

# Nationwide House Energy Rating Scheme

## NatHERS Certificate No. 0005735527

Generated on 01 Mar 2021 using BERS Pro v4.4.0.2 (3.21)

### Property

**Address** 26 Riverview Road , Avalon Beach , NSW  
, 2107

**Lot/DP** 5/28164

**NCC Class\*** 1A

**Type** New Dwelling

### Plans

**Main Plan** Mr Michael Privitera 05/02/2021

**Prepared by** FUTURE FLIP

### Construction and environment

<b>Assessed floor area (m<sup>2</sup>)*</b>	<b>Exposure Type</b>
Conditioned* 282.0	Suburban
Unconditioned* 90.0	<b>NatHERS climate zone</b>
Total 373.0	56
Garage 40.0	



### Accredited assessor

**Name** Abbas Chatfirouzeh

**Business name** SYMEC Group Pty. Ltd. T/As SDS Engineering

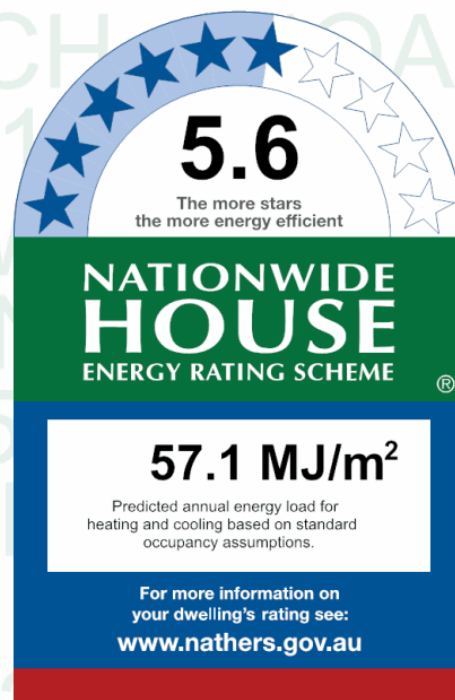
**Email** abbas@sdsengineering.com.au

**Phone** (02) 9098 4729

**Accreditation No.** 101512

**Assessor Accrediting Organisation** ABSA

**Declaration of interest** Declaration completed: no conflicts



### Thermal performance

<b>Heating</b>	<b>Cooling</b>
<b>31.8</b>	<b>25.4</b>
<b>MJ/m<sup>2</sup></b>	<b>MJ/m<sup>2</sup></b>

### 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=GPeqHXuF](http://hstar.com.au/QR/Generate?p=GPeqHXuF). When using either link, ensure you are visiting [hstar.com.au](http://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](http://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

## Window and glazed door *type and performance*

### Default\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

### Custom\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
BRD-041-10 A	BRD-041-10 A SIG Fixed Lite Externally Glazed (125mm) SG 638CP	4.3	0.45	0.43	0.47
BRD-033-11 A	BRD-033-11 A ESS Sliding Door (80mm) SG 6.38CPNtrl	4.3	0.45	0.43	0.47
BRD-043-06 A	BRD-043-06 A SIG Louvre Window (125mm) SG 6EA	4.5	0.52	0.49	0.55
BRD-001-15 A	BRD-001-15 A ESS Sliding Window (52mm) SG 638CP	4.6	0.46	0.44	0.48

## Custom\* windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
BRD-101-23 A	BRD-101-23 A Signature Sliding Door 100TB DG DuoUltraClr L1_638Clr-12-6mm	2.2	0.43	0.41	0.45
BRD-010-12 A	BRD-010-12 A ESS Casement Window SG 638CP	5.6	0.33	0.31	0.35

