Nationwide House Energy Rating Scheme® NatHERS® Certificate No. #HR-G6WHR2-01

Generated on 05 Jun 2025 using Hero 4.1 (Chenath v3.23)

Property

Address	327 McCarrs Creek Road, Terrey Hills, NSW, 2084
Lot/DP	417/-/DP752017
NCC Class*	1a
Floor/all Floors	1 of 2 floors
Type	New

Plans

Main Plan	23/01/2025 REV A
Prepared by	P L A Y O U S T C H U R C H E R

Construction and environment

Assessed floor area (m²)*		**Exposure Type**	
Conditioned*	554.0	Suburban	
Unconditioned*	38.2	**NatHERS climate zone**	
Total	647.7	56 - Mascot AMO	
Garage	55.5		

Accredited assessor

Name	Adam Clarke
Business name	10 Star Building Assessments
Email	admin@10sba.com
Phone	+61 481010999
Accreditation No.	101518
Assessor Accrediting Organisation	ABSA
Declaration of interest	No Conflict of Interest

NCC Requirements

BCA provisions	Volume 2
State/Territory variation	Yes

National Construction Code (NCC) requirements

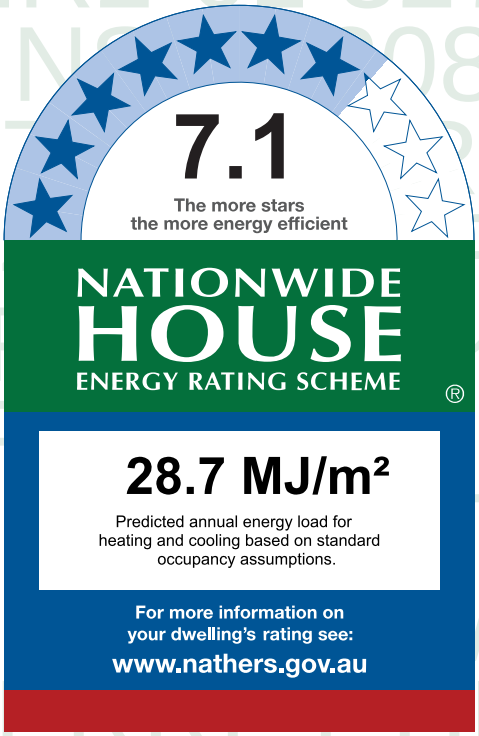
The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J2D2(2)(a) and (3) 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	18.0	10.7
Load limits	25	18

Features determining load limits

Floor type (lowest conditioned area)	CSOG
NCC climate zone 1 or 2	N
Outdoor living area	N
Outdoor living area ceiling fan	N

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 http://www.hero-software.com.au/pdf/HR-G6WHR2-01. When using either link, ensure you are visiting http://www.hero-software.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 and 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: 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

Shows the contribution each appliance has on the home's annual energy use, greenhouse gas emissions and cost without solar.

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 who should check each item.
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 Certifi cate?	☐	☐	☐	☐	☐
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 on the NatHERS-stamped plans?	☐	☐	☐	☐	☐

* 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 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.

* Refer to glossary.

Room *schedule*

Room	Zone Type	Area (m²)
WIR 2	Night Time	6.84
Ens 2	Night Time	8.25
Bed 2	Bedroom	30.48
Multipurpose	Living	29.10
Games	Living	62.26
W/C	Unconditioned	5.29
Cellar	Day Time	16.97
Coats	Day Time	6.10
Lift	Day Time	2.59
Bedroom 4	Bedroom	27.54
Bed 4 entry	Night Time	6.48
Ensuite 4	Night Time	6.25
WIR 4	Night Time	5.34
Plant	Unconditioned	3.97
WIR 3	Night Time	6.08
Bedroom 3	Bedroom	19.00
Ensuite 3	Night Time	7.81
Foyer grd	Day Time	33.76
hallway nth	Day Time	17.62
Laundry	Unconditioned	16.99
hallway sth	Day Time	26.87
Garage	Garage	55.52
Ens 1	Night Time	21.14
WIR 1.1	Night Time	10.25

Room *schedule*

Room	Zone Type	Area (m²)
Ldry Upper	Unconditioned	7.47
Wc Upper	Unconditioned	4.51
foyer upper	Day Time	35.89
Hallway upper	Day Time	24.94
Kit / Dining	Kitchen/Living	92.83
Study	Day Time	17.37
Pantry	Day Time	9.65
Bed 1	Bedroom	24.22
WIR 1	Night Time	20.77

