

Nationwide House Energy Rating Scheme

NatHERS Certificate No. OJRGMTG18

Generated on 6 Apr 2021 using FirstRate5: 5.3.1 (3.21)

Property

Address 15 DOVE LN, WARRIEWOOD, NSW, 2102
Lot/DP 24/1221920
NCC Class* Class 1a
Type New Home

Plans

Main plan 19293 - 03/02/2021
Prepared by ACCURATE

Construction and environment

Assessed floor area (m²)*		Exposure type
Conditioned*	227.4	suburban
Unconditioned*	71.5	NatHERS climate zone
Total	298.9	56, WARRIEWOOD
Garage	57.2	



Accredited assessor

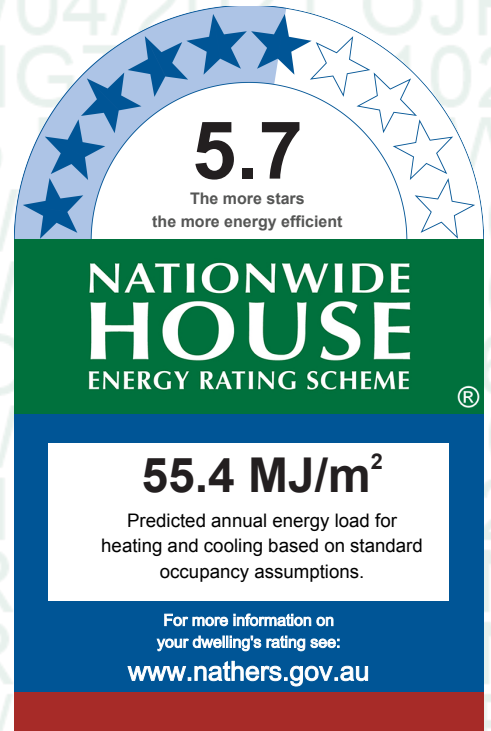
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Declaration of interest Declaration completed: no conflicts

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.



Thermal performance

Heating	Cooling
39.6	15.8
MJ/m²	MJ/m²

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 <https://www.fr5.com.au/QRCodeLanding?PublicId=OJRGMTG18> When using either link, ensure you are visiting www.FR5.com.au.



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

NOTES:

IF RECESSED DOWN LIGHTS WILL BE INSTALLED, IC RATED LED DOWN LIGHTS ARE REQUIRED & FITTED WITH APPROVED COVERS THAT ALLOW BULK INSULATION TO FULLY COVER

ALL EXHAUST FANS TO BE SELF CLOSING. MAX 250mm DIA.

ALL WINDOW FRAMES TO BE WEATHER STRIPPED.

ALL GAPS AND CRACKS SEALED.

ALL INSULATION TO BE INSTALLED IN ACCORDANCE WITH AS.3999

CEILING INSULATION MUST PROTRUDE NO LESS THAN 50mm FROM THE BUILDING

INSULATION ENVELOPE,

R2.5 INSULATION HAS BEEN ALLOWED TO CEILING PERIMETER DUE TO HEIGHT RESTRICTIONS WHERE APPLICABLE.

THIS NOTE IS ONLY APPLICABLE TO FLAT OR PITCHED ROOFS ONLY WITH NO ATTIC SPACE

R VALUE NOMINATED IS CEILING BATT + R1.3 FOIL BLANKET

EXAMPLE

R5.3 WOULD REPRESENT A COMBINATION OF

R4.0 CEILING BATT & R1.3 FOIL BLANKET LOCATED TO THE UNDERSIDE OF THE ROOF.

PLEASE ENSURE A MIN. 50mm SPACING BETWEEN THE CEILING AND ROOF INSULATION

IN ACCORDANCE WITH AS.3999

Window and glazed door *type and performance*

* Refer to glossary.

