Nationwide House Energy Rating Scheme NatHERS Certificate No. 0006005847

Generated on 11 May 2021 using BERS Pro v4.4.0.3 (3.21)

Property

Address 122 Clontarf Street, Balgowlah, NSW

2093

Lot/DP 174/873902

NCC Class'

Type **New Dwelling**

Plans

Main Plan **BROCK H0451**

Prepared by

Construction and environn

Assessed floor ar	ea (m²)*	Exposure Type
Conditioned*	229.0	Suburban
Unconditioned*	53.0	NatHERS climate zone
Total	282.0	56
Garage	33.0	



Name lan Fry

Business name Frys Energywise

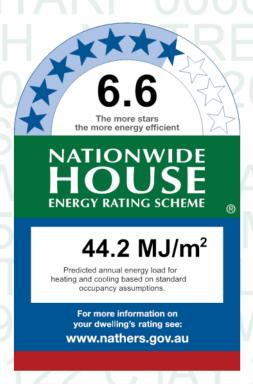
Email comply@frysenergywise.com.au

Phone 02 9899 2825 Accreditation No. DMN/12/1441

Assessor Accrediting Organisation

Design Matters National

Declaration of interest Declaration completed: no conflicts



Thermal performance

Heating Cooling 23.7 MJ/m^2 MJ/m^2

About the rating

NatHERS software models the expected thermal energy loads using information about the design and construction, climate and common patterns of household use. The software does not take into account appliances, apart from the airflow impacts from ceiling fans.

Verification

To verify this certificate, scan the QR code or visit



hstar.com.au/QR/Generate?

p=QzSdEoYyF.

When using either link, ensure you are visiting hstar.com.au

National Construction Code (NCC) requirements

The NCC's requirements for NatHERS-rated houses are detailed in 3.12.0(a)(i) and 3.12.5 of the NCC Volume Two. For apartments the requirements are detailed in J0.2 and J5 to J8 of the NCC Volume One.

In NCC 2019, these requirements include minimum star ratings and separate heating and cooling load limits that need to be met by buildings and apartments through the NatHERS assessment. Requirements additional to the NatHERS assessment that must also be satisfied include, but are not limited to: insulation installation methods, thermal breaks, building sealing, water heating and pumping, and artificial lighting requirements. The NCC and NatHERS Heating and Cooling Load Limits (Australian Building Codes Board Standard) are available at www.abcb.gov.au.

State and territory variations and additions to the NCC may also apply.



Certificate check

Ensure the dwelling is designed and then built as per the NatHERS Certificate. While you need to check the accuracy of the whole Certificate, the following spot check covers some important items impacting the dwelling's rating.

Genuine certificate

Does this Certificate match the one available at the web address or QR code in the verification box on the front page? Does the set of NatHERS-stamped plans for the dwelling have a Certificate number on the stamp that matches this Certificate?

Ceiling penetrations*

Does the 'number' and 'type' of ceiling penetrations (e.g. downlights, exhaust fans, etc) shown on the stamped plans or installed, match what is shown in this Certificate?

Windows

Does the installed window meet the substitution tolerances (SHGC and U-value) and window type, of the window shown on this Certificate?

Apartment entrance doors

Does the 'External Door Schedule' show apartment entrance doors? Please note that an "external door" between the modelled dwelling and a shared space, such as an enclosed corridor or foyer, should not be included in the assessment (because it overstates the possible ventilation) and would invalidate the Certificate.

Exposure*

Has the appropriate exposure level (terrain) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".

Provisional* values

Have provisional values been used in the assessment and, if so, noted in "additional notes" below?

Additional notes

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

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

coverings and external colours, without requiring an amended certificate.

Window and glazed door type and performance

Default* windows

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
WIII IGOW ID	Description	U-value*	31100	SHGC lower limit	SHGC upper limit	
No Data Availal	ole.					

Custom* windows

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	SIGC	SHGC lower limit	SHGC upper limit	
WID-003-01 A	WID-003-01 A Al Residential Double Hung Window SG 3Clr	6.2	0.74	0.70	0.78	
WID-002-01 A	WID-002-01 A AI Residential Bi fold Door SG 4mm Clear	6.2	0.62	0.59	0.65	

* Refer to glossary.