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
AWS-088-017	ComfortEDGE™ Series 755 Awning Window - Double Glazed	2.4	0.46	0.44	0.48
AWS-090-027	ComfortEDGE™ Series 755 Fixed Window - Double Glazed - with Embedded Frame	2.0	0.50	0.47	0.52
AWS-093-027	ComfortEDGE™ Series 753 Sliding Window - Double Glazed - with Embedded Frame	2.8	0.49	0.47	0.52
AWS-110-062	ComfortEDGE™ Series 759 Sliding Door Medium Rail with Embedded Frame (and Embedded Sill) - Double Glazed	2.4	0.49	0.46	0.51

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Ldry Upper	AWS-088-017	W37	2400	970	Awning	60	S	None
Bed 1	AWS-110-062	W28	3000	4210	Sliding Door	70	NNE	None
Bed 1	AWS-090-027	W27	2939	1420	Fixed	0	ESE	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Bed 2	AWS-110-062	W02	3000	4210	Sliding Door	70	NNE	None
Bed 2	AWS-110-062	W01	3000	4210	Sliding Door	70	ESE	None
Bedroom 3	AWS-110-062	W06	3000	3250	Sliding Door	70	ENE	None
Bedroom 4	AWS-110-062	W10	3000	4210	Sliding Door	70	ESE	None
Bedroom 4	AWS-110-062	W11	3000	4210	Sliding Door	70	NNE	None
Cellar	AWS-090-027	W19	2600	970	Fixed	0	SSE	None
Ens 1	AWS-110-062	W26	2600	2630	Sliding Door	45	NNE	None
Ens 1	AWS-088-017	W25-1	1600	1100	Awning	10	ESE	None
Ens 1	AWS-090-027	W25-2	1000	1100	Fixed	0	ESE	None
Ens 1	AWS-090-027	W43	1700	600	Fixed	0	NNE	None
Ens 1	AWS-090-027	W42	1700	600	Fixed	0	SSW	None
Ens 1	AWS-088-017	W41-1	1600	1100	Awning	10	ESE	None
Ens 1	AWS-090-027	W41-2	1000	1100	Fixed	0	ESE	None
Ens 2	AWS-088-017	W22-B	2600	870	Hinged Door	90	WNW	None
Ens 2	AWS-093-027	W22-A	2600	1660	Sliding	45	WNW	None
Ens 2	AWS-093-027	W23	3000	2700	Sliding	45	SSW	None
Ensuite 3	AWS-088-017	W07	3000	850	Awning	60	E	None
Ensuite 4	AWS-088-017	W08	2600	850	Awning	60	ESE	None
Foyer grd	AWS-088-017	W14	3200	2280	French	90	NNW	None
Foyer grd	AWS-090-027	W16	3300	600	Fixed	0	SW	None
Foyer grd	AWS-090-027	W15	3300	600	Fixed	0	WSW	None
Games	AWS-110-062	W05-B	3000	4140	Sliding Door	70	ENE	None
Games	AWS-110-062	W05-A	3000	4140	Sliding Door	70	ENE	None
Garage	AWS-090-027	W18-a	2600	600	Fixed	0	NNE	None
Hallway upper	AWS-090-027	W38	2500	1690	Fixed	0	WSW	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
Kit / Dining	AWS-110-062	W33	3000	2400	Sliding Door	45	NNW	None
Kit / Dining	AWS-110-062	W34	3000	2100	Sliding Door	45	NNW	None
Kit / Dining	AWS-090-027	W33 Highlight	680	2400	Fixed	0	NNW	None
Kit / Dining	AWS-090-027	W34 highlight	620	2100	Fixed	0	NNW	None
Kit / Dining	AWS-110-062	W32-C	3000	4067	Sliding Door	70	ENE	None
Kit / Dining	AWS-090-027	W32 over	800	12200	Fixed	0	ENE	None
Kit / Dining	AWS-110-062	W32-A	3000	4067	Sliding Door	70	ENE	None
Kit / Dining	AWS-110-062	W32-B	3000	4067	Sliding Door	70	ENE	None
Kit / Dining	AWS-090-027	W31	830	2840	Fixed	0	SSE	None
Kit / Dining	AWS-088-017	W44 clerestory-E	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-I	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-G	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-C	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-D	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-B	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-F	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-A	600	1399	Awning	90	W	None
Kit / Dining	AWS-088-017	W44 clerestory-H	600	1399	Awning	90	W	None
Laundry	AWS-088-017	W03	1400	610	Awning	90	E	None
Laundry	AWS-088-017	W03.1	3000	970	Hinged Door	90	E	None
Multipurpose	AWS-110-062	W04	3000	3730	Sliding Door	70	ENE	None
Pantry	AWS-088-017	W30	2500	1070	Hinged Door	90	ENE	None
Study	AWS-110-062	W29	3000	1670	Sliding Door	45	NNE	None
W/C	AWS-088-017	W20	2600	970	Awning	60	SSE	None
WIR 1	AWS-088-017	W40	900	1180	Awning	90	SSW	None

