Nationwide House Energy Rating Scheme®
NatHERS® Certificate No. 0011845955

Generated on 08 Apr 2025 using BERS Pro v5.2.4 (3.23)

Property

Address	24 Ogilvy Road, CLONTARF , NSW , 2093
Lot/DP	Lot 2 DP 210657
NCC class*	1a
Floor/all Floors	G of 3 floors
Type	New Home

Plans

Main plan	2266
Prepared by	Archisoul Architects

Construction and environment

Assessed floor area [m2]*	
Conditioned*	206.6
Unconditioned*	27.5
Total	276.5
Garage	42.5

Exposure type
Suburban

NatHERS climate zone
56 Mascot (Sydney Airport)

Accredited assessor

Name	Terry Chapman
Business name	CHAPMAN ENVIRONMENTAL SERVICES PTY LTD
Email	info@cesenergy.com.au
Phone	1300 004 914
Accreditation No.	20920
Assessor Accrediting Organisation	ABSA
Declaration of interest	Declaration completed: no conflicts

NCC Requirements

NCC provisions	Volume Two
Strate/Territory variation	Yes

National Construction Code (NCC) requirements

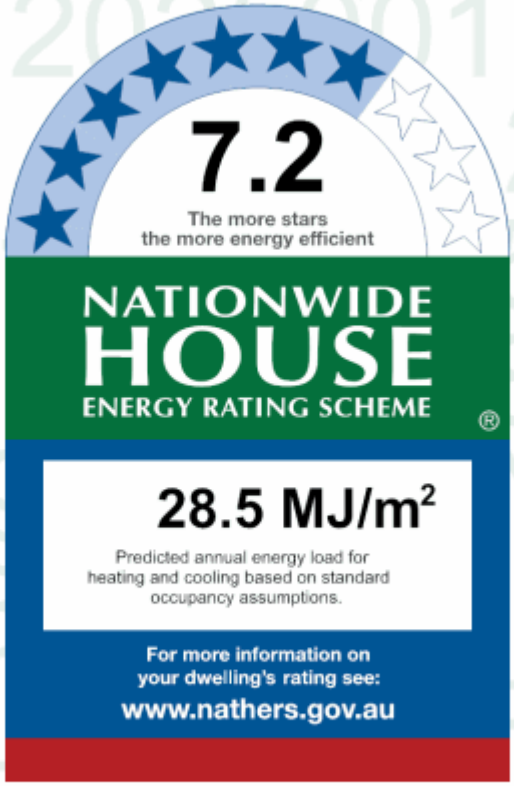
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two.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

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

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

	Heating	Cooling
Modelled	18.6	9.9
Load limits	N/A	N/A

Features determining load limits

Floor Type (lowest conditioned area)	SF
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=UTfgPBgIW . 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 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 2022: 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

* Refer to glossary.

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		
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
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	☐	☐	☐	☐	☐

* Refer to glossary.

Certificate check

Continued

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

* Refer to glossary.

Room *schedule*

Room	Zone Type	Area [m^2]
Garage 1	Garage	42.46
Lower Entry	Daytime	8.53
Lift LG	Daytime	2.26
Lift G	Daytime	2.42
Guest Bedroom	Bedroom	19.95
Bedroom 2	Bedroom	18.59
Bedroom 3	Bedroom	17.32
Hall / Library	Living	29.18
Ground Bath	Unconditioned	11.43
Lift 1	Daytime	2.47
Living 1	Living	64.17
Kitchen/Living1	Kitchen/Living	24.54
W C	Unconditioned	2.41
Laundry	Unconditioned	6.65
Master bed	Bedroom	20.7
Master WIR	Nighttime	8.31
Master Ens	Unconditioned	6.99

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
ATB-004-03 B	Al Thermally Broken B DG Air Fill High Solar Ga	3.1	0.49	0.47	0.51
ATB-003-03 B	Al Thermally Broken A DG Air Fill High Solar Ga	3.1	0.39	0.37	0.41

Custom windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
AWS-071-009	Aluminium Fixed Window DG LB Clr 4/12/4	2.7	0.51	0.48	0.53

