer to glossary.

Location	Construction	Area (m)	Sub-floor ventilation	Added insulation (R-value)	Covering
Hall 3	Waffle pod slab 225 mm 100mm	16.10	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Master Suite	Waffle pod slab 225 mm 100mm	47.10	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
Ensuite Master	Waffle pod slab 225 mm 100mm	28.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm
WC Ensuite Mast	Waffle pod slab 225 mm 100mm	3.30	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Kitchen/Living/Basement	Concrete Above Plasterboard 100mm	48.40		Bulk Insulation R2	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 225 mm 100mm	74.80	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Drop Zone	Waffle pod slab 225 mm 100mm	7.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Storage	Waffle pod slab 225 mm 100mm	6.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm
Garage	Waffle pod slab 225 mm 100mm	119.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Basement	Concrete, Plasterboard	No insulation	No
Basement	Concrete Above Plasterboard	Bulk Insulation R2	No
Mia	Plasterboard	Bulk Insulation R5	No
Ensuite Mia	Plasterboard	Bulk Insulation R5	No
WIR Mia	Plasterboard	Bulk Insulation R5	No
Paris	Plasterboard	Bulk Insulation R5	No
Ensuite Paris	Plasterboard	Bulk Insulation R5	No
WIR Paris	Plasterboard	Bulk Insulation R5	No
Games Room	Plasterboard	Bulk Insulation R5	No
Hall 1	Plasterboard	Bulk Insulation R5	No
Stairs to Basem	Plasterboard	Bulk Insulation R5	No
PDR	Plasterboard	Bulk Insulation R5	No
WIL	Plasterboard	Bulk Insulation R5	No
Activity	Plasterboard	Bulk Insulation R5	No
Sienna	Plasterboard	Bulk Insulation R5	No
WIR Sienna	Plasterboard	Bulk Insulation R5	No
WIR Ava	Plasterboard	Bulk Insulation R5	No
Ensuite Sienna	Plasterboard	Bulk Insulation R5	No
Ensuite Ava	Plasterboard	Bulk Insulation R5	No
Ava	Plasterboard	Bulk Insulation R5	No
Office/Gym	Plasterboard	Bulk Insulation R5	No
Media	Plasterboard	Bulk Insulation R5	No
Sebastian	Plasterboard	Bulk Insulation R5	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Ensuite Sebasti	Plasterboard	Bulk Insulation R5	No
WIR Sebastian	Plasterboard	Bulk Insulation R5	No
Ensuite Pierro	Plasterboard	Bulk Insulation R5	No
WIR Pierro	Plasterboard	Bulk Insulation R5	No
Pierro	Plasterboard	Bulk Insulation R5	No
Entry	Plasterboard	Bulk Insulation R5	No
Hall 2	Plasterboard	Bulk Insulation R5	No
Cool Room	Plasterboard	Bulk Insulation R5	No
WIL	Plasterboard	Bulk Insulation R5	No
Scullery	Plasterboard	Bulk Insulation R5	No
WIL	Plasterboard	Bulk Insulation R5	No
Laundry	Plasterboard	Bulk Insulation R5	No
WIR Master Suit	Plasterboard	Bulk Insulation R5	No
Hall 3	Plasterboard	Bulk Insulation R5	No
Master Suite	Plasterboard	Bulk Insulation R5	No
Ensuite Master	Plasterboard	Bulk Insulation R5	No
WC Ensuite Mast	Plasterboard	Bulk Insulation R5	No
Kitchen/Living	Plasterboard	Bulk Insulation R5	No
Drop Zone	Plasterboard	No insulation	No
Storage	Plasterboard	No insulation	No
Garage	Plasterboard	No insulation	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm^2)	Sealed/unsealed
Ensuite Mia	1	Exhaust Fans	300	Sealed
Ensuite Paris	1	Exhaust Fans	300	Sealed
PDR	1	Exhaust Fans	300	Sealed
Ensuite Sienna	1	Exhaust Fans	300	Sealed
Ensuite Master	1	Exhaust Fans	300	Sealed
WC Ensuite Mast	1	Exhaust Fans	300	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
No Data Available		

* Refer to glossary.

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Waterproofing Membrane	No Insulation, Only an Air Gap	0.85	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.85	Dark

* 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).

* Refer to glossary.