Nationwide House Energy Rating Scheme NatHERS Certificate No. 0007696487-03

Generated on 15 Jun 2022 using BERS Pro v4.4.1.5 (3.21)

Property

Address 35 Kings Road , Denistone East , NSW ,

2112

Lot/DP 14/15589

NCC Class* 1A

Type New Dwelling

Plans

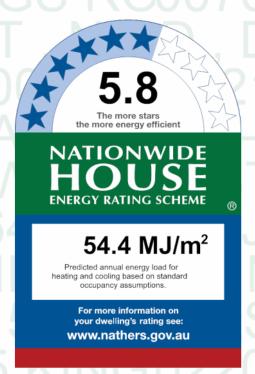
Garage

Main Plan 208565

Prepared by Wisdom Homes

Construction and environment

Assessed floor a	rea (m²)*	Exposure Type
Conditioned*	297.0	Suburban
Unconditioned*	42.0	NatHERS climate
Total	339.0	56



Thermal performance

Heating Cooling 28.9 25.4 MJ/m²



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

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=LwNFsVCTc.

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.

zone

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? Substituted values must be based on the Australian Fenestration Rating Council (AFRC) protocol.

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 the 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.

I have modeled the shading in accordance with NatHERS principles

Window and glazed door type and performance

Default* windows

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
WITIGOW ID	Description	U-value*	31100	SHGC lower limit	SHGC upper limit	
TIM-001-01 W	TIM-001-01 W Timber A SG Clear	5.4	0.56	0.53	0.59	

Custom* windows

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	ЗПОС	SHGC lower limit	SHGC upper limit	
TND-002-01 A	TND-002-01 A Trend Al Awning Window SG 3Clr	6.5	0.66	0.63	0.69	
TND-024-01 A	TND-024-01 A Trend Al Internal offset glazed window SG 5CIr	6.1	0.75	0.71	0.79	
TND-001-12 A	TND-001-12 A Trend Al Sliding Window DG 4/10/4	4.3	0.58	0.55	0.61	

* Refer to glossary.

Generated on 15 Jun 2022 using BERS Pro v4.4.1.5 (3.21) for 35 Kings Road, Denistone East, NSW, 2112



Custom* windows

Window ID	findow ID Window Maximum SI Description U-value*		SHGC*	Substitution tolerance ranges		
WITIGOW ID			SIGC	SHGC lower limit	SHGC upper limit	
TND-071-01 A	TND-071-01 A Windsor Sliding Door SG 6Clr	6.1	0.65	0.62	0.68	
TND-031-01 A	TND-031-01 A Trend Al Internal offset glazed window DG 4/10/4	3.5	0.66	0.63	0.69	
TND-001-01 A	TND-001-01 A Trend Al Sliding Window SG 3Clr	6.4	0.73	0.69	0.77	
TND-002-12 A	TND-002-12 A Trend Al Awning Window DG 4/10/4	4.2	0.57	0.54	0.60	