Default* windows

				Substitution tolerance ranges	
Window ID	Window description	Maximum U-value*	SHGC*	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
TND-017-07 A	Trend AI Sliding Door SG 6.38CPGy	4.28	0.43	0.41	0.45
TND-002-08 A	Trend AI Awning Window SG 638CP	4.93	0.41	0.39	0.43
TND-001-08 A	Trend AI Sliding Window SG 6.38CP	4.59	0.44	0.42	0.46
TND-024-04 A	Trend AI Internal offset glazed window SG 6.38CP	4.12	0.46	0.44	0.48
TND-021-01 A	Trend AI Hinged Door SG 4Clr T	6.03	0.61	0.58	0.64
TND-001-02 A	Trend AI Sliding Window SG 4Clr	6.41	0.72	0.68	0.76
TND-024-01 A	Trend AI Internal offset glazed window SG 5Clr	6.09	0.75	0.71	0.79
TND-002-02 A	Trend AI Awning Window SG 4Clr	6.51	0.65	0.62	0.68
TND-017-01 A	Trend AI Sliding Door SG 4Clr	6.18	0.73	0.69	0.77

Window and glazed door *Schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
KIT/MEALS/FAM	TND-017-07 A	Opening 45	2400	3600	sliding	45.0	W	No
KIT/MEALS/FAM	TND-002-08 A	Opening 49	1200	600	awning	90.0	W	No
KIT/MEALS/FAM	TND-002-08 A	Opening 50	1200	600	awning	90.0	E	No
KIT/MEALS/FAM	TND-001-08 A	Opening 51	600	3000	sliding	45.0	S	No
KIT/MEALS/FAM	TND-017-07 A	Opening 52	2400	3500	sliding	45.0	E	No
KIT/MEALS/FAM	TND-024-04 A	Opening 43	1800	850	fixed	0.0	N	No
KIT/MEALS/FAM	TND-024-04 A	Opening 44	1800	850	fixed	0.0	N	No
LDRY	TND-021-01 A	Opening 46	2400	820	casement	90.0	W	No
PWD	TND-001-02 A	Opening 47	900	700	sliding	45.0	S	No
BUTLERS	TND-024-04 A	Opening 48	700	1800	fixed	0.0	S	No
ENTRY	TND-024-04 A	Opening 42	2000	1000	fixed	0.0	N	No
B4	TND-001-02 A	Opening 59	1200	2400	sliding	45.0	W	No
B4	TND-001-02 A	Opening 60	600	2700	sliding	45.0	N	No
B3	TND-001-02 A	Opening 58	1200	2400	sliding	45.0	W	No
B3	TND-001-02 A	Opening 67	600	2700	sliding	45.0	S	No
BATH	TND-001-02 A	Opening 66	1000	1400	sliding	45.0	S	No
ACTIVITY	TND-001-02 A	Opening 65	600	2700	sliding	45.0	S	No
HALL/STAIR	TND-024-01 A	Opening 63	1500	1500	sliding	45.0	E	No
HALL/STAIR	TND-024-01 A	Opening 62	1500	2700	fixed	0.0	N	No

B2	TND-001-02 A	Opening 61	600	2700	sliding	45.0	N	No
ENS	TND-001-02 A	Opening 64	1000	1200	sliding	45.0	S	No
M.WIR	TND-002-02 A	Opening 57	1200	900	awning	90.0	E	No
M.BED	TND-017-01 A	Opening 55	2100	2400	sliding	45.0	E	No
M.BED	TND-002-02 A	Opening 56	1200	900	awning	90.0	E	No

Roof window *type and performance value*

Default* roof windows

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

Custom* roof windows

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

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Area (m²)	Orientation	Outdoor shade	Indoor shade
No Data Available							

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 Available								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
GARAGE	2200	5410	100.0	E
ENTRY	2100	1200	100.0	E

External wall *type*

Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
1	NRG - Earth Retaining Wall	0.5	Medium		No
2	NRG - Double Brick	0.5	Medium		No
3	NRG - BRICK VENEER	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No
4	NRG - FIBRE CEMENT	0.5	Medium	Glass fibre batt: R2.5 (R2.5)	No