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Custom* windows

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	SIGC	SHGC lower limit	SHGC upper limit	
WID-006-01 A	WID-006-01 A AI Residential Sliding Window SG 3mm Clear	6.4	0.76	0.72	0.80	
WID-012-04 A	WID-012-04 A Aluminium Awning Window SG 4mmClr	6.4	0.64	0.61	0.67	
WID-005-01 A	WID-005-01 A AI Residential Internal Sliding Door SG 4mm Clear	6.3	0.72	0.68	0.76	

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Garage	WID-003-01 A	n/a	900	900	n/a	45	N	No
Laundry	WID-002-01 A	n/a	2340	820	n/a	90	W	No
Guest	WID-006-01 A	n/a	1200	2200	n/a	40	N	No
Powder	WID-012-04 A	n/a	600	600	n/a	90	N	No
Kitchen/Family	WID-006-01 A	n/a	2000	2400	n/a	33	N	No
Kitchen/Family	WID-003-01 A	n/a	1500	600	n/a	45	N	No
Kitchen/Family	WID-003-01 A	n/a	1500	600	n/a	45	N	No
Kitchen/Family	WID-005-01 A	n/a	2400	3600	n/a	60	E	No
Kitchen/Family	WID-006-01 A	n/a	600	2400	n/a	40	E	No
Kitchen/Family	WID-012-04 A	n/a	600	2200	n/a	00	S	No
Media	WID-012-04 A	n/a	2000	1200	n/a	30	S	No
Media	WID-012-04 A	n/a	2000	1200	n/a	30	S	No
Entry	WID-002-01 A	n/a	2340	920	n/a	90	S	No
Entry	WID-012-04 A	n/a	600	1000	n/a	00	S	No
Bed 2	WID-003-01 A	n/a	1200	600	n/a	45	Е	No
Bed 2	WID-006-01 A	n/a	1200	2200	n/a	40	N	No
Bed 3	WID-006-01 A	n/a	1200	2200	n/a	40	Е	No
Bed 3	WID-003-01 A	n/a	1200	600	n/a	45	S	No
Sitting	WID-012-04 A	n/a	1200	1200	n/a	00	Е	No
Sitting	WID-012-04 A	n/a	900	1200	n/a	90	S	No
Sitting	WID-012-04 A	n/a	900	1200	n/a	90	S	No
Sitting	WID-012-04 A	n/a	900	1200	n/a	90	S	No
Bed 4	WID-012-04 A	n/a	1800	1200	n/a	30	S	No
Bed 4	WID-012-04 A	n/a	1800	1200	n/a	30	S	No
Master Bed	WID-003-01 A	n/a	1200	600	n/a	45	W	No
Master Bed	WID-003-01 A	n/a	1200	600	n/a	45	W	No
Master Bed	WID-006-01 A	n/a	1200	2200	n/a	40	N	No
Ensuite	WID-006-01 A	n/a	600	1200	n/a	45	N	No



Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
WC Ensuite	WID-012-04 A	n/a	600	600	n/a	90	N	No
Bath	WID-006-01 A	n/a	600	1200	n/a	45	N	No

Roof window type and performance

Default* roof windows

Window ID	Window ID Window Maximum SHGC*	Substitution tolerance ranges			
WITHOUT ID	Description	U-value*	знас	SHGC lower limit	SHGC upper limit
No Data Availal	nle				

Custom* roof windows

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
WITIGOW ID	Description	U-value*	SIGC	SHGC lower limit	SHGC upper limit
No Data Availa	ble				

Roof window schedule

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orientation	Outdoor shade	Indoor shade	
No Data Ava	ailable								_

Skylight type and performance

Skylight ID	Skylight description	

No Data Available

Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m²) Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Av	ailable						

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage	2400	5320	90	S

External wall type

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Brick Veneer	0.50	Medium	No insulation	No
EW-2	Single Skin Brick	0.50	Medium	No insulation	No



Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-3	Brick Veneer	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-4	Brick Veneer	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-5	Fibro Cavity Panel Direct Fix	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-6	Fibro Cavity Panel Direct FixZ:8W2:0	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-7	Fibro Cavity Panel Direct FixZ:8W2:6	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-8	Fibro Cavity Panel Direct FixZ:9W2:0	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-9	Fibro Cavity Panel Direct FixZ:9W2:1	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-10	Fibro Cavity Panel Direct FixZ:10W2:2	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-11	Fibro Cavity Panel Direct FixZ:10W2:3	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-12	Fibro Cavity Panel Direct FixZ:12W2:1	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-13	Fibro Cavity Panel Direct FixZ:13W2:0	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-14	Fibro Cavity Panel Direct FixZ:13W2:1	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-15	Fibro Cavity Panel Direct FixZ:14W2:0	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-16	Fibro Cavity Panel Direct FixZ:15W2:0	0.50	Medium	Anti-glare foil with bulk no gap R2	No
EW-17	Fibro Cavity Panel Direct FixZ:15W2:1	0.50	Medium	Anti-glare foil with bulk no gap R2	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Garage	EW-1	3629	600	E	6000	YES
Garage	EW-2	3630	600	S	2100	NO
Garage	EW-2	3629	5500	S	600	NO
Garage	EW-1	3629	5500	W	600	NO
Garage	EW-1	3629	1900	N	600	YES
Laundry	EW-3	3286	1790	W	100	YES
Guest	EW-3	3286	3095	W	100	NO
Guest	EW-3	3286	4295	N	100	NO
Powder	EW-3	3286	1790	N	100	YES
Kitchen/Family	EW-3	2600	900	W	100	YES
Kitchen/Family	EW-3	2600	3400	N	100	NO
Kitchen/Family	EW-3	2600	300	E	100	YES
Kitchen/Family	EW-3	2600	4000	N	100	YES
Kitchen/Family	EW-3	2600	4800	E	100	NO
Kitchen/Family	EW-3	2400	4800	E	100	NO
Kitchen/Family	EW-3	2400	3395	S	100	YES
Media	EW-3	2600	1900	E	100	YES
Media	EW-3	2600	3500	S	100	NO
Media	EW-3	2601	500	S	1600	NO
Media	EW-3	2600	1100	W	8600	YES



Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Entry	EW-3	3286	1890	S	2700	YES
Bed 2	EW-4	250	4795	E	0	NO
Bed 2	EW-6	2200	4795	E	600	NO
Bed 2	EW-4	250	3895	N	0	NO
Bed 2	EW-7	2200	3895	N	600	NO
Bed 3	EW-4	250	4795	E	0	NO
Bed 3	EW-8	2200	4795	E	600	NO
Bed 3	EW-4	250	3400	S	0	YES
Bed 3	EW-9	2200	3400	S	600	YES
Sitting	EW-4	250	1895	E	0	YES
Sitting	EW-10	2200	1895	E	600	YES
Sitting	EW-4	250	5900	S	0	NO
Sitting	EW-11	2200	5900	S	600	NO
Sitting	EW-5	2450	500	W	4800	YES
Bed 4	EW-5	2450	4195	S	600	YES
Bed 4	EW-5	2450	3095	W	600	NO
WIR Master	EW-5	2450	1195	W	600	NO
WIR Master	EW-4	250	895	W	0	NO
WIR Master	EW-12	2200	895	W	600	NO
Master Bed	EW-4	250	5195	W	0	NO
Master Bed	EW-13	2200	5195	W	600	NO
Master Bed	EW-4	250	3695	N	0	NO
Master Bed	EW-14	2200	3695	N	600	NO
Ensuite	EW-4	250	2090	N	0	NO
Ensuite	EW-15	2200	2090	N	600	NO
WC Ensuite	EW-4	250	295	N	0	YES
WC Ensuite	EW-16	2200	295	N	1200	YES
WC Ensuite	EW-4	250	600	W	0	YES
WC Ensuite	EW-17	2200	600	W	6700	YES
WC Ensuite	EW-5	2450	795	N	600	NO
Bath	EW-5	2450	2690	N	600	NO

