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NatHERS and BASIX Assessment

Sekisui House
Proposed Residential Development

To be built at **Lot 18, Pheasant Place, Warriewood NSW 2102**

Issue	File Ref	Description	Author	Date
A	#2501540	NatHERS Thermal Comfort and BASIX Assessment	RF/HE	28/04/2025
B	#2501903	NatHERS Thermal Comfort and BASIX Assessment - Update	RF/SS	04/07/2025

This report has been prepared by Efficient Living Pty Ltd on behalf of our client Sekisui House. Efficient Living prepares all reports in accordance with the BASIX Thermal Comfort Protocol and is backed by professional indemnity insurance. This report takes into account our Client's instructions and preferred building inclusions.

If there is a change to this specification during design or construction phases, please contact Efficient Living and quote the above file reference for advice, and to obtain an updated Certificate if required.

Sustainable Building Consultants
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BASIX Inclusions – extra notes:
There are a few inclusions set in the BASIX Portal which are not showing correctly in the BASIX Certificate. These items have been flagged with BASIX as errors. The correct inclusions should be as follows (shown in bold text):

Ventilation
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: **interlocked to light / timer off**

Nationwide House Energy Rating Scheme® NatHERS® Certificate No. #HR-3WFUJA-01

Generated on 04 Jul 2025 using Hero 4.1 (Chenath v3.23)

Property

Address	Lot 18, Pheasant Place, Warriewood, NSW, 2102
Lot/DP	18/Unreg
NCC Class*	1a
Floor/all Floors	1 of 2 floors
Type	New

Plans

Main Plan	NM105720 - REV 02 27.06.2025
Prepared by	Sekisui House Services (NSW) Pty Limited

Construction and environment

Assessed floor area (m²)*		**Exposure Type**	
Conditioned*	152.2	Suburban	
Unconditioned*	8.0	**NatHERS climate zone**	
Total	192.9	56 - Mascot AMO	
Garage	32.7		

Accredited assessor

Name	Stefanie Simpson
Business name	Efficient Living
Email	stefanie@efficientliving.com.au
Phone	+61 299706181
Accreditation No.	10035
Assessor Accrediting Organisation	HERA
Declaration of interest	No Conflict of Interest

NCC Requirements

BCA provisions	Volume 2
State/Territory variation	Yes

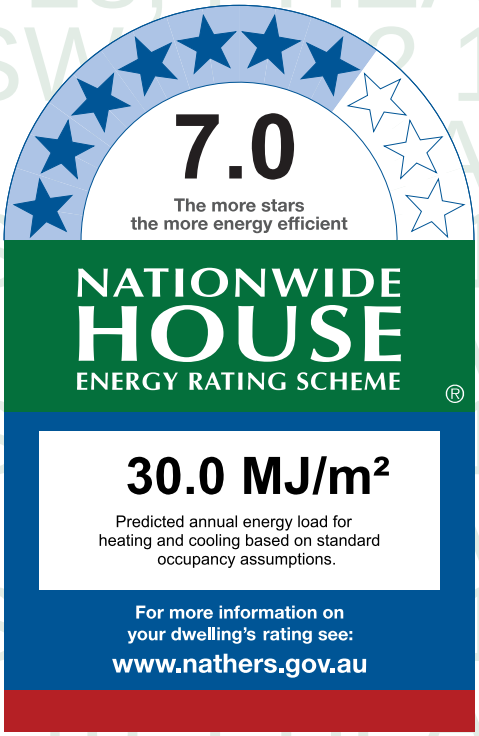
National Construction Code (NCC) requirements

The NCC allows the use of NatHERS accredited software to comply with the energy efficiency requirements for houses (Class 1 buildings) and apartments (Class 2 sole-occupancy units and Class 4 parts of buildings). The applicable requirements for houses are detailed in Specification 42 of NCC Volume Two. For apartments the requirements are detailed in clauses J2D2(2)(a) and (3) of NCC Volume One.

NCC 2022 includes enhanced thermal performance requirements for houses and apartments. It also includes a new whole-of-home annual energy use budget which applies to the major equipment in the home.

The NCC, and associated ABCB Standards and support material, can be accessed at www.abcb.gov.au.