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
STAIR	1	2750	999	W	0	No
STAIR	1	2300	2005	E	0	No
STAIR	2	200	3751	N	0	No
STAIR	1	2550	3751	N	0	No
GARAGE	1	2836	8357	W	0	No
GARAGE	2	986	4608	S	0	No
GARAGE	1	1850	4608	S	0	No
GARAGE	2	1336	1454	E	0	Yes
GARAGE	1	1500	1454	E	0	No
GARAGE	2	1636	3497	S	0	Yes
GARAGE	1	1200	3497	S	0	No
GARAGE	2	2836	5653	E	500	Yes
GARAGE	2	2836	234	E	500	No
GARAGE	2	2836	675	N	0	Yes
GARAGE	1	2000	3627	N	0	No
KIT/MEALS/FAM	3	2750	5241	W	4470	Yes
KIT/MEALS/FAM	3	2750	1454	W	0	Yes
KIT/MEALS/FAM	3	2750	4504	S	0	No
KIT/MEALS/FAM	3	2750	1457	E	0	Yes
KIT/MEALS/FAM	3	2750	3994	S	0	Yes
KIT/MEALS/FAM	3	2750	5596	E	1473	Yes
KIT/MEALS/FAM	3	2750	185	E	1473	No
KIT/MEALS/FAM	3	2750	1395	N	2126	Yes
KIT/MEALS/FAM	3	2750	11052	N	0	No
LDRY	3	2750	2607	W	4470	Yes
LDRY	3	2750	1795	S	0	Yes
PWD	3	2750	1999	S	0	Yes
BUTLERS	3	2750	2143	S	0	Yes
ENTRY	3	3436	1904	E	1218	Yes
ENTRY	3	3436	2159	N	0	No
B4	4	2450	3921	W	668	No
B4	4	2450	4274	N	667	No
B3	4	2450	3931	W	667	No
B3	4	2450	3649	S	667	No
B3.WIR	4	2450	1500	S	670	No
BATH	4	2450	2683	S	667	No
ACTIVITY	4	2450	2998	S	669	No

HALL/STAIR	4	2450	1905	E	667	Yes
HALL/STAIR	4	2450	6831	N	667	No
B2	4	2450	4284	N	671	No
ENS	4	2450	1855	S	668	No
M.WIR	4	2450	4869	S	669	No
M.WIR	4	2450	1670	E	1270	Yes
M.BED	4	2450	4183	E	1270	Yes
M.BED	4	2450	2450	N	667	Yes

Internal wall type

Wall ID	Wall type	Area (m²)	Bulk insulation
1	NRG - Double Brick	3.9	
2	NRG - INS. INT WALL	54.3	Glass fibre batt: R2.5 (R2.5)
3	FR5 - Internal Plasterboard Stud Wall	155	
4	NRG - FIBRE CEMENT	1.3	Glass fibre batt: R2.5 (R2.5)

Floor type

Location	Construction	Area (m²)	Sub-floor ventilation	Added insulation (R-value)	Covering
STAIR	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	4.8	Enclosed	R0.0	Tiles
GARAGE	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	57.2	Enclosed	R0.0	none
KIT/MEALS/FAM	NRG - TIM FLOOR INS	6.6	Enclosed	R2.5	Tiles
KIT/MEALS/FAM	NRG - SUB-FLOOR INS	2.3	Enclosed	R2.5	Tiles
KIT/MEALS/FAM	FR5 - Timber	5.2	Enclosed	R0.0	Tiles
KIT/MEALS/FAM	NRG - TIM FLOOR INS	2.6	Elevated	R2.5	Tiles
KIT/MEALS/FAM	NRG - TIM FLOOR INS	4.3	Enclosed	R2.5	Tiles
KIT/MEALS/FAM	NRG - TIM FLOOR INS	45.3	Enclosed	R2.5	Tiles
KIT/MEALS/FAM	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	32.2	Enclosed	R0.0	Tiles
LDRY	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	4.7	Enclosed	R0.0	Tiles
HALL/LINEN	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	3.1	Enclosed	R0.0	Tiles
PWD	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	1.9	Enclosed	R0.0	Tiles
BUTLERS	FR5 - 225mm waffle pod, 85mm concrete (R0.60)	5.6	Enclosed	R0.0	Tiles
ENTRY	NRG - SUB-FLOOR INS	4.1	Enclosed	R2.5	Tiles
B4	NRG - TIM FLOOR INS	13.3	Elevated	R2.5	Timber
B4	NRG - TIM FLOOR INS	2.8	Elevated	R2.5	Timber
B3	NRG - TIM FLOOR INS	11.7	Elevated	R2.5	Timber
B3	NRG - TIM FLOOR INS	2.6	Elevated	R2.5	Timber
B3.WIR	FR5 - Timber	0.8	Enclosed	R0.0	Timber
B3.WIR	FR5 - Timber	0.3	Enclosed	R0.0	Timber
B3.WIR	NRG - TIM FLOOR INS	0.3	Elevated	R2.5	Timber
B3.WIR	NRG - TIM FLOOR INS	0.8	Elevated	R2.5	Timber
WIL	NRG - TIM FLOOR INS	1	Elevated	R2.5	Timber