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
LDRY	BRD-041-10 A	n/a	1004	3686	n/a	00	S	No
KIT/LIV/DIN	BRD-041-10 A	n/a	1780	685	n/a	00	N	No
KIT/LIV/DIN	BRD-041-10 A	n/a	1780	685	n/a	00	N	No
KIT/LIV/DIN	BRD-033-11 A	n/a	2400	3400	n/a	59	E	No
KIT/LIV/DIN	BRD-041-10 A	n/a	2400	2160	n/a	00	E	No
KIT/LIV/DIN	BRD-033-11 A	n/a	2400	3500	n/a	49	E	No
KIT/LIV/DIN	BRD-041-10 A	n/a	2400	1050	n/a	00	E	No
KIT/LIV/DIN	BRD-041-10 A	n/a	1004	4300	n/a	00	S	No
STUDY	BRD-041-10 A	n/a	2090	1295	n/a	00	N	No
BATH	BRD-043-06 A	n/a	2200	600	n/a	90	N	No
BED	BRD-033-11 A	n/a	2200	2980	n/a	32	W	No
BED	BRD-001-15 A	n/a	857	2410	n/a	42	N	No
KIT/LIV/DIN	BRD-041-10 A	n/a	2700	1223	n/a	00	W	No
BED1	BRD-001-15 A	n/a	1029	2410	n/a	42	N	No
BED1	BRD-033-11 A	n/a	2200	2600	n/a	32	W	No
BATH	BRD-043-06 A	n/a	2200	600	n/a	90	N	No
LOUNGE	BRD-041-10 A	n/a	1580	685	n/a	00	N	No
LOUNGE	BRD-041-10 A	n/a	1580	685	n/a	00	N	No
LOUNGE	BRD-101-23 A	n/a	2300	2980	n/a	31	E	No
LOUNGE	BRD-010-12 A	n/a	2196	821	n/a	90	E	No
ENTRY VOID	BRD-041-10 A	n/a	1670	2260	n/a	00	W	No
KIT VOID	BRD-041-10 A	n/a	2240	2160	n/a	00	E	No
BED3	BRD-033-11 A	n/a	2200	2980	n/a	31	E	No
BED2	BRD-001-15 A	n/a	1029	2410	n/a	42	S	No
ENS MAS BED	BRD-043-06 A	n/a	1900	850	n/a	90	S	No
MAS BED	BRD-041-10 A	n/a	2000	910	n/a	00	S	No
MAS BED	BRD-033-11 A	n/a	2300	4000	n/a	49	W	No

## Roof window type and performance

### Default\* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

### Custom\* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
No Data Available					

## Roof window schedule

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

## Skylight type and performance

Skylight ID	Skylight description
GEN-04-008a	Double-glazed clear, Timber and Aluminium Frame

## Skylight schedule

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m <sup>2</sup> )	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
BED1	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
BED1	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
BATH	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
LOUNGE	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
LOUNGE	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
LOUNGE	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
LOUNGE	GEN-04-008a	n/a	150	1.00	N	None	No	0.50
LOUNGE	GEN-04-008a	n/a	150	1.00	E	None	No	0.50
ENTRY VOID	GEN-04-008a	n/a	150	1.00	W	None	No	0.50
KIT VOID	GEN-04-008a	n/a	150	1.30	E	None	Yes	0.50
KIT VOID	GEN-04-008a	n/a	150	1.30	E	None	Yes	0.50
BED3	GEN-04-008a	n/a	150	1.30	S	None	Yes	0.50
BED2	GEN-04-008a	n/a	150	1.30	S	None	Yes	0.50
ENS MAS BED	GEN-04-008a	n/a	150	1.30	S	None	Yes	0.50
MAS BED	GEN-04-008a	n/a	150	1.30	S	None	Yes	0.50
MAS BED	GEN-04-008a	n/a	150	1.30	S	None	Yes	0.50

## External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
KIT/LIV/DIN	2700	1000	90	W

## External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-1	Fibro Cavity Panel Direct Fix	0.30	Light	Bulk Insulation 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	2700	2800	N	6600	YES
GARAGE	EW-1	2700	6995	S	0	NO
GARAGE	EW-1	2700	5800	W	0	NO
LDRY	EW-1	2700	3790	S	0	NO
KIT/LIV/DIN	EW-1	2700	6695	N	75	NO
KIT/LIV/DIN	EW-1	2700	12400	E	5100	NO
KIT/LIV/DIN	EW-1	2700	6695	S	0	NO
STUDY	EW-1	2700	2590	N	50	NO
BATH	EW-1	2700	1990	N	25	NO
BED	EW-1	2700	1000	S	8200	YES
BED	EW-1	2700	4200	W	1800	NO
BED	EW-1	2700	4395	N	25	NO
KIT/LIV/DIN	EW-1	2700	2390	W	2800	YES
BED1	EW-1	2700	3795	N	600	NO
BED1	EW-1	2700	3495	W	1500	NO
BATH	EW-1	2700	4190	N	600	NO
LOUNGE	EW-1	2700	6695	N	600	NO
LOUNGE	EW-1	2700	3495	E	1600	NO
LOUNGE	EW-1	2700	1100	N	6500	YES
LOUNGE	EW-1	2700	1095	E	3300	NO
ENTRY VOID	EW-1	2700	2390	W	1500	YES
KIT VOID	EW-1	2700	2390	E	1600	YES
BED3	EW-1	2700	4695	E	3300	NO
BED3	EW-1	2700	4095	S	600	NO
BED2	EW-1	2700	3990	S	600	NO
ENS MAS BED	EW-1	2700	4090	S	600	NO
MAS BED	EW-1	2700	5095	S	600	NO

