Nationwide House Energy Rating Scheme® NatHERS® Certificate No. 0012112215

Generated on 12 Aug 2025 using BERS Pro v5.2.5 (3.23)

Property

Address	6 Summit Avenue, DEE WHY , NSW , 2099
Lot/DP	Lot 15 DP 12667
NCC class*	1a
Floor/all Floors	G of 3 floors
Type	New Home

Plans

Main plan	n/a
Prepared by	n/a

Construction and environment

Assessed floor area [m2]*	
Conditioned*	284.3
Unconditioned*	71.2
Total	484.8
Garage	129.3

Exposure type
Suburban

NatHERS climate zone
56 Mascot (Sydney Airport)

Accredited assessor

Name	Zoran Cvetkovski
Business name	Sustainability-Z
Email	sustainability-z@outlook.com
Phone	0414273176
Accreditation No.	DMN/13/1641
Assessor Accrediting Organisation	
Design Matters National	
Declaration of interest	Declaration not completed

NCC Requirements

NCC provisions	Volume Two
Strate/Territory variation	Yes

National Construction Code (NCC) requirements

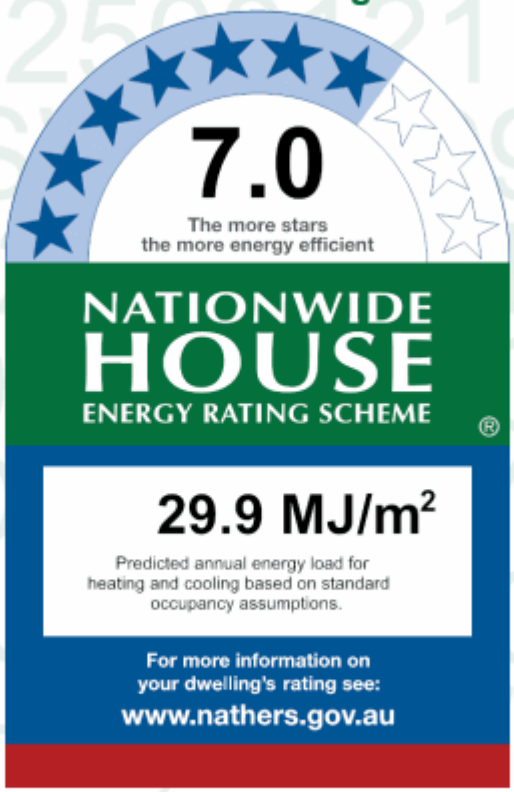
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. 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	17.4	12.4
Load limits	N/A	N/A

Features determining load limits

Floor Type (lowest conditioned area)	CSOG
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=FcbQoyFSV .
When using either link, ensure you are visiting hstar.com.au

* Refer to glossary

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

Greenhouse gas emissions

Cost

* 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

Rated with provisional values for downlights. All downlights: IC-F /IC-4/ (insulation covered/

including the control gears/) rated as per AS/NZS standard 60598 and IP (sealed) rated as per BS EN

60529:1992, European IEC 60509:1989.

* Refer to glossary.

The Basement areas, comprising Stairs, Plant Room, and Storage, are classified as unconditioned zones. This categorization is based on their non-primary status and the substantial energy required to achieve the desired energy balance.

Rated with ceiling fans (1200mm) as shown on the plans.

Rated with provisional floor covering/6.5 as per the NatHERS Technical Note 2023.

Rated with medium-coloured walls/7.2 as per the NatHERS Technical Note 2023.

Rated with medium-coloured roof/9.2 as per the NatHERS Technical Note 2023.

Internal window W35 is rated as a concrete wall (as a window with equivalent UV of 5).

Rated with Dowell windows.

All obscure windows are rated as custom windows/8.6 as per the NatHERS Technical Note 2023.

Because of the different shading projections W16 is split into two parts.

The skylights are rated with a rectangular shape with the same surface area.

All coffer ceiling verticals and walls against the roof-space, to be insulated, with the same insulation as the ceiling insulation.

Where the roof is extended over an open area such as a deck or carport: A barrier to be installed within the roof space to separate the space above the zoned part of the house and the space above the open veranda.