* Refer to glossary.

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
WIR 1.1	AWS-088-017	W39-1	1600	970	Awning	10	WNW	None
WIR 1.1	AWS-090-027	W39-2	1000	970	Fixed	0	WNW	None
WIR 2	AWS-088-017	W24	2600	850	Awning	60	SSW	None
WIR 4	AWS-088-017	W09	2600	850	Awning	60	ESE	None
foyer upper	AWS-090-027	W36	2350	2270	Fixed	0	NNW	None
foyer upper	AWS-090-027	W15-a	2500	600	Fixed	0	WSW	None
foyer upper	AWS-088-017	W35	2500	1070	Hinged Door	90	N	None
hallway nth	AWS-090-027	W13	3200	800	Fixed	0	NNE	None
hallway nth	AWS-090-027	W12	3200	600	Fixed	0	WNW	None
hallway sth	AWS-088-017	W21-B	2600	870	Hinged Door	90	SSW	None
hallway sth	AWS-088-017	W21-A	2600	2380	Awning	60	SSW	None
hallway sth	AWS-090-027	W18	2600	600	Fixed	0	NNE	None
hallway sth	AWS-090-027	W17	2600	600	Fixed	0	NNW	None

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
VEL-011-01 W	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)	Orient-ation	Outdoor shade	Indoor shade
foyer upper	VEL-011-01 W	SKYRW 02	0	2557.78	2557.78	W	None	None

* Refer to glossary.

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage	2400	5985	90	NNE
Hallway upper	2040	920	90	W
hallway nth	2040	920	90	NNE