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
MAS BED	EW-1	2700	5800	W	1900	NO
MAS BED	EW-1	2700	1500	N	6500	YES

## Internal wall type

Wall ID	Wall type	Area (m <sup>2</sup> )	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		342.00	No insulation

## Floor type

Location	Construction	Area (m <sup>2</sup> )	Sub-floor ventilation	Added insulation (R-value)	Covering
GARAGE	Waffle pod slab 225 mm 100mm	40.20	None	Waffle Pod 225mm	Bare
LDRY	Waffle pod slab 225 mm 100mm	8.70	None	Waffle Pod 225mm	Ceramic Tiles 8mm
GARAGE STORAGE	Waffle pod slab 225 mm 100mm	6.60	None	Waffle Pod 225mm	Ceramic Tiles 8mm
BUTLER	Waffle pod slab 225 mm 100mm	5.30	None	Waffle Pod 225mm	Ceramic Tiles 8mm
KIT/LIV/DIN	Waffle pod slab 225 mm 100mm	82.50	None	Waffle Pod 225mm	Ceramic Tiles 8mm
STUDY	Waffle pod slab 225 mm 100mm	10.40	None	Waffle Pod 225mm	Ceramic Tiles 8mm
BATH	Waffle pod slab 225 mm 100mm	5.40	None	Waffle Pod 225mm	Ceramic Tiles 8mm
BED	Waffle pod slab 225 mm 100mm	18.10	None	Waffle Pod 225mm	Carpet+Rubber Underlay 18mm
KIT/LIV/DIN	Waffle pod slab 225 mm 100mm	20.90	None	Waffle Pod 225mm	Ceramic Tiles 8mm
BED1/BATH	Timber Above Plasterboard 19mm	0.90		No Insulation	Carpet+Rubber Underlay 18mm
BED1/BED	Timber Above Plasterboard 19mm	11.60		No Insulation	Carpet+Rubber Underlay 18mm
BED1/KIT/LIV/DIN	Timber Above Plasterboard 19mm	0.50		No Insulation	Carpet+Rubber Underlay 18mm
BATH/STUDY	Timber Above Plasterboard 19mm	5.70		No Insulation	Ceramic Tiles 8mm
BATH/BATH	Timber Above Plasterboard 19mm	3.40		No Insulation	Ceramic Tiles 8mm
LOUNGE/KIT/LIV/DIN	Timber Above Plasterboard 19mm	23.00		No Insulation	20/80 Carpet 10mm/Ceramic
LOUNGE/GARAGE STORAGE	Timber Above Plasterboard 19mm	1.80		No Insulation	Ceramic Tiles 8mm
LOUNGE/BUTLER	Timber Above Plasterboard 19mm	1.80		No Insulation	Ceramic Tiles 8mm
LOUNGE/KIT/LIV/DIN	Timber Above Plasterboard 19mm	10.30		No Insulation	Ceramic Tiles 8mm
LOUNGE/STUDY	Timber Above Plasterboard 19mm	3.00		No Insulation	Ceramic Tiles 8mm
LOUNGE/KIT/LIV/DIN	Timber Above Plasterboard 19mm	9.60		No Insulation	Ceramic Tiles 8mm
LOUNGE	Suspended Timber Floor 19mm	1.10	Totally Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
ENTRY VOID /KIT/LIV/DIN	Timber Above Plasterboard 19mm	10.50		No Insulation	Carpet+Rubber Underlay 18mm