WIL	FR5 - Timber	1	Enclosed	R0.0	Timber
BATH	FR5 - Timber	1	Enclosed	R0.0	Tiles
BATH	FR5 - Timber	6.8	Enclosed	R0.0	Tiles
ACTIVITY	FR5 - Timber	1.1	Enclosed	R0.0	Timber
ACTIVITY	FR5 - Timber	7.6	Enclosed	R0.0	Timber
HALL/STAIR	FR5 - Timber	2.9	Enclosed	R0.0	Timber
HALL/STAIR	FR5 - Timber	21.9	Enclosed	R0.0	Timber
HALL/STAIR	NRG - TIM FLOOR INS	1.6	Elevated	R2.5	Timber
B2	FR5 - Timber	1.4	Enclosed	R0.0	Timber
B2	FR5 - Timber	14.3	Enclosed	R0.0	Timber
B2	NRG - TIM FLOOR INS	0.4	Elevated	R2.5	Timber
B2	NRG - TIM FLOOR INS	0	Elevated	R2.5	Timber
ENS	FR5 - Timber	0.7	Enclosed	R0.0	Tiles
ENS	FR5 - Timber	6.9	Enclosed	R0.0	Tiles
M.WIR	FR5 - Timber	7.5	Enclosed	R0.0	Timber
M.WIR	FR5 - Timber	1.7	Enclosed	R0.0	Timber
M.BED	FR5 - Timber	1	Enclosed	R0.0	Timber
M.BED	FR5 - Timber	21.6	Enclosed	R0.0	Timber

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
STAIR	NRG - SUB-FLOOR INS	R2.5	No
STAIR	FR5 - Timber	R0.0	No
GARAGE	NRG - TIM FLOOR INS	R2.5	No
GARAGE	NRG - SUB-FLOOR INS	R2.5	No
GARAGE	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	Plasterboard	R7.3	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	Plasterboard	R2.5	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	Plasterboard	R2.5	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
KIT/MEALS/FAM	FR5 - Timber	R0.0	No
LDRY	FR5 - Timber	R0.0	No
HALL/LINEN	FR5 - Timber	R0.0	No
PWD	FR5 - Timber	R0.0	No
BUTLERS	FR5 - Timber	R0.0	No
ENTRY	Plasterboard	R7.3	No
B4	Plasterboard	R6.0	Yes

* Refer to glossary.

B4	Plasterboard	R2.5	Yes
B3	Plasterboard	R6.0	Yes
B3	Plasterboard	R2.5	Yes
B3.WIR	Plasterboard	R6.0	Yes
B3.WIR	Plasterboard	R6.0	Yes
WIL	Plasterboard	R6.0	Yes
WIL	Plasterboard	R6.0	Yes
BATH	Plasterboard	R2.5	Yes
BATH	Plasterboard	R6.0	Yes
ACTIVITY	Plasterboard	R2.5	Yes
ACTIVITY	Plasterboard	R6.0	Yes
HALL/STAIR	Plasterboard	R2.5	Yes
HALL/STAIR	Plasterboard	R6.0	Yes
HALL/STAIR	Plasterboard	R6.0	Yes
B2	Plasterboard	R2.5	Yes
B2	Plasterboard	R6.0	Yes
ENS	Plasterboard	R2.5	Yes
ENS	Plasterboard	R6.0	Yes
M.WIR	Plasterboard	R6.0	Yes
M.WIR	Plasterboard	R2.5	Yes
M.BED	Plasterboard	R2.5	Yes
M.BED	Plasterboard	R6.0	Yes

Ceiling penetrations*

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
KIT/MEALS/FAM	1	Exhaust Fans	150	Sealed
KIT/MEALS/FAM	1	Heater Flues	150	Unsealed
BATH	1	Exhaust Fans	250	Sealed
ENS	1	Exhaust Fans	250	Sealed

Ceiling fans

Location	Quantity	Diameter (mm)
No Data Available		

Roof type

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.6	Dark
Framed:Flat - Flat Framed (Metal Deck)	0.0	0.5	Medium
Cont:Attic-Continuous	1.3	0.6	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 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

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 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.
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).
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 .
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
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 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.
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.
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).