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
300 MUD-BRICK-EXP INSUL	300 MUD-BRICK-EXP INSUL	0.50	Medium	1.10	No
INSUL - CONC-200-EXP1	INSUL - CONC-200-EXP1	0.50	Medium	2.00	No
MC-NOCAV11	Metal Clad Direct-Fix (No Cavity) Stud Wall	0.50	Medium	2.70	No
MUD-BRICK-500	MUD-BRICK-500	0.50	Medium	0.00	No
MUD-BRICK-500 INSUL	MUD-BRICK-500 INSUL	0.50	Medium	1.10	No
REN-BV-NON REFL-CAV1	Ren Brick Veneer Stud Wall with NonReflective Sarking	0.50	Medium	2.70	No
REN-CAV-BRICK-110-110-REN	REN-CAV-BRICK-110-110-REN	0.50	Medium	2.30	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Ldry Upper	REN-BV-NON REFL-CAV1	2500	2534	WSW	6899	Yes
Ldry Upper	REN-BV-NON REFL-CAV1	2500	2942	S	183	Yes
Bed 1	REN-BV-NON REFL-CAV1	3056	5046	NNE	1902	Yes
Bed 1	REN-BV-NON REFL-CAV1	2939	2285	ESE	4150	Yes
Bed 2	REN-CAV-BRICK-110-110-REN	3000	6382	NNE	1324	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Bed 2	REN-CAV-BRICK-110-110-REN	3000	4630	ESE	4215	Yes
Bed 2	REN-CAV-BRICK-110-110-REN	3000	1929	SSW	3986	Yes
Bed 4 entry	300 MUD-BRICK-EXP INSUL	3000	1255	WNW		Yes
Bed 4 entry	300 MUD-BRICK-EXP INSUL	3000	1480	WNW		Yes
Bed 4 entry	REN-CAV-BRICK-110-110-REN	3000	120	WNW		Yes
Bedroom 3	REN-CAV-BRICK-110-110-REN	3000	3519	ENE	2895	Yes
Bedroom 4	REN-CAV-BRICK-110-110-REN	3000	5499	ESE	951	Yes
Bedroom 4	REN-CAV-BRICK-110-110-REN	3000	947	SSW		Yes
Bedroom 4	300 MUD-BRICK-EXP INSUL	3000	1755	NW		Yes
Bedroom 4	300 MUD-BRICK-EXP INSUL	3000	1762	NW	749	Yes
Bedroom 4	300 MUD-BRICK-EXP INSUL	3000	1522	NW	1030	Yes
Bedroom 4	300 MUD-BRICK-EXP INSUL	3000	506	NW	1115	Yes
Bedroom 4	REN-CAV-BRICK-110-110-REN	3000	4658	NNE	9375	Yes
Cellar	REN-CAV-BRICK-110-110-REN	3000	2510	SSE		Yes
Cellar	MUD-BRICK-500 INSUL	1700	2205	SSW		Yes
Cellar	MUD-BRICK-500 INSUL	1300	2205	SSW		No
Ens 1	REN-BV-NON REFL-CAV1	2600	2822	SSW	100	Yes
Ens 1	MC-NOCAV11	2941	2822	NNE	4338	Yes
Ens 1	MC-NOCAV11	2905	1257	ESE	1381	Yes
Ens 1	MC-NOCAV11	2870	754	NNE		Yes
Ens 1	MC-NOCAV11	2765	3940	ESE	627	Yes
Ens 1	MC-NOCAV11	2660	754	SSW	1492	Yes
Ens 1	MC-NOCAV11	2630	1241	ESE	1381	Yes
Ens 2	REN-CAV-BRICK-110-110-REN	3000	2950	WNW	3917	Yes
Ens 2	REN-CAV-BRICK-110-110-REN	3000	2798	SSW	926	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Ensuite 3	REN-CAV-BRICK-110-110-REN	3000	977	E	3043	Yes
Ensuite 3	INSUL - CONC-200-EXP1	1750	2027	SSE		No
Ensuite 3	INSUL - CONC-200-EXP1	1750	2526	SW		No
Ensuite 4	REN-CAV-BRICK-110-110-REN	3000	2430	ESE	9213	Yes
Foyer grd	MC-NOCAV11	3300	2280	NNW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	790	S		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	690	SSW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	790	SSW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	530	SW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	601	SW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	748	WSW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	444	WSW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	3837	WSW		Yes
Foyer grd	MUD-BRICK-500 INSUL	3300	170	S		Yes
Games	REN-CAV-BRICK-110-110-REN	3000	8540	ENE	1907	Yes
Games	REN-CAV-BRICK-110-110-REN	3000	988	NNW		Yes
Garage	MUD-BRICK-500	2760	6370	WNW		No
Garage	MUD-BRICK-500	2760	8719	NNE		Yes
Garage	MUD-BRICK-500	2760	8729	SSW		No
Hallway upper	MC-NOCAV11	3000	94	NW		Yes
Hallway upper	REN-BV-NON REFL-CAV1	2500	2090	WSW	1350	Yes
Hallway upper	REN-BV-NON REFL-CAV1	2500	1754	W	6893	Yes
Hallway upper	MUD-BRICK-500 INSUL	2500	1263	NNW	830	Yes
Kit / Dining	REN-BV-NON REFL-CAV1	4276	7352	NNW	5698	Yes
Kit / Dining	REN-BV-NON REFL-CAV1	3990	12630	ENE	2238	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
Kit / Dining	REN-BV-NON REFL-CAV1	3911	3136	SSE	1456	Yes
Kit / Dining	MC-NOCAV11	700	12594	W	944	Yes
Kit / Dining	MC-NOCAV11	705	4166	SSE	1654	Yes
Laundry	REN-CAV-BRICK-110-110-REN	3000	2275	E	4956	Yes
Laundry	REN-CAV-BRICK-110-110-REN	3000	665	NNE	1288	Yes
Lift	REN-CAV-BRICK-110-110-REN	3000	2009	WSW		Yes
Lift	REN-BV-NON REFL-CAV1	2500	2005	WSW		Yes
Multipurpose	REN-CAV-BRICK-110-110-REN	3000	3994	ENE	3465	Yes
Multipurpose	REN-CAV-BRICK-110-110-REN	3000	3113	SSE	3144	Yes
Pantry	REN-BV-NON REFL-CAV1	2500	2270	ENE	5062	Yes
Plant	MUD-BRICK-500 INSUL	3000	1246	W		Yes
Plant	MC-NOCAV11	3000	1498	NNW		Yes
Plant	MUD-BRICK-500 INSUL	3000	1027	W		Yes
Study	REN-BV-NON REFL-CAV1	3056	1875	NNE	1877	Yes
W/C	REN-CAV-BRICK-110-110-REN	3000	2471	SSE		Yes
WIR 1	REN-BV-NON REFL-CAV1	2600	4987	SSW	100	Yes
WIR 1.1	REN-BV-NON REFL-CAV1	2665	2501	WNW	954	Yes
WIR 1.1	REN-BV-NON REFL-CAV1	2600	4100	SSW	100	Yes
WIR 2	REN-CAV-BRICK-110-110-REN	3000	2950	ESE	4200	Yes
WIR 2	REN-CAV-BRICK-110-110-REN	3000	2317	SSW	926	Yes
WIR 4	REN-CAV-BRICK-110-110-REN	3000	2074	ESE	1889	Yes
Wc Upper	REN-BV-NON REFL-CAV1	2500	1554	WSW	6894	Yes
foyer upper	MC-NOCAV11	2500	2270	NNW	992	Yes
foyer upper	MUD-BRICK-500 INSUL	2500	907	ENE		No
foyer upper	MUD-BRICK-500 INSUL	2500	520	NNW		No