Thermal performance star rating



Thermal performance (MJ/m²)

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	16.3	13.7
Load limits	25	18

Features determining load limits

Floor type (lowest conditioned area)	CSOG
NCC climate zone 1 or 2	N
Outdoor living area	N
Outdoor living area ceiling fan	N

Whole of Home performance rating

No Whole of Home performance rating generated for this certificate.

Verification

To verify this certificate, scan the QR code or visit http://www.hero-software.com.au/pdf/HR-3WFUJA-01. When using either link, ensure you are visiting http://www.hero-software.com.au

* Refer to glossary.

About the ratings

Note, variations and additions to the NCC energy efficiency requirements may apply in some states and territories.

Thermal performance rating

NatHERS thermal software models the expected heating and cooling energy loads using information about the design, construction, climate and common patterns of household use. The thermal performance rating (shown as a star rating on this Certificate) does not take into account appliances, apart from the airflow impacts from ceiling fans.

Whole of Home performance rating

NatHERS Whole of Home software uses the heating and cooling energy loads combined with the energy performance of the home's appliances (heating, cooling, hot water, lighting, pool/spa pump and onsite renewable energy generation and storage) and models the expected energy value* of the whole home. The Whole of Home performance rating is shown as a score out of 100 on this Certificate.

Heating and Cooling Load Limits

Additional information

In some locations under the NCC NatHERS pathway, separate heating and cooling load limits may apply. Minimum required star ratings in northern parts of Australia may also be affected by the presence or absence of an outdoor living area and/or an outdoor living area ceiling fan. Refer to the *ABCB Standard: NatHERS heating and cooling load limits* for details or contact the relevant local building regulating authority, noting that State and Territory variations may also apply.

Setting options:

Floor type:

- CSOG - Concrete Slab on Ground
- SF - Suspended Floor (or a mixture of CSOG and SF)
- NA - Not Applicable

NCC climate Zone 1 or 2:

- Yes
- No
- NA - Not Applicable

Outdoor living area:

- Yes
- No
- NA - Not Applicable

Outdoor living area ceiling fan:

- Yes
- No
- NA - Not Applicable

Predicted onsite renewable energy impact

No Whole of Home performance assessment conducted for this certificate.

Predicted Whole of Home annual impact by appliance

Shows the contribution each appliance has on the home's annual energy use, greenhouse gas emissions and cost without solar.

Energy use:

No Whole of Home performance assessment conducted for this certificate.

Greenhouse gas emissions:

No Whole of Home performance assessment conducted for this certificate.

Cost:

No Whole of Home performance assessment conducted for this certificate.

* Refer to glossary.

Certificate check

The checklist covers important items impacting the dwelling's ratings.
It is recommended that the accuracy of the whole certificate is checked.

Note: The boxes indicate when and who should check each item.
It is not mandatory to complete this checklist.

	Approval stage		Construction stage		
	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
Genuine certificate check					
Does this Certificate match the one available at the web address or QR code verification link on the front page?		☐	☐	☐	☐
Does the NatHERS certificate number on the NatHERS-stamped plans match the number on this Certificate?		☐	☐	☐	☐
Thermal performance check					
Windows and glazed doors					
Does the window size, opening type and location shown on the NatHERS-stamped plans or as installed match what is shown in *'Window and glazed door schedule'* and *'Roof window schedule'* tables on this Certificate?	☐	☐	☐	☐	☐
Does the installed windows meet the substitution tolerances (AFRC* based SHGC* and U-values*) as shown in the *'Window and glazed door type and performance'* and *'Roof window type and performance'* tables on this Certificate?			☐	☐	☐
External walls					
Does the external wall bulk insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the *'External wall type table'* on this Certificate?	☐	☐	☐	☐	☐
Does the external wall shade (colour) match what is shown in the *'External wall type'* table on this Certificate?	☐	☐	☐	☐	☐
Floor					
Does the floor insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the *'Floor type'* table on this certificate?	☐	☐	☐	☐	☐
Ceiling penetrations*					
Does the *'quantity'* and *'type'* of ceiling penetrations* (e.g. downlights, exhaust fans, etc) shown on the NatHERS-stamped plans or as installed match what is shown in the *'Ceiling penetrations'* table on this Certificate?	☐	☐	☐	☐	☐
Ceiling					
Does the ceiling insulation (R-value) shown on the NatHERS-stamped plans or as installed match what is shown in the *'Ceiling type'* table on this Certifi cate?	☐	☐	☐	☐	☐
Roof					
Does the external roof shade (colour) on the NatHERS stamped plans or as installed match what is shown in the *'Roof type'* table on this Certificate?	☐	☐	☐	☐	☐
Apartment entrance doors (NCC Class 2 assessments only)					
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 type (terrain) (shown on page 1) been applied? For example, it is unlikely that a ground-floor apartment is "exposed" or a top floor high-rise apartment is "protected".	☐	☐		☐	☐
Heating and cooling load limits*					
Do the load limits settings (shown on page 1) match what is shown on the NatHERS-stamped plans?	☐	☐	☐	☐	☐