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Garage 1	ATB-004-03 B	W0.2	1180	300	Fixed	00	SE	No
Lower Entry	ATB-003-03 B	D.02	2700	900	Casement	90	S	No
Guest Bedroom	ATB-004-03 B	W1.7	2400	1200	Tilt 'n' Turn	90	W	No
Guest Bedroom	ATB-004-03 B	W1.6	2400	1200	Fixed	00	N	No
Guest Bedroom	ATB-004-03 B	W1.5	2400	2700	Tilt 'n' Turn	30	E	No
Bedroom 2	ATB-004-03 B	D1.1	2400	3100	Sliding	45	S	No
Bedroom 2	ATB-004-03 B	W1.2	2100	600	Fixed	00	W	No
Bedroom 3	ATB-003-03 B	W1.4	1500	900	Tilt 'n' Turn	10	E	No
Bedroom 3	ATB-003-03 B	D1.2	2400	900	Casement	90	S	No
Bedroom 3	ATB-003-03 B	W1.3	1500	500	Tilt 'n' Turn	90	S	No
Hall / Library	ATB-004-03 B	D1.3	2400	2700	Sliding	45	E	No
Hall / Library	ATB-004-03 B	W1.1	2800	900	Fixed	00	S	No
Hall / Library	ATB-004-03 B	W1.10	2100	750	Fixed	00	W	No
Hall / Library	ATB-003-03 B	W1.9	2100	750	Tilt 'n' Turn	10	W	No
Ground Bath	ATB-003-03 B	W1.8	1500	750	Tilt 'n' Turn	10	W	No
Living 1	ATB-003-03 B	W2.1	2100	1200	Tilt 'n' Turn	10	E	No
Living 1	ATB-003-03 B	W2.2	2100	1200	Tilt 'n' Turn	10	E	No
Living 1	ATB-003-03 B	W2.3	2100	1200	Tilt 'n' Turn	10	E	No
Living 1	ATB-004-03 B	D2.1	2700	5350	Sliding	45	S	No
Living 1	ATB-003-03 B	W2.14	2100	750	Tilt 'n' Turn	90	W	No
Living 1	AWS-071-009-001	W3.1	900	6330	Fixed	00	N	No
Kitchen/Living1	ATB-003-03 B	W2.12	900	750	Tilt 'n' Turn	90	W	No
Kitchen/Living1	ATB-003-03 B	W2.4	2100	1200	Tilt 'n' Turn	10	E	No
Kitchen/Living1	ATB-003-03 B	W2.5	2100	1200	Tilt 'n' Turn	10	E	No
W C	ATB-003-03 B	W2.13	900	750	Tilt 'n' Turn	90	W	No
Laundry	ATB-003-03 B	W2.11	1200	600	Tilt 'n' Turn	90	N	No
Laundry	ATB-003-03 B	D2.3	2400	900	Casement	90	N	No
Master bed	ATB-003-03 B	W2.7	1800	600	Tilt 'n' Turn	10	E	No
Master bed	ATB-003-03 B	W2.8	1800	600	Tilt 'n' Turn	10	E	No

* Refer to glossary.

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Master bed	ATB-004-03 B	W2.6	1800	1800	Fixed	00	S	No
Master bed	ATB-004-03 B	D2.2	2400	3000	Sliding	45	N	No
Master WIR	ATB-003-03 B	W2.9	900	750	Tilt 'n' Turn	90	N	No
Master Ens	ATB-003-03 B	W2.10	900	750	Tilt 'n' Turn	90	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 1	2400	3400	90	S

* Refer to glossary.

