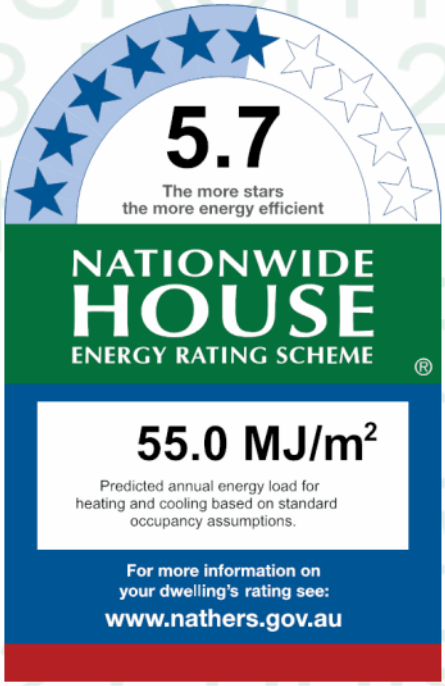
Nationwide House Energy Rating Scheme
NatHERS Certificate No. 0011815594-02

Generated on 28 Mar 2025 using BERS Pro v4.4.1.5 (3.21)



Property

Address	231-233 McCarrs Creek Road, Church Point , NSW , 2105
Lot/DP	34/35/0
NCC Class*	1A
Type	New Dwelling

Plans

Main plan	SE2501
Prepared by	SB

Construction and environment

Assessed floor area (m^2)*

Conditioned*	193.0
Unconditioned*	52.0
Total	245.0
Garage	35.0

Exposure type

Suburban

NatHERS climate zone

56

Thermal performance

Heating	Cooling
28.6	**26.4**
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.

Accredited assessor

Name	Ian 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

Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate?p=zarqWBGOM.
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? 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 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 substitutions were made due to software limitations.

I have modeled the shading in accordance with NatHERS principles

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
TIM-002-01 W	TIM-002-01 W Timber B SG Clear	5.4	0.63	0.60	0.66
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 Description	Maximum U-value*	SHGC*	Substitution tolerance ranges	
				SHGC lower limit	SHGC upper limit
WID-012-05 A	WID-012-05 A Aluminium Awning Window SG 6mmCS	6.2	0.57	0.54	0.60
BRD-097-64 A	BRD-097-64 A Signature Awning Window 100TB DG 019_AGG MAX Clr 6_12_6	2.4	0.20	0.19	0.21
BRD-108-50 A	BRD-108-50 A Signature Fixed Lite INT 100TB DG 019_AGG MAX Clr 6_12_6	1.9	0.24	0.23	0.25
WID-006-01 A	WID-006-01 A Al Residential Sliding Window SG 3mm Clear	6.4	0.76	0.72	0.80
BRD-102-50 A	BRD-102-50 A Signature Sliding Window 100TB DG 019_AGG MAX Clr 6_12_6	2.6	0.20	0.19	0.21

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
BASEMENT ENTRY	TIM-002-01 W	n/a	2100	575	n/a	00	NW	No
BASEMENT ENTRY	TIM-002-01 W	n/a	2100	575	n/a	00	NW	No
DIN FAM KIT LIV	WID-012-05 A	n/a	1800	1500	n/a	00	NE	No
DIN FAM KIT LIV	BRD-097-64 A	n/a	2400	3580	n/a	65	SE	No
DIN FAM KIT LIV	BRD-097-64 A	n/a	2400	2200	n/a	30	NW	No
DIN FAM KIT LIV	BRD-108-50 A	n/a	2400	2650	n/a	00	NE	No
DIN FAM KIT LIV	BRD-097-64 A	n/a	2400	3580	n/a	65	NW	No
DIN FAM KIT LIV	WID-012-05 A	n/a	1800	1500	n/a	00	NW	No
LAUNDRY	TIM-001-01 W	n/a	1100	880	n/a	90	SE	No
GF POWDER	WID-006-01 A	n/a	857	610	n/a	45	SE	No
BED 4	BRD-102-50 A	n/a	1200	1450	n/a	10	SW	No
GF VOID	BRD-097-64 A	n/a	2057	850	n/a	65	SW	No
GF VOID	BRD-108-50 A	n/a	2300	2200	n/a	00	NW	No

* Refer to glossary.