* Refer to glossary.

Certificate check

Continued

	Approval stage		Construction stage		
	Assessor checked	Consent authority/ surveyor checked	Builder checked	Consent authority/ surveyor checked	Occupancy/other
Additional NCC requirements for thermal performance (not included in the NatHERS assessment)					
Thermal bridging					
Does the dwelling meet the NCC requirement for thermal bridging?		☐	☐	☐	☐
Insulation installation method					
Has the insulation been installed according to the NCC requirements?			☐	☐	☐
Building sealing					
Does the dwelling meet the NCC requirements for Building Sealing?		☐	☐	☐	☐
Whole of Home performance check (not applicable if a Whole of Home assessment is not conducted)					
Appliances					
Does the cooling appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the *'Appliance schedule'* on this Certificate?	☐	☐	☐	☐	☐
Does the heating appliance/s type, location and efficiency/performance shown on the NatHERS-stamped plans or installed, match the location and minimum efficiency/performance requirements shown in the *'Appliance schedule'* on this Certificate?	☐	☐	☐	☐	☐
Does the hot water system type and efficiency/performance shown on the NatHERS-stamped plans or as installed match the location and minimum efficiency/performance requirements shown in the *'Appliance schedule'* on this Certificate?	☐	☐	☐	☐	☐
Does the pool pump efficiency/performance shown on the NatHERS-stamped plans or as installed match the minimum efficiency/performance requirements shown in the *'Appliance schedule'* on this Certificate?	☐	☐	☐	☐	☐
Does the onsite renewable energy system type, orientation and system size or generation capacity shown on the NatHERS stamped plans or installed match the *'Onsite Renewable Energy schedule'* on this Certificate?	☐	☐	☐	☐	☐
Additional NCC Requirements for Services (not included in the NatHERS assessment)					
Does the lighting meet the artificial lighting requirements specified in the NCC?		☐	☐	☐	☐
Does the hot water system meet the additional requirements specified in the NCC?		☐	☐	☐	☐
Provisional values* check					
Have provisional values* been used in the assessment and, if so, are they noted in *'Additional notes'* table below?	☐	☐			
Other NCC requirements					
Note: This Certificate only covers the energy efficiency requirements in the NCC. Additional requirements that must also be satisfied include, but are not limited to: condensation, structural and fire safety requirements and any state or territory variations to the NCC energy efficiency requirements.					

* Refer to glossary.

Additional Notes

Provisional Inclusions:
Roof and window frames colour Wallaby
Default colour modelled to external walls and floor finishes
Waffle pod 225mm thick
Sealed and insulated Downlights 1 per 5m2 ceiling penetration diameter 150mm
Sealed and insulated Exhaust fans ceiling penetration diameter 200mm
Windows modelled as a proxy to match window manufacturer U-value and SHGC
Floor coverings: bare concrete to garage, carpet to bedrooms and first floor living areas, tiles to remainder of the house
Page 2 - Whole of home and Appliance check list on this NatHERS Certificate is not applicable in NSW as energy is covered by BASIX.
Insulation is applied to the conditioned envelope of the house; this includes; external walls of habitable rooms, the wall between the garage and the house and any vertical walls adjacent to roof space. Unless noted otherwise garage external walls do not require insulation.