Room *schedule*

Room	Zone Type	Area [m^2]
Garage-BSMNT	Garage	129.3
Stairs/Lift-BSMNT	Unconditioned	20.97
Plant Room-BSMNT	Unconditioned	6.15
Storage-BSMNT	Unconditioned	26.76
Guest Bed-GF	Bedroom	16.15
Bath-GF	Unconditioned	6.53
Hall to G.Bed-GF	Daytime	2.24
Home Office-GF	Daytime	17.76
Laundry-GF	Unconditioned	10.82
WIP-GF	Daytime	11.34
Ktch/Dn/Fam/Str-GF	Kitchen/Living	105.01
Entry-GF	Daytime	9.39
Master Bed-FF	Bedroom	17.55

Room	Zone Type	Area [m^2]
WIR/M.Bed-FF	Nighttime	14.06
ENS/M.Bed-FF	Nighttime	8
Bed 1-FF	Bedroom	15.35
ENS/Bed 1-FF	Nighttime	3.37
Powder-FF	Daytime	3.66
Retreat-FF	Living	21.04
Void/Family-FF	Unconditioned	24.11
Bed 2-FF	Bedroom	15
WIR/Bed 2-FF	Nighttime	4.53
ENS/Bed 2-FF	Nighttime	3.49
Hall to Retreat-FF	Daytime	4.71
Stairs/Lift/Hall-FF	Daytime	38.7

Window and glazed door *type and performance*

Default windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
ALM-002-01 A	Aluminium B SG Clear	6.7	0.70	0.67	0.74

Custom windows*

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
DOW-023-005	Thermally Broken Aluminium Fixed Window DG 4SolTNtl/12Ar/4ET	1.7	0.37	0.35	0.39
BRZ-011-001	Aluminium Louvre Window DG 6Clr(Cl_6)/101/6Clr(CL_6)	3.4	0.47	0.44	0.49
DOW-022-005	Thermally Broken Aluminium Sliding Window DG 4SolTNtl/12Ar/4ET	2.0	0.37	0.35	0.39
DOW-021-006	Thermally Broken Aluminium Awning Window DG 4SolTNtl/12Ar/4ET	1.9	0.33	0.31	0.34
DOW-025-004	Thermally Broken Aluminium Sliding Door DG 5ET/12Ar/5ET	1.9	0.49	0.47	0.52

Window and glazed door *schedule*

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Garage-BSMNT	ALM-002-01 A	W02	1200	3500	Fixed	00	W	No

* Refer to glossary.

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Garage-BSMNT	ALM-002-01 A	W01	1200	1050	Fixed	00	N	No
Guest Bed-GF	DOW-023-005-001	W16	3000	1500	Fixed	00	S	No
Guest Bed-GF	DOW-023-005-001	W14	3000	1800	Fixed	00	S	No
Guest Bed-GF	BRZ-011-001-001	W15	3000	900	Louvre	90	S	No
Guest Bed-GF	DOW-023-005-001	W17	3000	1000	Fixed	00	E	No
Bath-GF	DOW-022-005-001	W13	900	2400	Sliding	45	W	No
Home Office-GF	DOW-023-005-001	W06	2400	1500	Fixed	00	E	No
Home Office-GF	DOW-023-005-001	W03	2400	1400	Fixed	00	S	No
Home Office-GF	DOW-023-005-001	W05	2400	2250	Fixed	00	S	No
Home Office-GF	BRZ-011-001-001	W04	2400	1200	Louvre	90	S	No
Ktch/Dn/Fam/Str-GF	DOW-023-005-001	W12 GF	3300	3500	Fixed	00	W	No
Ktch/Dn/Fam/Str-GF	DOW-023-005-001	W10	3000	1200	Fixed	00	W	No
Ktch/Dn/Fam/Str-GF	DOW-021-006-001	W11	3000	1200	Awning	60	W	No
Ktch/Dn/Fam/Str-GF	DOW-023-005-001	W09	3000	1750	Fixed	00	N	No
Ktch/Dn/Fam/Str-GF	DOW-025-004-001	DG.03	3000	2900	Sliding	45	N	No
Ktch/Dn/Fam/Str-GF	DOW-023-005-001	W08	3000	1950	Fixed	00	W	No
Ktch/Dn/Fam/Str-GF	DOW-025-004-001	DG.02	3000	4800	Sliding	60	N	No
Ktch/Dn/Fam/Str-GF	DOW-023-005-001	W07	600	3100	Fixed	00	E	No
Master Bed-FF	DOW-023-005-001	W22	2500	2000	Fixed	00	E	No
Master Bed-FF	DOW-023-005-001	W19	2500	2000	Fixed	00	S	No
Master Bed-FF	DOW-023-005-001	W21	2500	1230	Fixed	00	S	No
Master Bed-FF	BRZ-011-001-001	W20	2500	1200	Louvre	90	S	No
ENS/M.Bed-FF	BRZ-011-001-001	W23	2400	2000	Louvre	45	E	No
Bed 1-FF	DOW-022-005-001	W24	2400	2150	Sliding	30	E	No
ENS/Bed 1-FF	DOW-021-006-001	W25	900	900	Awning	90	E	No
Retreat-FF	DOW-022-005-001	W26 Part 2	2700	800	Sliding	10	W	No
Retreat-FF	DOW-022-005-001	W26 Part 1	2700	2200	Sliding	10	W	No
Retreat-FF	DOW-025-004-001	DG.04	2700	4800	Sliding	60	N	No
Void/Family-FF	DOW-023-005-001	W29	2700	1200	Fixed	00	W	No
Void/Family-FF	DOW-023-005-001	W30	2700	1200	Fixed	00	W	No
Void/Family-FF	DOW-023-005-001	W27	2700	2900	Fixed	00	N	No