Internal wall type

Wall ID	Wall type	Area (m²)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		30.00	Bulk Insulation, No Air Gap R2
IW-2 - Cavity wall, direct fix plasterboard, single gap		207.00	No insulation



Floor type

Location	Construction	Area Sub-floor (m²) ventilation	Added insulation (R-value)	Covering
Garage	Waffle pod slab 225 mm 100mm	33.10 None	Waffle Pod 225mm	Bare
Laundry	Waffle pod slab 300 mm 100mm	5.20 None	Waffle Pod 300mm	Ceramic Tiles 8mm
Guest	Waffle pod slab 300 mm 100mm	13.00 None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Powder	Waffle pod slab 300 mm 100mm	5.20 None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Family	Waffle pod slab 300 mm 100mm	65.60 None	Waffle Pod 300mm	Ceramic Tiles 8mm
Media	Waffle pod slab 300 mm 100mm	14.80 None	Waffle Pod 300mm	Carpet+Rubber Underlay 18mm
Entry	Waffle pod slab 300 mm 100mm	12.10 None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bed 2/Kitchen/Family	Timber Above Plasterboard 19mm	17.40	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Bed 3/Kitchen/Family	Timber Above Plasterboard 19mm	16.40	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Bed 3/Media	Timber Above Plasterboard 19mm	0.90	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Sitting/Media	Timber Above Plasterboard 19mm	13.90	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Sitting/Entry	Timber Above Plasterboard 19mm	5.00	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Sitting	Suspended Timber Floor 19mm	2.00 Totally Open	No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Garage	Timber Above Plasterboard 19mm	12.70	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
WIR Master/Garage	Timber Above Plasterboard 19mm	8.30	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Master Bed/Garage	Timber Above Plasterboard 19mm	1.20	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Master Bed/Laundry	Timber Above Plasterboard 19mm	5.50	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Master Bed/Guest	Timber Above Plasterboard 19mm	11.20	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Master Bed/Entry	Timber Above Plasterboard 19mm	1.90	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Ensuite/Guest	Timber Above Plasterboard 19mm	1.80	Bulk Insulation R2	Ceramic Tiles 8mm
Ensuite/Powder	Timber Above Plasterboard 19mm	4.80	Bulk Insulation R2	Ceramic Tiles 8mm
Ensuite/Kitchen/Family	Timber Above Plasterboard 19mm	1.20	Bulk Insulation R2	Ceramic Tiles 8mm
WC Ensuite/Kitchen/Family	Timber Above Plasterboard 19mm	1.50	Bulk Insulation R2	Ceramic Tiles 8mm
Bath/Kitchen/Family	Timber Above Plasterboard 19mm	9.50	Bulk Insulation R2	Ceramic Tiles 8mm
Passage/Kitchen/Family	Timber Above Plasterboard 19mm	16.90	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Passage/Entry	Timber Above Plasterboard 19mm	5.60	Bulk Insulation R2	Carpet+Rubber Underlay 18mm
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Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage	Plasterboard	No insulation	No
Garage	Timber Above Plasterboard	Bulk Insulation R2	No
Laundry	Timber Above Plasterboard	Bulk Insulation R2	No
Guest	Timber Above Plasterboard	Bulk Insulation R2	No
Powder	Timber Above Plasterboard	Bulk Insulation R2	No
Kitchen/Family	Plasterboard	Bulk Insulation R4.1	No
Kitchen/Family	Timber Above Plasterboard	Bulk Insulation R2	No



Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Media	Timber Above Plasterboard	Bulk Insulation R2	No
Entry	Timber Above Plasterboard	Bulk Insulation R2	No
Bed 2	Plasterboard	Bulk Insulation R4.1	No
Bed 3	Plasterboard	Bulk Insulation R4.1	No
Sitting	Plasterboard	Bulk Insulation R4.1	No
Bed 4	Plasterboard	Bulk Insulation R4.1	No
WIR Master	Plasterboard	Bulk Insulation R4.1	No
Master Bed	Plasterboard	Bulk Insulation R4.1	No
Ensuite	Plasterboard	Bulk Insulation R4.1	No
WC Ensuite	Plasterboard	Bulk Insulation R4.1	No
Bath	Plasterboard	Bulk Insulation R4.1	No
Passage	Plasterboard	Bulk Insulation R4.1	No