- Windows areas may be split into varying sash types in the model
- Sisalation / sarking is only shown in certificate where it provides a reflective air-space
- No insulation clearance modeled as IC rated downlights are nominated

Room *schedule*

Room	Zone Type	Area (m²)
KITCHEN/LIVING/DINING	Kitchen/Living	49.08
ENTRY	Day Time	16.88
PDR	Day Time	2.70
LAUNDRY	Day Time	4.27
BUTLER'S PANTRY	Day Time	3.28
GARAGE	Garage	32.74
PRINCIPAL SUITE	Bedroom	17.37
ENSUITE	Night Time	7.41
WIR	Night Time	6.39
BED 4	Bedroom	10.41
BATH	Unconditioned	6.24
WC	Unconditioned	1.73
BED 3	Bedroom	10.41
BED 2	Bedroom	11.81
STAIRS/HALLWAY	Day Time	20.28

Window and glazed door *type and performance*

Default* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
WID-101-012	Horizon Awning Window	3.2	0.45	0.43	0.47
WID-102-028	Horizon Sliding Window	3.1	0.47	0.45	0.49
WID-106-028	Horizon Fixed Window	2.1	0.54	0.52	0.57
WID-111-014	Ascend Stacking Door	3.1	0.52	0.49	0.55

Window and glazed door *schedule*

Location	Window ID	Window no.	Height (mm)	Width (mm)	Window type	Opening %	Orient-ation	Shading device*
BATH	WID-102-028	W204	600	1570	Sliding	45	SW	None
BED 2	WID-101-012	W208	1200	1210	Awning	10	SE	None
BED 3	WID-101-012	W207	890	2750	Awning	10	SE	None
BED 3	WID-106-028	W206	890	850	Fixed	0	SW	None
BED 4	WID-102-028	W203	600	2170	Sliding	10	SW	None
ENSUITE	WID-102-028	W202	1030	850	Sliding	45	SW	None
KITCHEN/LIVING/DINING	WID-101-012	W102	2050	2170	Awning	29	NW	None
KITCHEN/LIVING/DINING	WID-111-014	D103	2660	2644	Sliding Door	59	NE	None
KITCHEN/LIVING/DINING	WID-111-014	D102	2660	2676	Sliding Door	59	NW	None
KITCHEN/LIVING/DINING	WID-101-012	W101	600	3010	Awning	44	NE	None
PRINCIPAL SUITE	WID-102-028	W201	1200	2650	Sliding	10	NW	None
STAIRS/HALLWAY	WID-106-028	W209	860	2170	Fixed	0	NE	None
STAIRS/HALLWAY	WID-106-028	W210	860	2170	Fixed	0	NE	None
WC	WID-102-028	W205	600	610	Sliding	45	SW	None

* Refer to glossary.

Roof window *type and performance value*

Default* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Custom* roof windows

Window ID	Window Description	Maximum U-value*	SHGC*	SHGC substitution tolerance ranges	
				lower limit	upper limit
None					

Roof window *schedule*

Location	Window ID	Window no.	Opening %	Height (mm)	Width (mm)	Orient-ation	Outdoor shade	Indoor shade
None								

Skylight *type and performance*

Skylight ID	Skylight description
None	

Skylight *schedule*

Location	Skylight ID	Skylight No.	Skylight shaft length (mm)	Area (m^2)	Orient-ation	Outdoor shade	Diffuser	Shaft Reflectance
None								

External door *schedule*

Location	Height (mm)	Width (mm)	Opening %	Orientation
ENTRY	2360	1275	90	SE
GARAGE	2400	4817	90	SE