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
foyer upper	MUD-BRICK-500 INSUL	2500	640	NNW		No
foyer upper	MUD-BRICK-500 INSUL	2500	1163	N		No
foyer upper	MUD-BRICK-500 INSUL	2500	504	W		No
foyer upper	MUD-BRICK-500 INSUL	2500	395	S		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	789	S		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	790	SSW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	789	SW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	636	SW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	548	WSW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	640	WSW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	3818	WSW		Yes
foyer upper	MUD-BRICK-500 INSUL	2500	170	S		Yes
foyer upper	REN-BV-NON REFL-CAV1	2500	1270	N	5851	Yes
foyer upper	MUD-BRICK-500 INSUL	2500	787	W		No
hallway nth	MUD-BRICK-500 INSUL	3000	1182	W		Yes
hallway nth	MUD-BRICK-500 INSUL	3000	1883	W		Yes
hallway nth	MUD-BRICK-500 INSUL	3000	1794	W		Yes
hallway nth	MC-NOCAV11	3200	1313	NNE		Yes
hallway nth	MC-NOCAV11	3200	201	WNW		Yes
hallway nth	MUD-BRICK-500 INSUL	3200	2392	WNW		Yes
hallway nth	MUD-BRICK-500 INSUL	3200	601	WNW		Yes
hallway nth	MUD-BRICK-500 INSUL	3200	625	WNW		Yes
hallway nth	MC-NOCAV11	3000	1214	NNE		Yes
hallway nth	MUD-BRICK-500 INSUL	3000	548	W		Yes
hallway nth	INSUL - CONC-200-EXP1	1750	1215	SSW		No

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
hallway sth	REN-CAV-BRICK-110-110-REN	3000	71	SSW		Yes
hallway sth	REN-CAV-BRICK-110-110-REN	3000	3408	SSW	4022	Yes
hallway sth	REN-CAV-BRICK-110-110-REN	3000	327	SSE		Yes
hallway sth	MUD-BRICK-500 INSUL	3000	1525	NNE		Yes
hallway sth	MUD-BRICK-500 INSUL	3000	1782	NNW		Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PB	Internal Plasterboard Stud Wall	140.2	0.00
INT-PB	Internal Plasterboard Stud Wall	11.8	2.00
MUD-BRICK-500	MUD-BRICK-500	58.1	0.00
MUD-BRICK-500	MUD-BRICK-500	20.1	1.10
MUD-BRICK-EXP	Mud Brick - 300mm Exposed	10.3	0.00
SGL-BRICK-110-INSUL-PB	SGL-BRICK-110-INSUL-PB	39.2	1.10
SGL-BRICK-110-REND	Single 110mm Brick Wall - Rendered Both Sides	229.9	0.00

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Ldry Upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	7.5	N/A	0.15	Tile (8mm)
Bed 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	23.3	N/A	0.15	Carpet
Bed 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.9	N/A	0.15	Timber (12mm)
Bed 2	CSOG-150: Concrete Slab on Ground (150mm)	30.5	N/A	1.30	Carpet
Bed 4 entry	CSOG-150: Concrete Slab on Ground (150mm)	6.5	N/A	1.30	Carpet
Bedroom 3	CSOG-150: Concrete Slab on Ground (150mm)	19.0	N/A	1.30	Carpet
Bedroom 4	CSOG-150: Concrete Slab on Ground (150mm)	27.5	N/A	1.30	Carpet
Cellar	CSOG-150: Concrete Slab on Ground (150mm)	17.0	N/A	1.30	Timber (12mm)

* Refer to glossary.

