

Nationwide House Energy Rating Scheme®

NatHERS® Certificate No. 0012700126-05

Generated on 20 May 2026 using BERS Pro v5.2.6 (3.23)

Property

Address Unit MH, 91 Windsor Road,
PADSTOW , NSW , 2211

Lot/DP Lot 18 DP 19247

NCC class* 1b

Floor/all Floors G of 2 floors

Type New Home

Plans

Main plan 25-1048

Prepared by S.ML

Construction and environment

Assessed floor area [m²]*		Exposure type
Conditioned*	258.1	Suburban
Unconditioned*	28.2	
Total	318.2	NatHERS climate zone
Garage	31.8	56 Mascot (Sydney Airport)



Accredited assessor

Name Ian Fry

Business name Frys Energywise

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Accreditation No. DMN/12/1441

Assessor Accrediting Organisation
Design Matters National

Declaration of interest Declaration completed: no conflicts

NCC Requirements

NCC provisions Volume Two

State/Territory variation Yes

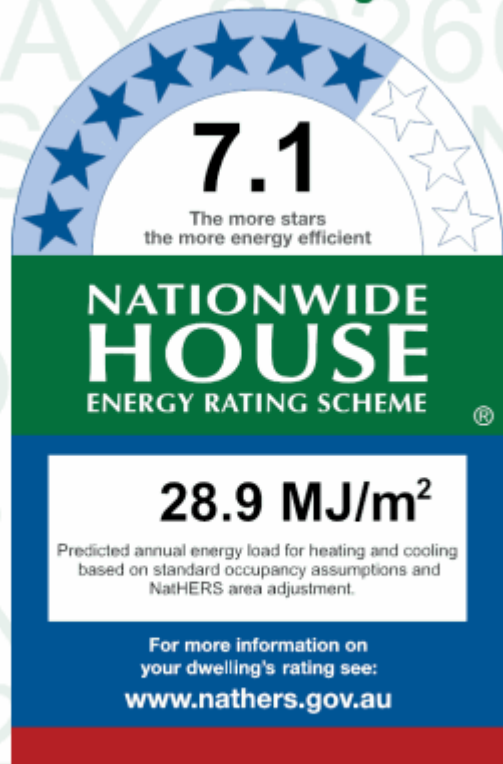
National Construction Code (NCC) requirements

The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J3D3 and J3D15 of NCC Volume One.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

Thermal performance star rating



Thermal performance [MJ/m²]

Limits taken from ABCB Standard 2022
Area adjustment included

	Heating	Cooling
Modelled	19.5	9.3
Load limits	N/A	N/A

Features determining load limits

	CSOG
Floor Type (lowest conditioned area)	No
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

Whole of Home performance rating

No Whole of Home performance rating generated for this certificate.

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=bQrnlIAW. When using either link, ensure you are visiting hstar.com.au



About the ratings

Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

Whole of Home performance rating

NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump, cooking, plug-in loads and onsite renewable energy generation and storage) and models the expected energy value* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

Heating & Cooling Load Limits

Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the *ABCB Standard 2025: NatHERS heating and cooling load limits* for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting Options:

Floor Type:

CSOG – Concrete Slab on Ground
SF – Suspended Floor (or a mixture of CSOG and SF)
NA – Not Applicable

NCC Climate Zone 1 or 2:

Yes
No
NA – Not Applicable

Outdoor Living Area:

Yes
No
NA – Not Applicable

Outdoor Living Area Ceiling Fan:

Yes
No
NA – Not Applicable



Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

Predicted Whole of Home annual impact by appliance

Energy use

No Whole of Home performance assessment conducted for this certificate

Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost

No Whole of Home performance assessment conducted for this certificate



Certificate check

The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.