External wall *type*

Wall ID	Wall Type	Solar absorptance	Wall Colour	Bulk insulation (R-value)	Reflective wall wrap*
CONC-100-EXP	Precast 100mm Concrete - Exposed	0.50	Medium	0.00	No
Sekisui Nichiha Cladding Walls-A	Sekisui Nichiha Cladding Walls - Fibre-Cement Clad Battened (Refl Cavity) Stud Wall	0.50	Medium	3.10	Yes
Sekisui Nichiha Cladding Walls-B	Sekisui Nichiha Cladding Walls - Fibre-Cement Clad Battened (Refl Cavity) Stud Wall	0.50	Medium	0.00	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
BATH	Sekisui Nichiha Cladding Walls-A	1630	1972	SW	460	Yes
BED 2	Sekisui Nichiha Cladding Walls-A	2510	3586	NE	460	Yes
BED 2	Sekisui Nichiha Cladding Walls-A	2510	3480	SE	459	No
BED 3	Sekisui Nichiha Cladding Walls-A	2510	3471	SE	460	No
BED 3	Sekisui Nichiha Cladding Walls-A	2510	1220	SW	460	Yes
BED 3	Sekisui Nichiha Cladding Walls-A	1470	1779	SW	460	Yes
BED 4	Sekisui Nichiha Cladding Walls-A	1745	2890	SW	460	Yes
BUTLER'S PANTRY	Sekisui Nichiha Cladding Walls-A	2660	1964	SW		Yes
ENSUITE	Sekisui Nichiha Cladding Walls-A	1860	2269	SW	460	Yes
ENTRY	Sekisui Nichiha Cladding Walls-A	2660	7072	NE		Yes
ENTRY	Sekisui Nichiha Cladding Walls-A	2660	2273	SE	1747	Yes
GARAGE	Sekisui Nichiha Cladding Walls-B	2830	5893	SE	1210	Yes
GARAGE	Sekisui Nichiha Cladding Walls-B	2830	5555	SW		Yes
GARAGE	Sekisui Nichiha Cladding Walls-B	2830	583	NE	2400	Yes
GARAGE	CONC-100-EXP	170	5878	NW		No
GARAGE	CONC-100-EXP	170	4972	NE		No
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	3471	NW	200	Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	3025	NE	3797	Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	3597	NW	3225	Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	4658	NE	200	Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	4667	SW		Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	1204	NW	3216	Yes
KITCHEN/LIVING /DINING	Sekisui Nichiha Cladding Walls-A	2660	3016	SW	200	Yes
PRINCIPAL SUITE	Sekisui Nichiha Cladding Walls-A	1510	3671	NW	460	No
PRINCIPAL SUITE	Sekisui Nichiha Cladding Walls-A	2510	4966	NE	460	Yes

* Refer to glossary.

External wall *schedule*

Location	Wall ID	Height (mm)	Width (mm)	Orient-ation	Horizontal shading feature* projection (mm)	Vertical shading feature
STAIRS/HALLWAY	Sekisui Nichiha Cladding Walls-A	2510	4878	NE	460	Yes
WC	Sekisui Nichiha Cladding Walls-A	1555	981	SW	460	Yes
WIR	Sekisui Nichiha Cladding Walls-A	1510	3264	NW	460	Yes
WIR	Sekisui Nichiha Cladding Walls-A	1960	1958	SW	460	Yes

Internal wall *type*

Wall ID	Wall Type	Area (m^2)	Bulk insulation
INT-PB	Internal Plasterboard Stud Wall	107.4	0.00
INT-PB	Internal Plasterboard Stud Wall	26.0	2.50
INT-PB-EXP1	Internal Plasterboard Stud Wall (exposed 1 side)	16.3	3.10

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
BATH	TIMB-001: Suspended Timber Floor	6.2	N/A	4.00	Tile (8mm)
BED 2	TIMB-001: Suspended Timber Floor	4.2	N/A	0.15	Carpet
BED 2	TIMB-001: Suspended Timber Floor	2.0	N/A	4.00	Carpet
BED 2	TIMB-002: Suspended Timber Floor - Lined Below	5.6	N/A	4.00	Carpet
BED 3	TIMB-001: Suspended Timber Floor	6.2	N/A	4.00	Carpet
BED 3	TIMB-002: Suspended Timber Floor - Lined Below	4.2	N/A	4.00	Carpet
BED 4	TIMB-001: Suspended Timber Floor	8.8	N/A	0.15	Carpet
BED 4	TIMB-001: Suspended Timber Floor	1.7	N/A	4.00	Carpet
BUTLER'S PANTRY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	3.3	N/A	0.59	Tile (8mm)
ENSUITE	TIMB-001: Suspended Timber Floor	7.4	N/A	0.15	Tile (8mm)
ENTRY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	16.9	N/A	0.59	Tile (8mm)
GARAGE	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	32.7	N/A	0.59	Exposed
KITCHEN/LIVING/DINING	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	49.1	N/A	0.59	Tile (8mm)

* Refer to glossary.