* Refer to glossary.

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Void/Family-FF	DOW-023-005-001	W28	2700	1750	Fixed	00	N	No
Bed 2-FF	DOW-023-005-001	W34	2500	1300	Fixed	00	E	No
Bed 2-FF	BRZ-011-001-001	W32	2500	900	Louvre	90	S	No
Bed 2-FF	DOW-023-005-001	W33	2500	1500	Fixed	00	S	No
ENS/Bed 2-FF	DOW-021-006-001	W31	900	900	Awning	90	W	No
Stairs/Lift/Hall-FF	DOW-023-005-001	W18	2500	1750	Fixed	00	S	Yes
Stairs/Lift/Hall-FF	DOW-023-005-001	W12 FF	2700	3500	Fixed	00	W	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
VEL-010-01 W	VEL-010-01 W VELUX VS - Ventilating Skylight DG 3mm LoE 366 / 8.5mm Argon Gap / 5.36mm Clear La	2.5	0.21	0.20	0.22
VEL-011-01 W	VEL-011-01 W VELUX FS - Fixed Skylight DG 3mm LoE 366 / 8.5mm Argon Gap / 5.36mm Clear La	2.6	0.24	0.23	0.25

Roof window* *schedule*

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
Stairs/Lift/Hall-FF	VEL-011-01 W	SL04	0	710	710	S	Yes	Yes
Stairs/Lift/Hall-FF	VEL-011-01 W	SL05	0	1775	3800	S	Yes	Yes
Stairs/Lift/Hall-FF	VEL-010-01 W	Skydoor	90	2760	1200	E	Yes	Yes

* Refer to glossary.

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-BSMNT	2400	4000	90	S
Laundry-GF	2400	820	90	E
Entry-GF	3000	1750	90	S

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Tilt up Concrete	0.50		No insulation	No
EW-2	Tilt Up Concrete, Lined Timber Stud Frame	0.50		Bulk Insulation R2.5	No
EW-3	Cavity Brick	0.50		Foil Sided Bubble Wrap, Anti-glare one side	No

External wall *schedule*

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Garage-BSMNT	EW-1	2400	5645	S	1800	No
Garage-BSMNT	EW-1	800	5345	W	0	Yes
Garage-BSMNT	EW-1	1600	5345	W	2900	No
Garage-BSMNT	EW-1	800	1600	N	0	Yes
Garage-BSMNT	EW-1	1600	1600	N	6200.02240139322	No
Garage-BSMNT	EW-1	800	2200	W	0	No
Garage-BSMNT	EW-1	1600	2200	W	4500	No

* Refer to glossary.