Ceiling penetrations*

Location	Quantity	Туре	Diameter (mm²)	Sealed/unsealed
Powder	1	Exhaust Fans	0	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
WC Ensuite	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.85	Dark
Corrugated Iron	Bulk, Reflective Side Down, No Air Gap Above R1.3	0.85	Dark
Roof Tiles	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.85	Dark



Explanatory notes

About this report

A NatHERS rating is a comprehensive, dynamic computer modelling evaluation of a home, using the floorplans, elevations and specifications to estimate an energy load. It addresses the building layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings), but does not cover the water or energy use of appliances or energy production of solar panels.

Ratings are based on a unique climate zone where the home is located and are generated using standard assumptions, including occupancy patterns and thermostat settings. The actual energy consumption of a home may vary significantly from the predicted energy load, as the assumptions used in the rating will not match actual usage patterns. For example, the number of occupants and personal heating or cooling preferences will vary.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparing different dwelling designs and to demonstrate that the design meets the energy efficiency requirements in the National Construction Code. Homes that are energy efficient use less energy, are warmer on cool days, cooler on hot days and cost less to run. The higher the star rating the more thermally efficient the dwelling is.

Accredited assessors

To ensure the NatHERS Certificate is of a high quality, always use an accredited or licenced assessor. NatHERS accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

Australian Capital Territory (ACT) licensed assessors may only produce assessments for regulatory purposes using software for which they have a licence endorsement. Licence endorsements can be confirmed on the ACT licensing register

AAOs have specific quality assurance processes in place, and continuing professional development requirements, to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any ongoing training requirements.

Any questions or concerns about this report should be directed to the assessor in the first instance. If the assessor is unable to address these questions or concerns, the AAO specified on the front of this certificate should be contacted.

Disclaimer

The format of the NatHERS Certificate was developed by the NatHERS Administrator. However the content of each individual certificate is entered and created by the assessor to create a NatHERS Certificate. It is the responsibility of the assessor who prepared this certificate to use NatHERS accredited software correctly and follow the NatHERS Technical Notes to produce a NatHERS Certificate.

The predicted annual energy load in this NathERS Certificate is an estimate based on an assessment of the building by the assessor. It is not a prediction of actual energy use, but may be used to compare how other buildings are likely to perform when used in a similar way.

Information presented in this report relies on a range of standard assumptions (both embedded in NatHES accredited software and made by the assessor who prepared this report), including assumptions about occupancy, indoor air temperature and local climate

Not all assumptions that may have been made by the assessor while using the Nath—RS accredited software tool are presented in this report and further details or data files may be available from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the floor area in the design documents.
Ceiling penetrations	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, chimneys and flues. Excludes
Cenning perietrations	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
Conditioned	will include garages.
Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
Default windows	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
Entrance door	these signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ventilated corridor in a Class 2 building.
Exposure category – exposed	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
	terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with scattered
Exposure category – open	sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
Exposure category – suburban	terrain with numerous, closely spaced obstructions below 10me.g. suburban housing, heavily vegetated bushland areas.
Exposure category – protected	terrain with numerous, closely spaced obstructions over 10 me.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	the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC Class 1, 2 or 4
(NOC) Class	buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
Opening percentage	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
	an assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, a provisional
Provisional value	value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note and can be found at
	www.nathers.gov.au
Reflective wrap (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
Roof window	for Nathers this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic space, and
NOOI WIIIGOW	generally does not have a diffuser.
Shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Salar hast gain apoliticiant (SLCC)	the fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and subsequently released
Solar heat gain coefficient (SHGC)	inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar heat it transmits.
Skylight (also known as roof lights)	for Nathers this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
Unconditioned	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features	provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
	Colora, Caro, Walle in the Sellining (Willig Walley), Fortices, Other Sellinings, Vogetation (protected or linear hallenge trees).