Floor *type*

Location	Construction	Area (m^2)	Sub-floor ventilation	Added insulation (R-value)	Covering
LAUNDRY	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	4.3	N/A	0.59	Tile (8mm)
PDR	WAFFLE-85: Concrete Waffle Pod Slab on Ground (85mm)	2.7	N/A	0.59	Tile (8mm)
PRINCIPAL SUITE	TIMB-001: Suspended Timber Floor	17.4	N/A	0.15	Carpet
STAIRS/HALLWAY	TIMB-001: Suspended Timber Floor	14.1	N/A	0.15	Carpet
STAIRS/HALLWAY	TIMB-001: Suspended Timber Floor	6.2	N/A	4.00	Carpet
WC	TIMB-001: Suspended Timber Floor	1.7	N/A	4.00	Tile (8mm)
WIR	TIMB-001: Suspended Timber Floor	6.4	N/A	0.15	Carpet

Ceiling *type*

Location	Construction	Bulk insulation (R-value)	Reflective wrap*
BATH	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
BED 2	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
BED 3	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
BED 4	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
BUTLER'S PANTRY	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
ENSUITE	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
GARAGE	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
KITCHEN/LIVING/DINING	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
PRINCIPAL SUITE	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
STAIRS/HALLWAY	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
WC	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No
WIR	ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	7.00	No

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATH	1	Downlight	150	Sealed

* Refer to glossary.

Ceiling *penetrations**

Location	Quantity	Type	Diameter (mm)	Sealed /unsealed
BATH	1	Exhaust Fan	200	Sealed
BED 2	2	Downlight	150	Sealed
BED 3	2	Downlight	150	Sealed
BED 4	2	Downlight	150	Sealed
BUTLER'S PANTRY	1	Downlight	150	Sealed
ENSUITE	1	Downlight	150	Sealed
ENSUITE	1	Exhaust Fan	200	Sealed
ENTRY	3	Downlight	150	Sealed
KITCHEN/LIVING/DINING	10	Downlight	150	Sealed
KITCHEN/LIVING/DINING	1	Exhaust Fan	200	Sealed
LAUNDRY	1	Downlight	150	Sealed
LAUNDRY	1	Exhaust Fan	200	Sealed
PDR	1	Downlight	150	Sealed
PDR	1	Exhaust Fan	200	Sealed
PRINCIPAL SUITE	3	Downlight	150	Sealed
STAIRS/HALLWAY	4	Downlight	150	Sealed
WC	1	Downlight	150	Sealed
WC	1	Exhaust Fan	200	Sealed
WIR	1	Downlight	150	Sealed

Ceiling *fans*

Location	Quantity	Diameter (mm)
BED 2	1	1300
BED 3	1	1300
BED 4	1	1300
PRINCIPAL SUITE	1	1300

* Refer to glossary.

Roof *type*

Construction	Added insulation (R-value)	Solar absorptance	Roof Colour
ATTIC-METAL-01: Pitched / Attic Metal Roof (Roofspace) & Flat PB Ceiling	1.80	0.64	Dark (Wallaby)

Thermal bridging *schedule for steel frame elements*

Building element	Steel section dimensions (height x width, mm)	Frame spacing (mm)	Steel thickness (BMT mm)	Thermal Break (R-value)
None				

Appliance *schedule*

(not applicable if a Whole of Home performance assessment is not conducted for this certificate)

Cooling system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Heating system

Type	Location	Fuel Type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data				

Hot water system

Type	Fuel type	Hot Water CER Zone	Minimum efficiency / STC	Assessed daily load [litres]
No Whole of Home Data				

Pool / spa equipment

Type	Fuel type	Minimum efficiency / performance	Recommended capacity
No Whole of Home Data			

Onsite Renewable Energy *schedule*

Type	Orientatation	Generation Capacity [kW]
No Whole of Home Data		

Battery *schedule*

Type	Storage Capacity [kWh]
No Whole of Home Data	

* Refer to glossary.