Location	Construction	Area (m <sup>2</sup> )	Sub-floor ventilation	Added insulation (R-value)	Covering
KIT VOID/KIT/LV/DIN	Timber Above Plasterboard 19mm	15.40		No Insulation	Carpet+Rubber Underlay 18mm
BED3/KIT/LV/DIN	Timber Above Plasterboard 19mm	12.10		No Insulation	Carpet+Rubber Underlay 18mm
BED3	Suspended Timber Floor 19mm	5.10	Totally Open	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
BED2/LDRY	Timber Above Plasterboard 19mm	0.70		No Insulation	Carpet+Rubber Underlay 18mm
BED2/BUTLER	Timber Above Plasterboard 19mm	0.70		No Insulation	Carpet+Rubber Underlay 18mm
BED2/KIT/LV/DIN	Timber Above Plasterboard 19mm	15.10		No Insulation	Carpet+Rubber Underlay 18mm
ENS MAS BED/GARAGE	Timber Above Plasterboard 19mm	0.80		Bulk Insulation R2	Ceramic Tiles 8mm
ENS MAS BED/LDRY	Timber Above Plasterboard 19mm	8.10		No Insulation	Ceramic Tiles 8mm
ENS MAS BED/GARAGE STORAGE	Timber Above Plasterboard 19mm	2.60		No Insulation	Ceramic Tiles 8mm
ENS MAS BED/BUTLER	Timber Above Plasterboard 19mm	1.80		No Insulation	Ceramic Tiles 8mm
WIR MAS BED/GARAGE	Timber Above Plasterboard 19mm	8.00		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
WIR MAS BED/GARAGE STORAGE	Timber Above Plasterboard 19mm	2.00		No Insulation	Carpet+Rubber Underlay 18mm
WIR MAS BED/BUTLER	Timber Above Plasterboard 19mm	1.30		No Insulation	Carpet+Rubber Underlay 18mm
MAS BED/GARAGE	Timber Above Plasterboard 19mm	22.90		Bulk Insulation R2	Carpet+Rubber Underlay 18mm

## Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
GARAGE	Plasterboard	Bulk Insulation R4	No
GARAGE	Timber Above Plasterboard	Bulk Insulation R2	No
LDRY	Timber Above Plasterboard	No Insulation	No
GARAGE STORAGE	Timber Above Plasterboard	No Insulation	No
BUTLER	Timber Above Plasterboard	No Insulation	No
KIT/LV/DIN	Plasterboard	Bulk Insulation R4	No
KIT/LV/DIN	Timber Above Plasterboard	No Insulation	No
STUDY	Plasterboard	Bulk Insulation R4	No
STUDY	Timber Above Plasterboard	No Insulation	No
BATH	Plasterboard	Bulk Insulation R4	No
BATH	Timber Above Plasterboard	No Insulation	No
BED	Plasterboard	Bulk Insulation R4	No
BED	Timber Above Plasterboard	No Insulation	No
KIT/LV/DIN	Timber Above Plasterboard	No Insulation	No
BED1	Plasterboard	Bulk Insulation R4	No
BATH	Plasterboard	Bulk Insulation R4	No
LOUNGE	Plasterboard	Bulk Insulation R4	No

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
LOUNGE	Plasterboard	Bulk Insulation R4	No
ENTRY VOID	Plasterboard	Bulk Insulation R4	No
KIT VOID	Plasterboard	Bulk Insulation R4	No
BED3	Plasterboard	Bulk Insulation R4	No
BED2	Plasterboard	Bulk Insulation R4	No
ENS MAS BED	Plasterboard	Bulk Insulation R4	No
WIR MAS BED	Plasterboard	Bulk Insulation R4	No
MAS BED	Plasterboard	Bulk Insulation R4	No

## Ceiling penetrations\*

Location	Quantity	Type	Diameter (mm <sup>2</sup> )	Sealed/unsealed
No Data Available				

## Ceiling fans

Location	Quantity	Diameter (mm)
LOUNGE	1	900
KIT VOID	1	900
MAS BED	1	900

## Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.30	Light



## 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 NatHERS 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 NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

## Glossary

<b>Annual energy load</b>	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
<b>Assessed floor area</b>	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.
<b>Ceiling penetrations</b>	features that require a penetration to the ceiling, including downlights, vents, exhaust fans, rangehoods, 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.
<b>Conditioned</b>	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.
<b>Custom windows</b>	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
<b>Default windows</b>	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
<b>Entrance door</b>	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.
<b>Exposure category – exposed</b>	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
<b>Exposure category – open</b>	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).
<b>Exposure category – suburban</b>	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
<b>Exposure category – protected</b>	terrain with numerous, closely spaced obstructions over 10m e.g. city and industrial areas.
<b>Horizontal shading feature</b>	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
<b>National Construction Code (NCC) Class</b>	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 <a href="http://www.abcb.gov.au">www.abcb.gov.au</a> .
<b>Opening percentage</b>	the openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
<b>Provisional value</b>	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 <a href="http://www.nathers.gov.au">www.nathers.gov.au</a>
<b>Reflective wrap</b> (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.
<b>Roof window</b>	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.
<b>Shading device</b>	a device fixed to windows that provides shading e.g. window awnings or screens but excludes eaves.
<b>Shading features</b>	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
<b>Solar heat gain coefficient (SHGC)</b>	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.
<b>Skylight</b> (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.
<b>U-value</b>	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
<b>Unconditioned</b>	a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
<b>Vertical shading features</b>	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).