Window and glazed door schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Guest	TND-002-01 A	n/a	2035	610	n/a	60	NW	No
Guest	TND-002-01 A	n/a	2035	610	n/a	60	NW	No
Guest	TND-002-01 A	n/a	2035	610	n/a	60	NW	No
PWD	TND-002-01 A	n/a	2035	610	n/a	60	NE	No
Butler	TND-024-01 A	n/a	700	1570	n/a	00	NE	No
Kitchen Living	TND-024-01 A	n/a	700	2410	n/a	00	NE	No
Kitchen Living	TND-001-12 A	n/a	2035	2650	n/a	30	NE	No
Kitchen Living	TND-071-01 A	n/a	2340	3620	n/a	60	SE	No
Kitchen Living	TND-071-01 A	n/a	2340	3250	n/a	33	NE	No
Kitchen Living	TND-031-01 A	n/a	2340	3970	n/a	00	SE	No
Kitchen Living	TND-001-12 A	n/a	2035	2650	n/a	30	SW	No
Home Theatre	TND-001-12 A	n/a	600	3010	n/a	42	SW	No
Laundry	TND-071-01 A	n/a	2140	1570	n/a	45	SW	No
Entry	TIM-001-01 W	n/a	2340	1200	n/a	90	NW	No
Bed 2	TND-001-12 A	n/a	600	2650	n/a	10	NE	No
Bed 2	TND-071-01 A	n/a	2100	2650	n/a	45	NW	No
Bed 2 Ensuite	TND-024-01 A	n/a	2035	350	n/a	00	NE	No
Ensuite	TND-001-01 A	n/a	1030	1570	n/a	10	NE	No
Ensuite	TND-024-01 A	n/a	2035	350	n/a	00	NE	No
His Hers	TND-024-01 A	n/a	2035	350	n/a	00	NE	No
Master Suite	TND-001-12 A	n/a	600	2650	n/a	10	NE	No
Master Suite	TND-071-01 A	n/a	2140	3610	n/a	33	SE	No
Bed 3 Ensuite	TND-002-01 A	n/a	1200	730	n/a	10	SW	No
Bed 3	TND-001-01 A	n/a	1030	2170	n/a	10	SW	No
Bed 4	TND-001-01 A	n/a	1030	2170	n/a	10	SW	No
Bed 4 Ensuite	TND-002-01 A	n/a	1200	730	n/a	10	SW	No
Upper Lounge	TND-001-12 A	n/a	600	2650	n/a	10	SW	No
Upper Lounge	TND-002-12 A	n/a	1200	910	n/a	10	NW	No



Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
Upper Lounge	TND-002-12 A	n/a	1200	910	n/a	10	NW	No
Upper Lounge	TND-002-12 A	n/a	1200	910	n/a	10	NW	No
Stairs Hall	TIM-001-01 W	n/a	2040	820	n/a	90	NW	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

Custom* roof windows

Window ID

Window Description

Waximum U-value*

SHGC*

Substitution tolerance ranges

SHGC lower limit SHGC upper limit

Roof window schedule

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

Skylight type and performance

Skylight ID Skylight description

No Data Available

No Data Available

Skylight schedule

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

No Data Available

External door schedule

Location	Height (mm)	Width (mm)	Opening %	Orientation
Garage	2400	4800	90	NW

External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective wall wrap*
ID	type	absorptance	(colour)	(R-value)	
EW-1	Brick Veneer	0.50	Medium	Anti-glare foil with bulk no gap R2	No



Wall ID	Wall type	Solar absorptance	Wall shade (colour)	Bulk insulation (R-value)	Reflective wall wrap*
EW-2	Brick Veneer	0.50	Medium	No insulation	No
EW-3	Single Skin Brick	0.50	Medium	No insulation	No

External wall schedule

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Guest	EW-1	2740	3195	NE	100	NO
Guest	EW-1	2740	1000	SW	8000	YES
Guest	EW-1	2740	4200	NW	1200	NO
PWD	EW-1	2740	1095	NE	100	YES
PWD	EW-1	2740	600	NW	100	YES
PWD	EW-1	2740	1695	NE	100	NO
Butler	EW-1	3590	2390	NE	100	NO
Kitchen Living	EW-1	3590	3795	NE	100	NO
Kitchen Living	EW-1	3590	600	SE	100	YES
Kitchen Living	EW-1	3590	3800	NE	100	YES
Kitchen Living	EW-1	3590	4900	SE	4300	YES
Kitchen Living	EW-1	3590	4200	NE	5000	YES
Kitchen Living	EW-1	3590	5500	SE	600	NO
Kitchen Living	EW-1	3590	7795	SW	600	NO
Home Theatre	EW-1	2740	3990	SW	100	NO
Laundry	EW-1	2740	1890	SW	100	YES
Entry	EW-1	2740	1890	NW	2200	YES
Garage	EW-2	2825	1200	SE	600	YES
Garage	EW-2	2825	5500	SW	600	NO
Garage	EW-3	2825	5495	NW	600	NO
Bed 2	EW-1	2440	3895	NE	600	NO
Bed 2	EW-1	2440	1000	SW	2600	YES
Bed 2	EW-1	2440	4200	NW	1800	NO
Bed 2 Ensuite	EW-1	2440	395	NE	1200	YES
Bed 2 Ensuite	EW-1	2440	600	NW	6100	YES
Bed 2 Ensuite	EW-1	2440	1695	NE	600	NO
Ensuite	EW-1	2440	4290	NE	600	NO
His Hers	EW-1	2440	1895	NE	600	NO
His Hers	EW-1	2440	600	SE	8700	YES
Master Suite	EW-1	2440	3795	NE	600	YES
Master Suite	EW-1	2440	5795	SE	4900	NO
Bed 3 Robe	EW-1	2440	1990	SE	600	NO
Bed 3 Ensuite	EW-1	2440	2595	SE	600	NO



Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
Bed 3 Ensuite	EW-1	2440	1395	SW	600	NO
Bed 3	EW-1	2440	3390	SW	600	NO
Bed 4	EW-1	2440	3190	SW	600	NO
Bed 4 Ensuite	EW-1	2440	1490	SW	600	NO
Upper Lounge	EW-1	2440	4095	SW	600	NO
Upper Lounge	EW-1	2440	4195	NW	600	YES
Stairs Hall	EW-1	2440	1400	SW	600	YES
Stairs Hall	EW-1	2440	1995	NW	2800	YES

Internal wall type

Wall ID	Wall type	Area (m²)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		272.00	No insulation
IW-2 - Cavity wall, direct fix plasterboard, single gap		27.00	Bulk Insulation, No Air Gap R2

Floor type

Location	Construction		oor Added insulation ation (R-value)	Covering
Guest	Waffle pod slab 300 mm 100mm	13.20 None	Waffle Pod 300mn	n Carpet+Rubber Underlay 18mm
PWD	Waffle pod slab 300 mm 100mm	7.00 None	Waffle Pod 300mn	n Ceramic Tiles 8mm
Butler	Waffle pod slab 300 mm 100mm	8.00 None	Waffle Pod 300mn	n Ceramic Tiles 8mm
Kitchen Living	Waffle pod slab 300 mm 100mm	86.10 None	Waffle Pod 300mn	n Ceramic Tiles 8mm
Home Theatre	Waffle pod slab 300 mm 100mm	17.00 None	Waffle Pod 300mn	n Carpet+Rubber Underlay 18mm
Laundry	Waffle pod slab 300 mm 100mm	5.50 None	Waffle Pod 300mn	n Ceramic Tiles 8mm
Entry	Waffle pod slab 300 mm 100mm	23.80 None	Waffle Pod 300mn	n 20/80 Carpet 10mm/Ceramic
Garage	Waffle pod slab 225 mm 100mm	29.80 None	Waffle Pod 225mn	n Bare
Bed 2/Guest	Timber Above Plasterboard 19mm	13.20	No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/PWD	Timber Above Plasterboard 19mm	1.20	No Insulation	Carpet+Rubber Underlay 18mm
Bed 2/Entry	Timber Above Plasterboard 19mm	1.60	No Insulation	Carpet+Rubber Underlay 18mm
Bed 2 Robe/Entry	Timber Above Plasterboard 19mm	2.00	No Insulation	Carpet+Rubber Underlay 18mm
Bed 2 Ensuite/PWD	Timber Above Plasterboard 19mm	5.60	No Insulation	Ceramic Tiles 8mm
Ensuite/Butler	Timber Above Plasterboard 19mm	8.10	No Insulation	Ceramic Tiles 8mm
Ensuite/Kitchen Living	Timber Above Plasterboard 19mm	6.00	No Insulation	Ceramic Tiles 8mm
His Hers/Kitchen Living	Timber Above Plasterboard 19mm	10.60	No Insulation	Carpet+Rubber Underlay 18mm
Master Suite/Kitchen Living	Timber Above Plasterboard 19mm	21.60	No Insulation	Carpet+Rubber Underlay 18mm
Bed 3 Robe/Kitchen Living	Timber Above Plasterboard 19mm	2.60	No Insulation	Carpet+Rubber Underlay 18mm
Bed 3 Ensuite/Kitchen Living	Timber Above Plasterboard 19mm	3.50	No Insulation	Ceramic Tiles 8mm
Bed 3/Kitchen Living	Timber Above Plasterboard 19mm	9.80	No Insulation	Carpet+Rubber Underlay 18mm
Bed 3/Home Theatre	Timber Above Plasterboard 19mm	4.80	No Insulation	Carpet+Rubber Underlay 18mm