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orientation	Window shading device*
BED 1	BRD-102-50 A	n/a	1200	2410	n/a	10	NW	No
ENSUITE	WID-006-01 A	n/a	1200	1450	n/a	45	NE	No
BED 3	BRD-102-50 A	n/a	1372	1810	n/a	10	SE	No
UF BATH	WID-006-01 A	n/a	1200	1450	n/a	45	SW	No
STUDY UF HALL	BRD-102-50 A	n/a	1200	2410	n/a	45	NW	No
BED 2	BRD-102-50 A	n/a	1200	2410	n/a	10	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
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
No Data Available	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orientation	Outdoor shade	Diffuser	Skylight shaft reflectance
No Data Available								

* Refer to glossary.

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
BASEMENT ENTRY	2040	820	90	SE
BASEMENT ENTRY	2040	1200	90	NW
LAUNDRY	1300	880	90	SE
Garage 1	2400	5850	90	SW

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	Anti-glare foil with bulk no gap R2.5	No
EW-2	Tilt up concrete, lined	0.50	Medium	No insulation	No
EW-3	AAC cavity panel on battens	0.50	Medium	Anti-glare foil with bulk no gap R2.5	No
EW-4	AAC cavity panel on battens	0.50	Medium	Anti-glare foil with bulk no gap R2.5	No
EW-5	Brick Veneer	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)
BASEMENT ENTRY	EW-1	2500	2400	NE	12000	NO
BASEMENT ENTRY	EW-1	3000	1200	NE	12000	NO
BASEMENT ENTRY	EW-1	3500	1200	NE	12000	NO
BASEMENT ENTRY	EW-1	3500	900	SE	7400	NO
BASEMENT ENTRY	EW-2	3500	200	SW	1400	YES
BASEMENT ENTRY	EW-2	3500	1400	SE	7600	YES
BASEMENT ENTRY	EW-2	2090	4600	SW	0	NO
BASEMENT ENTRY	EW-2	410	4600	SW	100	NO
BASEMENT ENTRY	EW-1	2500	2300	NW	100	NO
DIN FAM KIT LIV	EW-3	2700	7600	NE	100	NO
DIN FAM KIT LIV	EW-3	2700	5295	SE	100	NO
DIN FAM KIT LIV	EW-3	2700	2690	SW	100	NO

* Refer to glossary.
Generated on 28 Mar 2025 using BERS Pro v4.4.1.5 (3.21) for Church Point , NSW , 2105

Location	Wall ID	Height (mm)	Width (mm)	Orientation	Horizontal shading feature* maximum projection (mm)	Vertical shading feature (yes/no)
DIN FAM KIT LIV	EW-1	2700	295	NW	1100	NO
DIN FAM KIT LIV	EW-3	2700	3000	NW	300	NO
DIN FAM KIT LIV	EW-3	2700	4600	NE	4300	YES
DIN FAM KIT LIV	EW-4	2700	7200	NW	4600	YES
PANTRY	EW-3	2700	1690	SW	100	NO
LAUNDRY	EW-3	2700	2190	SE	100	NO
GF POWDER	EW-3	2700	1890	SE	100	NO
BED 4	EW-3	2700	3395	SE	100	NO
BED 4	EW-3	2700	3195	SW	100	NO
GF VOID	EW-3	2700	4595	SW	100	NO
GF VOID	EW-1	2700	2295	NW	1100	NO
BED 1	EW-3	2450	4995	NE	100	NO
BED 1	EW-3	2450	4195	NW	100	NO
ENSUITE	EW-3	2450	2595	NE	100	NO
ENSUITE	EW-3	2450	3595	SE	600	NO
BED 1 WIR	EW-3	2450	2190	SE	600	NO
BED 3	EW-3	2450	4090	SE	600	NO
UF BATH	EW-3	2450	2895	SE	600	NO
UF BATH	EW-3	2450	2995	SW	100	NO
STUDY UF HALL	EW-3	2450	4595	SW	100	NO
STUDY UF HALL	EW-3	2450	4595	NW	100	NO
BED 2	EW-3	2450	3990	NW	100	NO
Garage 1	EW-2	3500	6300	NE	200	NO
Garage 1	EW-2	3500	1300	SE	200	NO
Garage 1	EW-2	3500	4300	SE	4900	NO
Garage 1	EW-5	3500	6300	SW	8600	NO
Garage 1	EW-5	3500	5600	NW	200	NO

* Refer to glossary.