	Approval Stage		Construction Stage		Occupancy/Other
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	
Genuine certificate check					
Does this Certificate match the one available at the web address or QR code verification link on the front page?		☐	☐	☐	☐
Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?		☐	☐	☐	☐
Thermal performance check					
Windows and glazed doors					
Does the window size, opening type and location shown on the NatHERS-stamped plans or as installed match what is shown in 'Window and glazed door schedule' and 'Roof window schedule' tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the 'Window and glazed door type and performance' and 'Roof window type and performance' tables on this Certificate?			☐	☐	☐
External walls					
Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the External wall type table on this Certificate?	☐	☐	☐	☐	☐
Does the external wall shade (colour) match what is shown in the 'External wall type' table on this Certificate?	☐	☐	☐	☐	☐
Floor					
Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Floor type' table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the 'quantity' and 'type' of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling penetrations' table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the 'Ceiling type' table on this Certificate?	☐	☐	☐	☐	☐
Roof					
Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the 'Roof type' table on this Certificate?	☐	☐	☐	☐	☐
Apartment entrance doors (NCC Class 2 assessments only)					
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 type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".	☐	☐		☐	☐
Heating and cooling load limits*					
Do the load limits settings (shown on page 1) match what is shown	☐	☐	☐	☐	☐



Certificate check

Continued

	Approval Stage		Construction Stage		
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	

Additional NCC requirements for thermal performance (not included in the NatHERS assessment)

Thermal bridging

Does the dwelling meet the NCC requirement for thermal bridging?

☐ ☐ ☐ ☐

Insulation installation method

Has the insulation been installed according to the NCC requirements?

☐ ☐ ☐

Building sealing

Does the dwelling meet the NCC requirements for Building Sealing?

☐ ☐ ☐ ☐

Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)

Appliances

Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the Appliance schedule on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or installed, match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the 'Appliance schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the 'Onsite Renewable Energy schedule' on this Certificate?

☐ ☐ ☐ ☐ ☐

Additional NCC Requirements for Services (not included in the NatHERS assessment)

Does the lighting meet the artificial lighting requirements specified in the NCC?

☐ ☐ ☐ ☐

Does the hot water system meet the additional requirements specified in the NCC?

☐ ☐ ☐ ☐

Provisional values* check

Have provisional values* been used in the assessment and, if so, are they noted in 'Additional notes' table below?

☐ ☐ ☐ ☐

Other NCC requirements

Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.

Additional notes

Where not noted on plans, default selections to floor coverings and external colours have been used in this assessment,

as noted in the NatHERS Technical Notes. Alternative selections past this point can be made to floor coverings and

external colours, without requiring an amended certificate

Room schedule

Room	Zone Type	Area [m ²]
Garage	Garage	31.82
H.OFFICE/ENTRY	Daytime	25.51
HOME CINEMA	Daytime	13.01
STAIRWELL	Daytime	6.55
PDR	Unconditioned	6.18
LDRY	Unconditioned	5.86
BUTLER	Daytime	4.02
WIP	Daytime	2.99
Kitchen/Living	Kitchen/Living	45.38
BATH	Unconditioned	6.38
ENT. WING	Living	30.06
LEISURE	Living	35.02
MASTER SUITE	Bedroom	20.94
ENS	Nighttime	7.1
HIS/HER	Nighttime	7.19
IT NOOK	Daytime	5.58
WIL	Daytime	2.28
BATHROOM	Unconditioned	9.82
BED 2	Bedroom	12.69
WIR BED 2	Nighttime	3.31
BED 3	Bedroom	12.82
WIR BED 3	Nighttime	2.82
BED 4	Bedroom	11.84
BED 5	Bedroom	15.27

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
TND-002-300	Aluminium Awning Window DG 4PbAS2/12Ar/4PbG	3.0	0.41	0.39	0.43
TND-001-300	Aluminium Sliding Window DG 4PbAS2/12Ar/4PbG	3.0	0.42	0.40	0.45
TND-001-001	Aluminium Sliding Window SG 3Clr	6.5	0.73	0.70	0.77
TND-003-001	Aluminium Fixed Window DG 5clr/10ar/5PbAS2	2.2	0.52	0.49	0.54
TND-017-300	Aluminium Sliding Door DG 4PbAS2-10Ar-4PbG	2.6	0.45	0.42	0.47
TND-002-003	Aluminium Awning Window SG 4EA	5.3	0.48	0.46	0.50
TND-024-013	Aluminium Fixed Window SG 6ET	4.4	0.63	0.59	0.66

Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
H.OFFICE/ENTRY	TND-002-300-002	W01	2000	1800	Awning	90	N	No
HOME CINEMA	TND-001-300-002	W02	600	3000	Sliding	45	W	No
PDR	TND-001-001-001	W03	600	800	Sliding	45	W	No
BUTLER	TND-003-001-001	W09	700	1600	Fixed	00	E	No
Kitchen/Living	TND-003-001-001	W08	700	2700	Fixed	00	E	No
Kitchen/Living	TND-001-300-002	W04	1800	800	Sliding	45	W	No
Kitchen/Living	TND-001-300-002	W05	1800	800	Sliding	45	W	No
BATH	TND-001-001-001	W06	600	800	Sliding	45	W	No
ENT. WING	TND-001-300-002	W07	2000	2200	Sliding	45	S	No
ENT. WING	TND-017-300-004	D1-ENT. WING	2400	2700	Sliding	60	S	No
LEISURE	TND-003-001-001	W19	1200	1200	Fixed	00	E	No
LEISURE	TND-001-300-002	W20	600	2700	Sliding	45	E	No
MASTER SUITE	TND-002-003-001	W12	2000	1800	Awning	10	N	No
MASTER SUITE	TND-024-013-001	W11	2000	1200	Fixed	00	N	No
ENS	TND-001-001-001	W13	1200	700	Sliding	45	W	No
IT NOOK	TND-001-300-002	W14	1200	800	Sliding	45	W	No
BATHROOM	TND-001-001-001	W15	1200	1600	Sliding	45	W	No



Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
BED 2	TND-002-003-001	W16	800	2400	Awning	10	S	No
BED 3	TND-002-003-001	W17	800	2400	Awning	10	S	No
BED 4	TND-002-003-001	W18	600	2400	Awning	10	E	No
BED 5	TND-002-003-001	W21	2000	3000	Awning	10	N	No

Roof window* type and performance value

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	Skylight shaft reflectance
No Data Available		

Skylight* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m ²]	Orientation	Outdoor shade	Diffuser
No Data Available							

External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
Garage	2400	4810	90	N
H.OFFICE/ENTRY	2340	1200	90	N



Location	Height [mm]	Width [mm]	Opening %	Orientation
LDRY	2340	920	90	W
BATH	2340	920	90	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Timber Stud Frame Brick Veneer	0.50		No insulation	No
EW-2	Single Skin Brick	0.50		No insulation	No
EW-3	Timber Stud Frame Brick Veneer	0.50		Bulk Insulation, Air Gap R2.5	No
EW-4	Fibro Timber Stud Frame Panel Direct Fix	0.50		Bulk Insulation 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-1	2912	1000	S	600	No
Garage	EW-2	2912	5695	N	100	No
Garage	EW-1	2912	5700	E	600	No
H.OFFICE/ENTRY	EW-3	2740	3195	W	100	No
H.OFFICE/ENTRY	EW-3	2740	2600	N	100	Yes
H.OFFICE/ENTRY	EW-3	2740	900	E	2200	No
H.OFFICE/ENTRY	EW-3	2740	2100	N	1600	No
H.OFFICE/ENTRY	EW-3	2740	600	E	100	No
HOME CINEMA	EW-3	2740	4190	W	100	No
STAIRWELL	EW-3	2740	2295	E	100	No
PDR	EW-3	2740	2090	W	100	No
LDRY	EW-3	2740	1990	W	100	No
BUTLER	EW-3	2740	1990	E	100	No
Kitchen/Living	EW-3	2740	4390	E	100	No
Kitchen/Living	EW-3	2740	4390	W	100	No
BATH	EW-3	2740	3195	S	5800	No
BATH	EW-3	2740	2095	W	700	No
ENT. WING	EW-3	3505	4895	E	600	No