Location	Construction	Area Sub-floor (m) ventilation	Added insulation (R-value)	Covering
Bed 4/Home Theatre	Timber Above Plasterboard 19mm	11.20	No Insulation	Carpet+Rubber Underlay 18mm
Bed 4/Laundry	Timber Above Plasterboard 19mm	1.20	No Insulation	Carpet+Rubber Underlay 18mm
Bed 4 Ensuite/Laundry	Timber Above Plasterboard 19mm	3.60	No Insulation	Ceramic Tiles 8mm
Bed 4 Robe/Laundry	Timber Above Plasterboard 19mm	0.70	No Insulation	Carpet+Rubber Underlay 18mm
Bed 4 Robe/Entry	Timber Above Plasterboard 19mm	2.30	No Insulation	Carpet+Rubber Underlay 18mm
Upper Lounge/Garage	Timber Above Plasterboard 19mm	16.80	No Insulation	Carpet+Rubber Underlay 18mm
Stairs Hall/Kitchen Living	Timber Above Plasterboard 19mm	7.30	No Insulation	Carpet+Rubber Underlay 18mm
Stairs Hall/Home Theatre	Timber Above Plasterboard 19mm	1.00	No Insulation	Carpet+Rubber Underlay 18mm
Stairs Hall/Entry	Timber Above Plasterboard 19mm	17.00	No Insulation	Carpet+Rubber Underlay 18mm
Stairs Hall/Garage	Timber Above Plasterboard 19mm	0.50	No Insulation	Carpet+Rubber Underlay 18mm

Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Guest	Timber Above Plasterboard	No Insulation	No
PWD	Timber Above Plasterboard	No Insulation	No
Butler	Timber Above Plasterboard	No Insulation	No
Kitchen Living	Plasterboard	Bulk Insulation R4	No
Kitchen Living	Timber Above Plasterboard	No Insulation	No
Home Theatre	Timber Above Plasterboard	No Insulation	No
Laundry	Timber Above Plasterboard	No Insulation	No
Entry	Timber Above Plasterboard	No Insulation	No
Garage	Plasterboard	No insulation	No
Garage	Timber Above Plasterboard	No Insulation	No
Bed 2	Plasterboard	Bulk Insulation R4	No
Bed 2 Robe	Plasterboard	Bulk Insulation R4	No
Bed 2 Ensuite	Plasterboard	Bulk Insulation R4	No
Ensuite	Plasterboard	Bulk Insulation R4	No
His Hers	Plasterboard	Bulk Insulation R4	No
Master Suite	Plasterboard	Bulk Insulation R4	No
Bed 3 Robe	Plasterboard	Bulk Insulation R4	No
Bed 3 Ensuite	Plasterboard	Bulk Insulation R4	No
Bed 3	Plasterboard	Bulk Insulation R4	No
Bed 4	Plasterboard	Bulk Insulation R4	No
Bed 4 Ensuite	Plasterboard	Bulk Insulation R4	No
Bed 4 Robe	Plasterboard	Bulk Insulation R4	No
Upper Lounge	Plasterboard	Bulk Insulation R4	No
Stairs Hall	Plasterboard	Bulk Insulation R4	No



Ceiling penetrations*

Location	Quantity	Туре	Diameter (mm²)	Sealed/unsealed	
PWD	1	Exhaust Fans	300	Sealed	
Bed 2 Ensuite	1	Exhaust Fans	300	Sealed	
Ensuite	1	Exhaust Fans	300	Sealed	
Bed 3 Ensuite	1	Exhaust Fans	300	Sealed	
Bed 4 Ensuite	1	Exhaust Fans	300	Sealed	

Ceiling fans

Location	Quantity	Diameter (mm)
Kitchen Living	1	1200
Master Suite	1	1200

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



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, chirmeys and flues. Excludes
Celling 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).
Eveneure esteriory coop	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. NatHEPS 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 WIIIdOW	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).