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Concrete Block	0.30		No insulation	No
EW-2	Concrete Block	0.50		No insulation	No
EW-3	Concrete Block, Lined Timber Stud Frame	0.30		Foil, Anti-glare one side + Bulk Insulation R2.5	No
EW-4	Concrete Block	0.50		Foil, Anti-glare one side + Bulk Insulation R2.5	No
EW-5	Concrete Block, Lined Timber Stud Frame	0.50		Foil, Anti-glare one side + Bulk Insulation R2.5	No
EW-6	Reverse Timber Stud Frame Brick Veneer	0.50		Foil, Anti-glare one side + 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 1	EW-1	2357	3900	E	0	No
Garage 1	EW-2	343	3900	E	925	No
Garage 1	EW-2	2357	5200	SE	0	No
Garage 1	EW-2	343	5200	SE	35.3553390593274	No
Garage 1	EW-1	2700	3847	S	1924	No
Garage 1	EW-1	2700	700	W	1400	No
Garage 1	EW-1	2700	1595	W	0	No
Garage 1	EW-1	2700	7200	N	0	No
Lower Entry	EW-3	2700	1395	S	2100	No
Lower Entry	EW-3	2357	4195	W	0	No
Lower Entry	EW-4	343	4195	W	0	No
Lift LG	EW-3	2700	1590	W	0	No
Lift G	EW-5	2800	1590	W	0	No
Guest Bedroom	EW-5	2800	4295	W	500	No
Guest Bedroom	EW-5	2800	4700	N	5300	No
Guest Bedroom	EW-5	2800	4295	E	2300	No
Bedroom 2	EW-5	2800	3795	E	975	No
Bedroom 2	EW-5	2800	3400	S	1000	No

* Refer to glossary.

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Bedroom 2	EW-5	2800	1800	W	1400	No
Bedroom 3	EW-5	2800	1800	E	0	No
Bedroom 3	EW-5	2800	3940	SE	0	No
Bedroom 3	EW-5	2800	1800	S	2100	No
Bedroom 3	EW-5	2800	3000	N	14800	No
Hall / Library	EW-5	2800	5190	E	2300	No
Hall / Library	EW-5	2800	1395	S	1100	No
Hall / Library	EW-5	2800	4195	W	0	No
Hall / Library	EW-5	2800	1595	W	0	No
Hall / Library	EW-5	2800	500	N	14800	No
Hall / Library	EW-5	2800	2795	W	500	No
Ground Bath	EW-5	2800	2390	W	500	No
Lift 1	EW-6	2700	300	E	5850	No
Lift 1	EW-6	2700	1600	S	4200	No
Lift 1	EW-6	2800	1595	W	0	No
Living 1	EW-6	3200	9295	E	0	No
Living 1	EW-6	2700	5895	S	4500	No
Living 1	EW-6	2900	1595	W	0	No
Living 1	EW-6	3000	500	N	6400	No
Living 1	EW-6	3800	6395	W	0	No
Kitchen/Living1	EW-6	2700	400	S	6400	No
Kitchen/Living1	EW-6	2700	1595	W	0	No
Kitchen/Living1	EW-6	2700	1090	W	0	No
Kitchen/Living1	EW-6	2700	3190	E	0	No
W C	EW-6	2700	1690	W	0	No
Laundry	EW-6	2700	3900	W	0	No
Laundry	EW-6	2700	1795	N	2100	No
Master bed	EW-6	2700	5100	E	0	No
Master bed	EW-6	2700	2100	S	0	No
Master bed	EW-6	2700	4095	N	2100	No
Master WIR	EW-6	2700	1690	N	2100	No

* Refer to glossary.

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Master Ens	EW-6	2700	1890	N	2100	No

Internal wall *type*

Wall ID	Wall type	Area [m^2]	Bulk insulation
IW-001	Timber Stud Frame, Direct Fix Plasterboard	94.03	Bulk Insulation, No Air Gap R2.5
IW-002	Timber Stud Frame, Direct Fix Plasterboard	137.01	No insulation

Floor *type*

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage 1	Concrete Slab on Ground 100mm	42.40	None	No Insulation	Bare
Lower Entry	Concrete Slab on Ground 100mm	8.53	None	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Lift LG	Concrete Slab on Ground 100mm	2.26	None	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Lift G / Lift LG	Concrete Timber Framed Above Plasterboard 100mm	0.00		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Guest Bedroom	Concrete Slab on Ground 100mm	19.95	None	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Bedroom 2 / Garage 1	Concrete Timber Framed Above Plasterboard 150mm	15.85		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Bedroom 2	Suspended Concrete Slab 150mm	2.38	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Bedroom 3 / Garage 1	Concrete Timber Framed Above Plasterboard 150mm	14.31		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm

* Refer to glossary.