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Garage-BSMNT	EW-1	1650	8600	N	0	No
Garage-BSMNT	EW-1	750	8600	N	4000	No
Garage-BSMNT	EW-1	1650	900	N	0	No
Garage-BSMNT	EW-1	751	900	N	100	No
Garage-BSMNT	EW-1	2400	14400	E	100	No
Stairs/Lift-BSMNT	EW-2	2100	4245	W	0	No
Stairs/Lift-BSMNT	EW-2	300	4245	W	1800	No
Stairs/Lift-BSMNT	EW-2	800	1100	N	0	No
Stairs/Lift-BSMNT	EW-2	1600	1100	N	11600.0119731739	No
Stairs/Lift-BSMNT	EW-1	1600	3455	N	11600.0119731739	No
Plant Room-BSMNT	EW-2	2100	1890	W	0	No
Plant Room-BSMNT	EW-2	300	1890	W	100	No
Storage-BSMNT	EW-2	2401	1745	E	5800	No
Storage-BSMNT	EW-2	2400	1900	E	100	No
Storage-BSMNT	EW-2	2100	1700	S	0	No
Storage-BSMNT	EW-2	301	1700	S	100	No
Storage-BSMNT	EW-2	2100	4500	S	0	No
Storage-BSMNT	EW-2	300	4500	S	1100	No
Storage-BSMNT	EW-2	2401	300	S	250	No
Storage-BSMNT	EW-2	2401	1000	W	250	No
Storage-BSMNT	EW-2	2400	3145	W	100	No
Guest Bed-GF	EW-3	3000	4300	S	1100	Yes
Guest Bed-GF	EW-3	3001	300	S	250	No
Guest Bed-GF	EW-3	3001	1000	W	250	No
Guest Bed-GF	EW-3	3000	2545	W	100	No
Guest Bed-GF	EW-3	3000	2700	E	7700	Yes
Bath-GF	EW-3	3000	2490	W	100	Yes
Home Office-GF	EW-3	2400	3345	E	100	No
Home Office-GF	EW-3	2400	5400	S	2400	Yes
Home Office-GF	EW-3	2400	700	W	6900	No
Laundry-GF	EW-3	3000	2190	E	100	No

* Refer to glossary.

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
WIP-GF	EW-3	3000	2090	E	100	No
Ktch/Dn/Fam/Str-GF	EW-3	3300	4245	W	100	No
Ktch/Dn/Fam/Str-GF	EW-3	3000	1100	N	100	No
Ktch/Dn/Fam/Str-GF	EW-3	3000	5400	W	100	Yes
Ktch/Dn/Fam/Str-GF	EW-3	3000	4600	N	100	Yes
Ktch/Dn/Fam/Str-GF	EW-3	3000	2200	W	100	Yes
Ktch/Dn/Fam/Str-GF	EW-3	3000	5600	N	3100	Yes
Ktch/Dn/Fam/Str-GF	EW-3	3001	900	N	100	No
Ktch/Dn/Fam/Str-GF	EW-3	3000	8145	E	100	No
Entry-GF	EW-3	3000	2090	S	3800	No
Master Bed-FF	EW-3	2700	3745	E	533	No
Master Bed-FF	EW-3	2700	4441	S	1464	Yes
Master Bed-FF	EW-3	2700	2200	W	100	No
WIR/M.Bed-FF	EW-3	2700	3290	E	333	No
ENS/M.Bed-FF	EW-3	2700	1890	E	100	No
Bed 1-FF	EW-3	2700	3590	E	100	No
ENS/Bed 1-FF	EW-3	2700	1790	E	100	No
Retreat-FF	EW-3	2700	1195	W	4800	No
Retreat-FF	EW-3	2700	2650	W	100	No
Retreat-FF	EW-3	2700	5500	N	1400	Yes
Retreat-FF	EW-3	2700	3845	E	100	No
Void/Family-FF	EW-3	2700	5345	W	200	No
Void/Family-FF	EW-3	2700	4545	N	1883	Yes
Bed 2-FF	EW-3	2700	300	E	7167	No
Bed 2-FF	EW-3	2700	1900	E	100	Yes
Bed 2-FF	EW-3	2700	4627	S	217	Yes
Bed 2-FF	EW-3	2700	3545	W	100	No
ENS/Bed 2-FF	EW-3	2700	2490	W	100	Yes
Stairs/Lift/Hall-FF	EW-3	2700	2090	S	250	Yes
Stairs/Lift/Hall-FF	EW-3	2700	4245	W	100	No
Stairs/Lift/Hall-FF	EW-3	2700	1100	N	100	No

* Refer to glossary.