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
Coats	CSOG-150: Concrete Slab on Ground (150mm)	6.1	N/A	1.30	Timber (12mm)
Ens 1	SUSP-CONC-150-LINED: Suspended Concrete Slab Floor (150mm) - Lined Below	21.1	N/A	1.10	Tile (8mm)
Ens 2	CSOG-150: Concrete Slab on Ground (150mm)	8.3	N/A	1.30	Tile (8mm)
Ensuite 3	CSOG-150: Concrete Slab on Ground (150mm)	7.8	N/A	1.30	Tile (8mm)
Ensuite 4	CSOG-150: Concrete Slab on Ground (150mm)	6.3	N/A	1.30	Tile (8mm)
Foyer grd	CSOG-150: Concrete Slab on Ground (150mm)	33.8	N/A	1.30	Timber (12mm)
Games	CSOG-150: Concrete Slab on Ground (150mm)	62.3	N/A	1.30	Timber (12mm)
Garage	CSOG-150: Concrete Slab on Ground (150mm)	55.5	N/A	0.00	Exposed
Hallway upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	20.3	N/A	0.15	Timber (12mm)
Hallway upper	SUSP-CONC-150-LINED: Suspended Concrete Slab Floor (150mm) - Lined Below	4.5	N/A	1.10	Timber (12mm)
Hallway upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.1	N/A	1.10	Timber (12mm)
Kit / Dining	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	92.7	N/A	1.10	Timber (12mm)
Laundry	CSOG-150: Concrete Slab on Ground (150mm)	17.0	N/A	1.30	Tile (8mm)
Lift	CSOG-150: Concrete Slab on Ground (150mm)	2.6	N/A	1.30	Timber (12mm)
Multipurpose	CSOG-150: Concrete Slab on Ground (150mm)	29.1	N/A	1.30	Carpet
Pantry	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	9.5	N/A	0.15	Timber (12mm)
Pantry	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.2	N/A	1.10	Timber (12mm)
Plant	CSOG-150: Concrete Slab on Ground (150mm)	4.0	N/A	0.00	Exposed
Study	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	17.3	N/A	0.15	Timber (12mm)
W/C	CSOG-150: Concrete Slab on Ground (150mm)	5.3	N/A	1.30	Tile (8mm)
WIR 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	14.1	N/A	0.15	Carpet
WIR 1	SUSP-CONC-150-LINED: Suspended Concrete Slab Floor (150mm) - Lined Below	6.3	N/A	1.10	Carpet
WIR 1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.3	N/A	1.10	Carpet
WIR 1.1	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.1	N/A	1.10	Carpet

* Refer to glossary.

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
WIR 1.1	SUSP-CONC-150-LINED: Suspended Concrete Slab Floor (150mm) - Lined Below	10.1	N/A	1.10	Carpet
WIR 2	CSOG-150: Concrete Slab on Ground (150mm)	6.8	N/A	1.30	Carpet
WIR 3	CSOG-150: Concrete Slab on Ground (150mm)	6.1	N/A	1.30	Carpet
WIR 4	CSOG-150: Concrete Slab on Ground (150mm)	5.3	N/A	1.30	Carpet
Wc Upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	4.4	N/A	0.15	Tile (8mm)
Wc Upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	0.1	N/A	1.10	Timber (12mm)
foyer upper	SUSP-CONC-150: Suspended Concrete Slab Floor (150mm)	35.8	N/A	0.15	Timber (12mm)
hallway nth	CSOG-150: Concrete Slab on Ground (150mm)	17.6	N/A	1.30	Timber (12mm)
hallway sth	CSOG-150: Concrete Slab on Ground (150mm)	26.9	N/A	1.30	Timber (12mm)

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Ldry Upper	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Bed 1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Bed 4 entry	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Bedroom 3	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Bedroom 4	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Cellar	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Ens 1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Ensuite 3	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Ensuite 4	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Foyer grd	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Games	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Garage	SLAB-150-EXP-01: Concrete Slab (150mm) with Exposed Concrete Ceiling	0.00	No
Hallway upper	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes

* Refer to glossary.