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
ENT. WING	EW-3	3172	2500	S	600	No
ENT. WING	EW-3	3173	3700	S	3000	Yes
ENT. WING	EW-3	3505	2800	W	3900	No
LEISURE	EW-3	2600	5590	E	600	No
MASTER SUITE	EW-3	2600	4700	N	100	Yes
MASTER SUITE	EW-3	2601	600	E	5300	No
MASTER SUITE	EW-3	2600	3795	W	600	No
ENS	EW-3	2600	2290	W	600	No
HIS/HER	EW-3	2600	1590	W	600	No
IT NOOK	EW-3	2600	1790	W	600	No
BATHROOM	EW-3	2600	3190	W	600	No
BED 2	EW-4	2600	3395	S	600	No
BED 2	EW-3	2600	3695	W	600	No
WIR BED 2	EW-4	2600	1390	S	600	No
BED 3	EW-4	2600	3395	S	600	No
BED 3	EW-3	2600	3695	E	600	No
WIR BED 3	EW-4	2600	1190	S	600	No
BED 4	EW-3	2600	3190	E	600	No
BED 5	EW-4	2600	4695	N	700	No
BED 5	EW-4	2601	900	E	600	No
BED 5	EW-3	2600	2395	E	600	No

Internal wall type

Wall ID	Wall type	Area [m ²]	Bulk insulation [R-value]
IW-001	Timber Stud Frame, Direct Fix Plasterboard	102.02	Bulk Insulation, No Air Gap R2.5
IW-002	Timber Stud Frame, Direct Fix Plasterboard	225.15	No insulation

Floor type

Location	Construction	Area [m ²]	Sub-floor ventilation	Insulation [R-value]	Slab edge insulation [R-value]	Covering
Garage	Concrete Slab on Ground 100mm	31.76	None	No Insulation		Bare



Location	Construction	Area [m ²]	Sub-floor ventilation	Insulation [R-value]	Slab edge insulation [R-value]	Covering
H.OFFICE/ENTRY	Concrete Slab on Ground 100mm	25.51	None	No Insulation		Ceramic Tiles 8mm
HOME CINEMA	Concrete Slab on Ground 100mm	13.01	None	No Insulation		Carpet+Rubber Underlay 18mm
STAIRWELL	Suspended Concrete Slab 150mm	6.55	Very Open	Bulk Insulation in Contact with Floor R2.5		Cork Tiles or Parquetry 8mm
PDR	Suspended Concrete Slab 150mm	6.18	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
LDRY	Suspended Concrete Slab 150mm	5.86	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
BUTLER	Suspended Concrete Slab 150mm	4.02	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
WIP	Suspended Concrete Slab 150mm	2.99	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	45.38	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
BATH	Suspended Concrete Slab 150mm	6.38	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
ENT. WING	Suspended Concrete Slab 150mm	30.06	Very Open	Bulk Insulation in Contact with Floor R2.5		Ceramic Tiles 8mm
LEISURE / Garage	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	8.41		Bulk Insulation R2.5		Cork Tiles or Parquetry 8mm
LEISURE / H.OFFICE/ENTRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.00		No Insulation		Cork Tiles or Parquetry 8mm
LEISURE / STAIRWELL	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.00		No Insulation		Cork Tiles or Parquetry 8mm
LEISURE / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.82		No Insulation		Cork Tiles or Parquetry 8mm
MASTER SUITE / H.OFFICE/ENTRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 42mm	17.12		No Insulation		Cork Tiles or Parquetry 8mm
MASTER SUITE / HOME CINEMA	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 42mm	1.55		No Insulation		Cork Tiles or Parquetry 8mm