Internal wall *type*

Wall ID	Wall type	Area (m^2)	Bulk insulation
IW-1 - Cavity wall, direct fix plasterboard, single gap		37.00	Bulk Insulation, No Air Gap R2
IW-2 - Cavity wall, direct fix plasterboard, single gap		129.00	No insulation

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BASEMENT ENTRY	Waffle pod slab 225 mm 100mm	10.80	None	Waffle Pod 225mm	Ceramic Tiles 8mm
DIN FAM KIT LIV/Garage 1	Concrete Above Plasterboard 35mm	11.50		Bulk Insulation R2	Ceramic Tiles 8mm
DIN FAM KIT LIV	Suspended Concrete Slab 35mm	72.70	Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
PANTRY	Suspended Concrete Slab 35mm	3.00	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
GF HALL	Suspended Concrete Slab 35mm	3.60	Enclosed	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
LAUNDRY	Suspended Concrete Slab 35mm	4.50	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
GF POWDER	Suspended Concrete Slab 35mm	3.90	Enclosed	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
BED 4	Suspended Concrete Slab 35mm	10.60	Enclosed	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
GF VOID/BASEMENT ENTRY	Rendered Concrete 150mm	10.30		No Insulation	Carpet+Rubber Underlay 18mm
BED 1/DIN FAM KIT LIV	Timber Above Plasterboard 19mm	22.10		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
ENSUITE/DIN FAM KIT LIV	Timber Above Plasterboard 19mm	9.10		Bulk Insulation R2	Ceramic Tiles 8mm
BED 1 WIR/DIN FAM KIT LIV	Timber Above Plasterboard 19mm	4.20		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 1 WIR/LAUNDRY	Timber Above Plasterboard 19mm	1.00		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3/GF HALL	Timber Above Plasterboard 19mm	2.50		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3/LAUNDRY	Timber Above Plasterboard 19mm	3.60		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3/GF POWDER	Timber Above Plasterboard 19mm	4.00		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 3/BED 4	Timber Above Plasterboard 19mm	1.40		Bulk Insulation R2	Carpet+Rubber Underlay 18mm

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
UF BATH/BED 4	Timber Above Plasterboard 19mm	8.40		Bulk Insulation R2	Ceramic Tiles 8mm
STUDY UF HALL/DIN FAM KIT LIV	Timber Above Plasterboard 19mm	20.10		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
STUDY UF HALL/PANTRY	Timber Above Plasterboard 19mm	3.10		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
STUDY UF HALL/GF HALL	Timber Above Plasterboard 19mm	1.30		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
STUDY UF HALL/BED 4	Timber Above Plasterboard 19mm	0.70		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
BED 2/DIN FAM KIT LIV	Timber Above Plasterboard 19mm	12.50		Bulk Insulation R2	Carpet+Rubber Underlay 18mm
Garage 1	Waffle pod slab 225 mm 100mm	35.30	None	Waffle Pod 225mm	Bare

Ceiling *type*

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
BASEMENT ENTRY	Rendered Concrete	No Insulation	No
DIN FAM KIT LIV	Plasterboard	Bulk Insulation R5	No
DIN FAM KIT LIV	Timber Above Plasterboard	Bulk Insulation R2	No
PANTRY	Timber Above Plasterboard	Bulk Insulation R2	No
GF HALL	Timber Above Plasterboard	Bulk Insulation R2	No
LAUNDRY	Timber Above Plasterboard	Bulk Insulation R2	No
GF POWDER	Timber Above Plasterboard	Bulk Insulation R2	No
BED 4	Timber Above Plasterboard	Bulk Insulation R2	No
GF VOID	Plasterboard	Bulk Insulation R5	No
BED 1	Plasterboard	Bulk Insulation R5	No
ENSUITE	Plasterboard	Bulk Insulation R5	No
BED 1 WIR	Plasterboard	Bulk Insulation R5	No
BED 3	Plasterboard	Bulk Insulation R5	No
UF BATH	Plasterboard	Bulk Insulation R5	No
STUDY UF HALL	Plasterboard	Bulk Insulation R5	No
BED 2	Plasterboard	Bulk Insulation R5	No
Garage 1	Plasterboard	No insulation	No

* Refer to glossary.

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap*
Garage 1	Concrete Above Plasterboard	Bulk Insulation R2	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed/unsealed
DIN FAM KIT LIV	1	Exhaust Fans	300	Sealed
DIN FAM KIT LIV	1	Chimneys	0	Sealed
GF POWDER	1	Exhaust Fans	300	Sealed
ENSUITE	1	Exhaust Fans	300	Sealed
UF BATH	1	Exhaust Fans	300	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
DIN FAM KIT LIV	1	1200
STUDY UF HALL	1	1200

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof shade
Corrugated Iron	Foil, Gap Above, Reflective Side Down, Anti-glare Up	0.50	Medium

* Refer to glossary.

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).