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
Kit / Dining	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Lift	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Multipurpose	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Pantry	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
Plant	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	No
Study	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
WIR 1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
WIR 1.1	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
WIR 3	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
WIR 4	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
Wc Upper	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
foyer upper	FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	4.00	Yes
hallway nth	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No
hallway sth	SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	2.30	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Ldry Upper	2	Downlight	200	Sealed
Ldry Upper	1	Exhaust Fan	250	Sealed
Bed 1	5	Downlight	200	Sealed
Bed 2	6	Downlight	200	Sealed
Bed 4 entry	2	Downlight	200	Sealed
Bedroom 3	5	Downlight	200	Sealed
Bedroom 4	6	Downlight	200	Sealed
Cellar	3	Downlight	200	Sealed
Coats	2	Downlight	200	Sealed

* Refer to glossary.

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
Ens 1	5	Downlight	200	Sealed
Ens 1	1	Exhaust Fan	350	Sealed
Ens 2	3	Downlight	200	Sealed
Ens 2	1	Exhaust Fan	350	Sealed
Ensuite 3	3	Downlight	200	Sealed
Ensuite 3	1	Exhaust Fan	350	Sealed
Ensuite 4	3	Downlight	200	Sealed
Ensuite 4	1	Exhaust Fan	350	Sealed
Foyer grd	5	Downlight	200	Sealed
Games	13	Downlight	200	Sealed
Hallway upper	7	Downlight	200	Sealed
Kit / Dining	22	Downlight	200	Sealed
Kit / Dining	1	Exhaust Fan	250	Sealed
Kit / Dining	1	Chimney	350	Sealed
Laundry	4	Downlight	200	Sealed
Laundry	1	Exhaust Fan	250	Sealed
Lift	1	Downlight	200	Sealed
Lift upper	1	Downlight	200	Sealed
Multipurpose	8	Downlight	200	Sealed
Pantry	1	Downlight	200	Sealed
Plant	1	Downlight	200	Sealed
Study	4	Downlight	200	Sealed
W/C	2	Downlight	200	Sealed
W/C	1	Exhaust Fan	250	Sealed
WIR 1	4	Downlight	200	Sealed
WIR 1.1	2	Downlight	200	Sealed

* Refer to glossary.

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
WIR 2	2	Downlight	200	Sealed
WIR 3	2	Downlight	200	Sealed
WIR 4	2	Downlight	200	Sealed
Wc Upper	1	Downlight	200	Sealed
Wc Upper	1	Exhaust Fan	250	Sealed
foyer upper	7	Downlight	200	Sealed
hallway nth	5	Downlight	200	Sealed
hallway sth	6	Downlight	200	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
Bed 1	1	1300
Bedroom 3	1	1300
Bedroom 4	1	1300
Games	1	1400
Kit / Dining	2	1500
Multipurpose	1	1400
Study	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
FLAT-01: Flat Framed / Skillion Metal Roof & Flat PB Ceiling	1.30	0.50	Medium
SLAB-150-EXP-01: Concrete Slab (150mm) with Exposed Concrete Ceiling	0.00	0.50	Medium
SLAB-200-CEIL-01: Concrete Slab (200mm) with Suspended PB Ceiling	0.00	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)
None				

* Refer to glossary.

Appliance *schedule*

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

Cooling system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Heating system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Hot water system

Type	Fuel type	Hot Water CER Zone	Minimum efficiency / STC	Assessed daily load [litres]
No Whole of Home Data				

Pool / spa equipment

Type	Fuel type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data			

Onsite Renewable Energy *schedule*

Type	Orientatation	Generation Capacity [kW]
No Whole of Home Data		

Battery *schedule*

Type	Storage Capacity [kWh]
No Whole of Home Data	

* 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

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
AFRC	Australian Fenestration Rating Council
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.
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.
COP	Coefficient of performance
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 - suburban	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category - protected	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shading feature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
National Construction Code (NCC) Class	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
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.
Solar heat gain coefficient (SHGC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
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 Regulatory
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, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
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	a 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.