Internal wall *type*

Wall ID	Wall type	Area [m^2]	Bulk insulation
IW-001	Single Skin Brick	15.63	Bulk Insulation, No Air Gap R2.5
IW-002	Tilt Concrete	0.00	No insulation
IW-003	Single Skin Brick	317.37	No insulation

Floor *type*

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
Garage-BSMNT	Concrete Slab on Ground 100mm	129.29	None	No Insulation	Bare
Stairs/Lift-BSMNT	Concrete Slab on Ground 100mm	20.97	None	No Insulation	Ceramic Tiles 8mm
Plant Room-BSMNT	Concrete Slab on Ground 100mm	6.15	None	No Insulation	Ceramic Tiles 8mm
Storage-BSMNT	Concrete Slab on Ground 100mm	26.76	None	No Insulation	Ceramic Tiles 8mm
Guest Bed-GF / Storage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	16.15		No Insulation	Carpet+Rubber Underlay 18mm
Bath-GF / Plant Room-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	4.96		No Insulation	Ceramic Tiles 8mm
Bath-GF / Storage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	0.93		No Insulation	Ceramic Tiles 8mm
Hall to G.Bed-GF / Stairs/Lift-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	0.42		No Insulation	Carpet+Rubber Underlay 18mm
Hall to G.Bed-GF / Plant Room-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	0.43		No Insulation	Carpet+Rubber Underlay 18mm
Hall to G.Bed-GF / Storage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	0.41		No Insulation	Carpet+Rubber Underlay 18mm
Home Office-GF / Garage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	8.58		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Home Office-GF	Suspended Concrete Slab 150mm	8.58	Totally Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Laundry-GF / Garage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	10.82		Bulk Insulation R2.5	Ceramic Tiles 8mm
WIP-GF / Garage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	11.35		Bulk Insulation R2.5	Ceramic Tiles 8mm

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
Ktch/Dn/Fam/Str-GF / Garage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	71.40		Bulk Insulation R2.5	60/40 Carpet 10mm/Ceramic
Ktch/Dn/Fam/Str-GF / Stairs/Lift-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	7.57		No Insulation	60/40 Carpet 10mm/Ceramic
Entry-GF / Garage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	5.26		Bulk Insulation R2.5	Carpet+Rubber Underlay 18mm
Entry-GF / Stairs/Lift-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	0.00		No Insulation	Carpet+Rubber Underlay 18mm
Entry-GF / Storage-BSMNT	Concrete Timber Framed Above Plasterboard 150mm	2.17		No Insulation	Carpet+Rubber Underlay 18mm
Master Bed-FF / Home Office-GF	Concrete Timber Framed Above Plasterboard 150mm	12.27		No Insulation	Carpet+Rubber Underlay 18mm
Master Bed-FF	Suspended Concrete Slab 150mm	4.79	Totally Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
WIR/M.Bed-FF / Home Office-GF	Concrete Timber Framed Above Plasterboard 150mm	1.30		No Insulation	Carpet+Rubber Underlay 18mm
WIR/M.Bed-FF / Laundry-GF	Concrete Timber Framed Above Plasterboard 150mm	8.79		No Insulation	Carpet+Rubber Underlay 18mm
WIR/M.Bed-FF / WIP-GF	Concrete Timber Framed Above Plasterboard 150mm	2.16		No Insulation	Carpet+Rubber Underlay 18mm
ENS/M.Bed-FF / WIP-GF	Concrete Timber Framed Above Plasterboard 150mm	6.11		No Insulation	Ceramic Tiles 8mm
ENS/M.Bed-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	1.09		No Insulation	Ceramic Tiles 8mm
Bed 1-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	15.35		No Insulation	Carpet+Rubber Underlay 18mm
ENS/Bed 1-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	3.37		No Insulation	Ceramic Tiles 8mm
Powder-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	3.67		No Insulation	Ceramic Tiles 8mm
Retreat-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	11.70		No Insulation	Carpet+Rubber Underlay 18mm
Retreat-FF	Suspended Concrete Slab 150mm	8.93	Totally Open	Bulk Insulation in Contact with Floor R2.5	Carpet+Rubber Underlay 18mm
Void/Family-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	0.00		No Insulation	Carpet+Rubber Underlay 18mm
Bed 2-FF / Guest Bed-GF	Concrete Timber Framed Above Plasterboard 150mm	15.09		No Insulation	Carpet+Rubber Underlay 18mm
WIR/Bed 2-FF / Bath-GF	Concrete Timber Framed Above Plasterboard 150mm	2.59		No Insulation	Carpet+Rubber Underlay 18mm

* Refer to glossary.