Location	Construction	Area [m ²]	Sub-floor ventilation	Insulation [R-value]	Slab edge insulation [R-value]	Covering
MASTER SUITE	Suspended 35mm Fibre-Reinforced Concrete Floor Timber Frame 42mm	1.52	Totally Open	Bulk Insulation in Contact with Floor R2.5		Cork Tiles or Parquetry 8mm
ENS / HOME CINEMA	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	7.10		No Insulation		Ceramic Tiles 8mm
HIS/HER / H.OFFICE/ENTRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	2.07		No Insulation		Cork Tiles or Parquetry 8mm
HIS/HER / HOME CINEMA	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	3.83		No Insulation		Cork Tiles or Parquetry 8mm
HIS/HER / PDR	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.63		No Insulation		Cork Tiles or Parquetry 8mm
IT NOOK / H.OFFICE/ENTRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.36		No Insulation		Cork Tiles or Parquetry 8mm
IT NOOK / PDR	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	4.86		No Insulation		Cork Tiles or Parquetry 8mm
WIL / PDR	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.26		No Insulation		Cork Tiles or Parquetry 8mm
WIL / LDRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.72		No Insulation		Cork Tiles or Parquetry 8mm
WIL / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.39		No Insulation		Cork Tiles or Parquetry 8mm
BATHROOM / LDRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	4.72		No Insulation		Ceramic Tiles 8mm
BATHROOM / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	4.41		No Insulation		Ceramic Tiles 8mm
BED 2 / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	10.99		No Insulation		Cork Tiles or Parquetry 8mm
BED 2 / BATH	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	1.23		No Insulation		Cork Tiles or Parquetry 8mm
WIR BED 2 / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	2.61		No Insulation		Cork Tiles or Parquetry 8mm
WIR BED 2 / ENT. WING	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.51		No Insulation		Cork Tiles or Parquetry 8mm



Location	Construction	Area [m ²]	Sub-floor ventilation	Insulation [R-value]	Slab edge insulation [R-value]	Covering
BED 3 / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	11.12		No Insulation		Cork Tiles or Parquetry 8mm
BED 3 / ENT. WING	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	1.46		No Insulation		Cork Tiles or Parquetry 8mm
WIR BED 3 / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	2.22		No Insulation		Cork Tiles or Parquetry 8mm
WIR BED 3 / ENT. WING	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	0.41		No Insulation		Cork Tiles or Parquetry 8mm
BED 4 / BUTLER	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	3.88		No Insulation		Cork Tiles or Parquetry 8mm
BED 4 / WIP	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	2.88		No Insulation		Cork Tiles or Parquetry 8mm
BED 4 / Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 100mm	4.44		No Insulation		Cork Tiles or Parquetry 8mm
BED 5 / Garage	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard 42mm	11.04		Bulk Insulation R2.5		Cork Tiles or Parquetry 8mm
BED 5	Suspended 35mm Fibre-Reinforced Concrete Floor Timber Frame 42mm	3.99	Totally Open	Bulk Insulation in Contact with Floor R2.5		Cork Tiles or Parquetry 8mm

Ceiling type

Location	Construction material/type	Bulk insulation [R-value] (may include edge batt values)
Garage	Plasterboard on Timber	No insulation
Garage	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	Bulk Insulation R2.5
H.OFFICE/ENTRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
HOME CINEMA	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
STAIRWELL	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
PDR	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
LDRY	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
BUTLER	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
WIP	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
Kitchen/Living	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation



Location	Construction material/type	Bulk insulation [R-value] (may include edge batt values)
BATH	Plasterboard on Timber	Bulk Insulation R6
BATH	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
ENT. WING	Plasterboard on Timber	Bulk Insulation R6
ENT. WING	Plasterboard on Timber	Bulk Insulation R2.5
ENT. WING	35mm Fibre-Reinforced Concrete Timber Frame Above Plasterboard	No Insulation
LEISURE	Plasterboard on Timber	Bulk Insulation R6
LEISURE	Plasterboard on Timber	Bulk Insulation R2.5
MASTER SUITE	Plasterboard on Timber	Bulk Insulation R6
MASTER SUITE	Plasterboard on Timber	Bulk Insulation R2.5
MASTER SUITE	Plasterboard on Timber	Bulk Insulation R2.5
ENS	Plasterboard on Timber	Bulk Insulation R6
ENS	Plasterboard on Timber	Bulk Insulation R2.5
HIS/HER	Plasterboard on Timber	Bulk Insulation R6
HIS/HER	Plasterboard on Timber	Bulk Insulation R2.5
IT NOOK	Plasterboard on Timber	Bulk Insulation R6
IT NOOK	Plasterboard on Timber	Bulk Insulation R2.5
WIL	Plasterboard on Timber	Bulk Insulation R6
BATHROOM	Plasterboard on Timber	Bulk Insulation R6
BATHROOM	Plasterboard on Timber	Bulk Insulation R2.5
BED 2	Plasterboard on Timber	Bulk Insulation R6
BED 2	Plasterboard on Timber	Bulk Insulation R2.5
WIR BED 2	Plasterboard on Timber	Bulk Insulation R6
WIR BED 2	Plasterboard on Timber	Bulk Insulation R2.5
BED 3	Plasterboard on Timber	Bulk Insulation R6
BED 3	Plasterboard on Timber	Bulk Insulation R2.5
WIR BED 3	Plasterboard on Timber	Bulk Insulation R6
WIR BED 3	Plasterboard on Timber	Bulk Insulation R2.5
BED 4	Plasterboard on Timber	Bulk Insulation R6
BED 4	Plasterboard on Timber	Bulk Insulation R2.5
BED 5	Plasterboard on Timber	Bulk Insulation R6
BED 5	Plasterboard on Timber	Bulk Insulation R2.5



Ceiling penetrations*

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
PDR	1	Exhaust Fans	300	Sealed
LDRY	1	Exhaust Fans	300	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
BATH	1	Exhaust Fans	300	Sealed
ENS	1	Exhaust Fans	300	Sealed
BATHROOM	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter [mm]
No Data Available		

Roof type

Construction	Insulation [R-value]	Reflective wrap* [yes/no]	Solar absorptance	Roof shade [colour]
Corrugated Iron Timber Frame	Bulk, Reflective Side Down, No Air Gap Above R1.3		0.50	Medium

Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	Steel thickness [BMT,mm]	Thermal break [R-value]
No Data Available				

Appliance schedule

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Cooling system

Appliance/ system type	Location	Fuel type	Performance	Recommended capacity
No Data Available				

Heating system

Appliance/ system type	Location	Fuel type	Performance	Recommended capacity
No Data Available				



Hot water system

Appliance/ system type	Fuel type	Performance	Hot water CER* zone
No Data Available			

Lighting

Lighting power density [W/m ²] (default assumption 5W/m ²)
No Data Available

Cooking

Cooktop type	Oven type
No Data Available	

Pool/spa equipment

Appliance/ system type	Volume [Litres]	Star rating	Recommended pump capacity [W]
No Data Available			

Explanatory notes

About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the heating and cooling energy loads and energy value* of the whole home. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy generation and storage to estimate the home's energy value*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary.

Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

Accredited assessors

For quality assured NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and

are not quality assured.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in the certificate is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings 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, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

Glossary

AFRC	Australian Fenestration Rating Council
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, range hoods, 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.
CER	Clean Energy Regulator
COP	Coefficient of performance
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.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your home's rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
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	see exposure categories below.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
Modelled airtightness	the air permeability rate determined by software inputs when generating this rating. This is for informational purposes only and not suitable for assessing compliance.
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 .
Net zero home	a home that achieves a net zero energy value*.
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
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
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 features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
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.
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.
STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER). NatHERS uses a 10-year STC.
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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 attached to the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
Window shading device	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)