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 3	Suspended Concrete Slab 150mm	2.81	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Hall / Library / Garage 1	Concrete Timber Framed Above Plasterboard 100mm	4.35		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Hall / Library / Lower Entry	Concrete Timber Framed Above Plasterboard 100mm	4.52		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Hall / Library	Concrete Slab on Ground 100mm	11.08	None	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Ground Bath	Concrete Slab on Ground 100mm	11.43	None	Bulk Insulation in Contact with Floor R3.4	Ceramic Tiles 8mm
Lift 1 / Lift G	Concrete Timber Framed Above Plasterboard 150mm	0.00		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1 / Guest Bedroom	Concrete Timber Framed Above Plasterboard 150mm	1.84		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1 / Bedroom 2	Concrete Timber Framed Above Plasterboard 150mm	0.00		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1 / Bedroom 3	Concrete Timber Framed Above Plasterboard 150mm	5.32		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1 / Hall / Library	Concrete Timber Framed Above Plasterboard 150mm	17.67		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1 / Ground Bath	Concrete Timber Framed Above Plasterboard 150mm	8.44		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm
Living 1	Suspended Concrete Slab 150mm	14.42	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Kitchen/Living1 / Guest Bedroom	Concrete Timber Framed Above Plasterboard 150mm	11.91		Bulk Insulation R3.4	Cork Tiles or Parquetry 8mm

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living1	Suspended Concrete Slab 150mm	11.77	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
W C / Guest Bedroom	Concrete Timber Framed Above Plasterboard 150mm	1.49		Bulk Insulation R3.4	Ceramic Tiles 8mm
W C	Suspended Concrete Slab 150mm	0.61	Totally Open	Bulk Insulation in Contact with Floor R3.4	Ceramic Tiles 8mm
Laundry	Suspended Concrete Slab 150mm	6.65	Totally Open	Bulk Insulation in Contact with Floor R3.4	Ceramic Tiles 8mm
Master bed	Suspended Concrete Slab 150mm	20.70	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Master WIR	Suspended Concrete Slab 150mm	8.31	Totally Open	Bulk Insulation in Contact with Floor R3.4	Cork Tiles or Parquetry 8mm
Master Ens	Suspended Concrete Slab 150mm	6.99	Totally Open	Bulk Insulation in Contact with Floor R3.4	Ceramic Tiles 8mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Garage 1	Concrete	No insulation	
Garage 1	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Lower Entry	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Lift LG	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Lift G	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Guest Bedroom	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Bedroom 2	Concrete, Plasterboard with Timber Frame	Bulk Insulation R3.5	

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Bedroom 2	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Bedroom 3	Concrete, Plasterboard with Timber Frame	Bulk Insulation R3.5	
Bedroom 3	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Hall / Library	Concrete, Plasterboard with Timber Frame	Bulk Insulation R3.5	
Hall / Library	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Ground Bath	Concrete Timber Framed Above Plasterboard	Bulk Insulation R3.4	
Lift 1	Plasterboard on Timber	Bulk Insulation R6	
Living 1	Plasterboard on Timber	Bulk Insulation R6	
Kitchen/Living1	Plasterboard on Timber	Bulk Insulation R6	
W C	Plasterboard on Timber	Bulk Insulation R6	
Laundry	Plasterboard on Timber	Bulk Insulation R6	
Master bed	Plasterboard on Timber	Bulk Insulation R6	
Master WIR	Plasterboard on Timber	Bulk Insulation R6	
Master Ens	Plasterboard on Timber	Bulk Insulation R6	

Ceiling *penetrations**

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
No Data Available				

Ceiling *fans*

Location	Quantity	Diameter [mm]
Living 1	2	1400

Roof *type*

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Waterproofing Membrane	No Insulation, Only an Air Gap	0.50	Medium
Corrugated Iron Timber Frame	No Insulation, Only an Air Gap	0.50	Medium
Waterproofing Membrane	No Insulation, Only an Air Gap	0.85	Dark
Corrugated Iron Timber Frame	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.85	Dark

* Refer to glossary.

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)

Note: A flat assumption of 5W/m^2 is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Heating system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Hot water system

Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC	Zone 3 Substitution tolerance ranges		Assessed daily load [litres]
					lower limit	upper limit	
No Data Available							

Pool/spa equipment

Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

Onsite Renewable Energy *Schedule*

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

Battery *Schedule*

System Type	Size [Battery Storage Capacity]
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 homes 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.
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 homes 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.
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)
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 in 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)

* Refer to glossary.