Location	Construction	Area [m^2]	Sub-floor ventilation	Added insulation [R-value]	Covering
WIR/Bed 2-FF / Hall to G.Bed-GF	Concrete Timber Framed Above Plasterboard 150mm	0.92		No Insulation	Carpet+Rubber Underlay 18mm
ENS/Bed 2-FF / Bath-GF	Concrete Timber Framed Above Plasterboard 150mm	3.49		No Insulation	Ceramic Tiles 8mm
Hall to Retreat-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	4.71		No Insulation	Carpet+Rubber Underlay 18mm
Stairs/Lift/Hall-FF / Hall to G.Bed-GF	Concrete Timber Framed Above Plasterboard 150mm	0.00		No Insulation	Carpet+Rubber Underlay 18mm
Stairs/Lift/Hall-FF / Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard 150mm	12.40		No Insulation	Carpet+Rubber Underlay 18mm
Stairs/Lift/Hall-FF / Entry-GF	Concrete Timber Framed Above Plasterboard 150mm	0.00		No Insulation	Carpet+Rubber Underlay 18mm

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Garage-BSMNT	Concrete, Plasterboard with Timber Frame	Bulk Insulation R2.5	
Garage-BSMNT	Concrete Timber Framed Above Plasterboard	Bulk Insulation R2.5	
Stairs/Lift-BSMNT	Concrete Timber Framed Above Plasterboard	No Insulation	
Plant Room-BSMNT	Concrete Timber Framed Above Plasterboard	No Insulation	
Storage-BSMNT	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Storage-BSMNT	Concrete Timber Framed Above Plasterboard	No Insulation	
Guest Bed-GF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Guest Bed-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Bath-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Hall to G.Bed-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Home Office-GF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Home Office-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Laundry-GF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Laundry-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
WIP-GF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
WIP-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Ktch/Dn/Fam/Str-GF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Ktch/Dn/Fam/Str-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Entry-GF	Concrete Timber Framed Above Plasterboard	No Insulation	
Master Bed-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
WIR/M.Bed-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
ENS/M.Bed-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Bed 1-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
ENS/Bed 1-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Powder-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Retreat-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Void/Family-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Bed 2-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
WIR/Bed 2-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
ENS/Bed 2-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Hall to Retreat-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	
Stairs/Lift/Hall-FF	Concrete, Plasterboard with Timber Frame	Bulk Insulation R5	

Ceiling *penetrations**

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
Stairs/Lift-BSMNT	4	Downlights - LED	50	Sealed
Plant Room-BSMNT	2	Downlights - LED	50	Sealed
Storage-BSMNT	11	Downlights - LED	50	Sealed
Guest Bed-GF	7	Downlights - LED	50	Sealed
Bath-GF	2	Downlights - LED	50	Sealed
Hall to G.Bed-GF	1	Downlights - LED	50	Sealed
Home Office-GF	7	Downlights - LED	50	Sealed
Laundry-GF	5	Downlights - LED	50	Sealed
WIP-GF	4	Downlights - LED	50	Sealed
Ktch/Dn/Fam/Str-GF	28	Downlights - LED	50	Sealed
Ktch/Dn/Fam/Str-GF	1	Exhaust Fans	300	Sealed
Entry-GF	2	Downlights - LED	50	Sealed
Master Bed-FF	7	Downlights - LED	50	Sealed
WIR/M.Bed-FF	6	Downlights - LED	50	Sealed
ENS/M.Bed-FF	2	Downlights - LED	50	Sealed
Bed 1-FF	6	Downlights - LED	50	Sealed
ENS/Bed 1-FF	1	Downlights - LED	50	Sealed

* Refer to glossary.

Location	Quantity	Type	Diameter [mm]	Sealed/unsealed
Powder-FF	1	Downlights - LED	50	Sealed
Powder-FF	1	Exhaust Fans	300	Sealed
Retreat-FF	8	Downlights - LED	50	Sealed
Void/Family-FF	10	Downlights - LED	50	Sealed
Bed 2-FF	6	Downlights - LED	50	Sealed
WIR/Bed 2-FF	1	Downlights - LED	50	Sealed
ENS/Bed 2-FF	1	Downlights - LED	50	Sealed
Hall to Retreat-FF	1	Downlights - LED	50	Sealed
Stairs/Lift/Hall-FF	16	Downlights - LED	50	Sealed

Ceiling *fans*

Location	Quantity	Diameter [mm]
Home Office-GF	1	1200
Ktch/Dn/Fam/Str-GF	1	1200
Master Bed-FF	1	1200
Bed 1-FF	1	1200
Retreat-FF	1	1200
Bed 2-FF	1	1200

Roof *type*

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
Waterproofing Membrane	No Insulation, Only an Air Gap	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)

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	

* Refer to glossary.

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.