Explanatory Notes

About this report

NatHERS ratings are a reliable guide for comparing different dwelling designs and to demonstrate that designs meet the energy efficiency requirements in the National Construction Code.

NatHERS ratings use computer modelling to evaluate a home's energy efficiency and performance. They use localised climate data and standard assumptions on how people use their home to predict the heating and cooling energy loads and energy value* of the whole home. The thermal performance star rating uses the home's building specifications, layout, orientation and fabric (i.e. walls, windows, floors, roofs and ceilings) to predict the heating and cooling energy loads. The Whole of Home performance rating uses information about the home's appliances and onsite energy generation and storage to estimate the homes energy value*.

The actual energy loads, cost and greenhouse gas emissions of a home may vary from that predicted. This is because the assumptions will not always match the actual occupant usage patterns. For example, the number of occupants and how people use their appliances will vary.

Energy efficient homes use less energy, are warmer on cool days, cooler on hot days and cost less to run.

Accredited assessors

For quality assured NatHERS Certificates, always use an accredited or licenced assessor registered with an Assessor Accrediting Organisation (AAO). AAOs have strict quality assurance processes, and professional development requirements ensuring consistently high standards for assessments.

Non-accredited assessors (Raters) have no ongoing training requirements and are not quality assured.

Any queries about this report should be directed to the assessor. If the assessor is unable to address questions or concerns, contact the AAO specified on the front of this certificate.

Disclaimer

The NatHERS Certificate format is developed by the NatHERS Administrator. However, the content in the certificate is entered by the assessor. It is the assessor's responsibility to use NatHERS accredited software correctly and follow the NatHERS Technical Note to produce a NatHERS Certificate.

The predicted annual energy load, cost and greenhouse gas emissions in this NatHERS Certificate are an estimate based on an assessment of the dwelling's design by the assessor. It is not a prediction of actual energy use, cost or emissions. The information and ratings may be used to compare how other dwellings 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, behaviour, appliance performance, indoor air temperature and local climate.

Not all assumptions made by the assessor using the NatHERS accredited software tool are presented in this report and further details or data files may be obtained from the assessor.

Glossary

Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
AFRC	Australian Fenestration Rating Council
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, range hoods, 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.
COP	Coefficient of performance
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.
EER	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
Energy use	This is your homes rating without solar or batteries.
Energy value	The net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as defined in the ABCB Housing Provisions Standard).
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	see exposure categories below
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.
Net zero home	a home that achieves a net zero energy value*.
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
Recommended capacity	this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified person.
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 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.
STCs	Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulatory
Thermal breaks	are materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, but is not limited to, materials such as timber battens greater than or equal to 20mm thick, continuous thermal breaks such as polystyrene insulation sheeting, plastic strips or furring channels.
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).
Window shading device	a device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

* Refer to glossary.

BASIX™ Certificate

Building Sustainability Index
www.planningportal.nsw.gov.au/development-and-assessment/basix

Single Dwelling

Certificate number: 1802857S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at www.planningportal.nsw.gov.au/definitions

Secretary
Date of issue: Friday, 04 July 2025
To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.

When submitting this BASIX certificate with a development application or complying development certificate application, it must be accompanied by NatHERS certificate HR-3WFUJA-01.

Project summary	
Project name	LOT 18, PHEASANT PLACE WARRIEWOOD
Street address	LOT 18 PHEASANT PLACE WARRIEWOOD 2102
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan
Lot no.	18
Section no.	Unreg
Project type	dwelling house (detached)
No. of bedrooms	4

Project score		
Water	✔ 42	Target 40
Thermal Performance	✔ Pass	Target Pass
Energy	✔ 100	Target 72
Materials	✔ -80	Target n/a

Certificate Prepared by
Name / Company Name: Efficient Living Pty Ltd
ABN (if applicable):

Description of project

Project address	
Project name	LOT 18, PHEASANT PLACE WARRIEWOOD
Street address	LOT 18 PHEASANT PLACE WARRIEWOOD 2102
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan
Lot no.	18
Section no.	Unreg

Project type	
Project type	dwelling house (detached)
No. of bedrooms	4

Site details	
Site area (m²)	256
Roof area (m²)	161
Conditioned floor area (m²)	152.2
Unconditioned floor area (m²)	8.0
Total area of garden and lawn (m²)	60
Roof area of the existing dwelling (m²)	0

Assessor details and thermal loads	
NatHERS assessor number	HERA10035
NatHERS certificate number	HR-3WFUJA-01
Climate zone	56
Area adjusted cooling load (MJ/m².year)	14
Area adjusted heating load (MJ/m².year)	16

Project score			
Water	✔	42	Target 40
Thermal Performance	✔	Pass	Target Pass
Energy	✔	100	Target 72
Materials	✔	-80	Target n/a

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development.		✔	✔
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		✔	✔
The applicant must install taps with a minimum rating of 6 star in the kitchen in the development.		✔	
The applicant must install basin taps with a minimum rating of 6 star in each bathroom in the development.		✔	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 1500 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✔	✔	✔
The applicant must configure the rainwater tank to collect rain runoff from at least 50 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✔	✔
The applicant must connect the rainwater tank to:			
• all toilets in the development		✔	✔
• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)		✔	✔

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
Assessor details and thermal loads			
The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate and the "Construction" and "Glazing" tables below.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.	✔	✔	✔
The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✔	✔
The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.	✔	✔	✔

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Construction			
The applicant must construct the floors, walls, roofs, ceilings and glazing of the dwelling in accordance with the specifications listed in the tables below.	✔	✔	✔
The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.			✔

Construction	Area - m²	Insulation
floor - concrete slab on ground, waffle pod slab.	76.2	not specified
floor - suspended floor above open subfloor, particle board; frame: laminated veneer lumber (LVL).	9.9	not specified
floor - above habitable rooms or mezzanine, particle board; frame: laminated veneer lumber (LVL)..	50	not specified
floor - suspended floor above garage, particle board; frame: laminated veneer lumber (LVL).	24.1	not specified
garage floor - concrete slab on ground, waffle pod slab.	32.7	not specified
external wall: framed (fibre cement sheet or boards); frame: timber - untreated softwood.	178.1	not specified
external wall: concrete block/plasterboard; frame: timber - untreated softwood.	1.8	not specified
external garage wall: framed (fibre cement sheet or boards); frame: timber - untreated softwood.	34	none
internal wall: plasterboard; frame: timber - untreated softwood.	146.9	not specified
ceiling and roof - flat ceiling / pitched roof, framed - metal roof, timber - untreated softwood.	161.41	ceiling: not specified; roof: not specified.

Thermal Performance and Materials commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Glazing			
The applicant must install windows, glazed doors and skylights as described in the table below, in accordance with the specifications listed in the table.	✔	✔	✔

Frames	Maximum area - m2
aluminium	35.5
timber	0
uPVC	0
steel	0
composite	0

Glazing	Maximum area - m2
single	0
double	35.5
triple	0

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump.	✔	✔	✔
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5		✔	✔
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.0 - 3.5		✔	✔
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER 3.5 - 4.0		✔	✔
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER 3.5 - 4.0		✔	✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: please select		✔	✔
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✔	✔
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✔	✔
Artificial lighting			
The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.		✔	✔
Natural lighting			
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	✔	✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Alternative energy			
The applicant must install a photovoltaic system as part of the development. The applicant must connect this system to the development's electrical system.	✔	✔	✔
The photovolatic system must consist of: • photovolatic collectors with the capacity to generate at least 5 peak kilowatts of electricity, installed at an angle between 0 degrees and 10 degrees to the horizontal facing north east	✔	✔	✔
Other			
The applicant must install an induction cooktop & electric oven in the kitchen of the dwelling.		✔	
The applicant must install a fixed outdoor clothes drying line as part of the development.		✔	

Legend
In these commitments, "applicant" means the person carrying out the development.
Commitments identified with a ✔ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
Commitments identified with a ✔ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
Commitments identified with a ✔ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.