# Nationwide House Energy Rating Scheme<sup>®</sup> Class 2 Summary NatHERS<sup>®</sup> Certificate No. 0011782370

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NatHERS Climate Zone 80-82 Showground Road, GOSFORD, NSW, 2250 Lot 10,11 DP 503890 15 Williamtown



# Accredited assessor

Name	Dean Gorman
Business name	Greenview Consulting Pty Ltd
Email	dean@greenview.net.au
Phone	8544 1683
Accreditation No.	DMN/13/1645
Assessor Accrediting Or	ganisation
Design Matters Matienal	Name and a second secon

**Design Matters National** 

# Verification

To verify this certificate, scan the QR code or visit hstar.com.au/QR/Generate? p=FZBSIeYjw . When using either link, ensure you are visiting hstar.com.au



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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating





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The rating above is the average of all dwellings in this summary.

> For more information on your dwelling's rating see: www.nathers.gov.au

# NCC heating and cooling maximum loads (MJ/m<sup>2</sup>/p.a.)

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled block average	23.6	15.6
Maximum block limit	N/A	N/A

## Whole of Home performance rating

No Whole of Home performance rating conducted for this summary certificate or not completed for all dwellings

### Summary of all dwellings

Certificate number and link	Unit Number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m <sup>2</sup> /p.a.]	Total load [MJ/m²/p.a.]	Star Rating	Whole of Home Rating
0011782125	GFU1	19.8 (N/A)	13.3 (N/A)	33.2	8.3	0
0011782166	GFU2	41.2 (N/A)	15.6 (N/A)	56.8	6.6	0

Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for 80-82 Showground Road , GOSFORD , NSW , 2250



### Summary of all dwellings (continued)

Certificate number and link	Unit Number	Heating load (load limit) [MJ/m <sup>2</sup> /p.a.]	Cooling load (load limit) [MJ/m²/p.a.]	Total load [MJ/m²/p.a.]	Star Rating	Whole of Home Rating
<u>0011782190</u>	GFU3	24.0 (N/A)	16.7 (N/A)	40.8	7.7	0
0011782224	GFU4	50.7 (N/A)	6.0 (N/A)	56.7	6.6	0
0011782265	L1U1	16.1 (N/A)	18.0 (N/A)	34.1	8.2	0
0011782299	L1U2	9.1 (N/A)	8.8 (N/A)	17.9	9.5	0
0011782323	L1U3	7.8 (N/A)	10.8 (N/A)	18.6	9.4	0
0011782349	L1U4	27.1 (N/A)	34.9 (N/A)	61.9	6.3	0
0011782364	L1U5	29.5 (N/A)	15.9 (N/A)	45.4	7.4	0
0011782117	L1U6	29.0 (N/A)	17.7 (N/A)	46.7	7.3	0
0011782158	L2U1	22.5 (N/A)	15.0 (N/A)	37.5	7.9	0
0011782182	L2U2	3.9 (N/A)	9.9 (N/A)	13.8	9.9	0
0011782216	L2U3	9.7 (N/A)	9.5 (N/A)	19.2	9.4	0
0011782240	L2U4	17.1 (N/A)	33.6 (N/A)	50.8	7	0
0011782273	L2U5	34.7 (N/A)	14.1 (N/A)	48.8	7.2	0
0011782307	L2U6	33.9 (N/A)	16.1 (N/A)	49.9	7.1	0
0011782331	L3U1	24.4 (N/A)	13.8 (N/A)	38.3	7.9	0
0011782356	L3U2	7.0 (N/A)	9.2 (N/A)	16.2	9.7	0
0011782133	L3U3	10.3 (N/A)	9.4 (N/A)	19.7	9.4	0
0011782141	L3U4	18.6 (N/A)	31.4 (N/A)	50.0	7.1	0
0011782174	L3U5	35.4 (N/A)	14.1 (N/A)	49.5	7.1	0
0011782208	L3U6	36.2 (N/A)	14.6 (N/A)	50.7	7	0
0011782232	L4U1	37.6 (N/A)	19.1 (N/A)	56.7	6.6	0
0011782257	L4U2	30.1 (N/A)	18.4 (N/A)	48.5	7.2	0
0011782281	L4U3	20.2 (N/A)	10.5 (N/A)	30.7	8.4	0
0011782315	L4U4	16.6 (N/A)	8.7 (N/A)	25.2	8.9	0

### **Explanatory notes**

#### About this ratings

The thermal performance star rating in this Certificate is the average rating of all NCC Class 2 dwellings in an apartment block. Individual unit ratings are listed in the 'Summary of all dwellings' section of this Certificate.

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 energy loads and societal cost. 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.

For more details about an individual dwelling's assessment, refer to the individual dwelling's NatHERS Certificate (accessible via link).

#### **Accredited Assessors**

Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments. For more details see www.nathers.gov.au

#### 0011782370 NatHERS Certificate

#### 7.9 Star Rating as of 13 Mar 2025



For high quality 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.

Licensed assessors in the Australian Capital Territory (ACT) can produce assessments for regulatory purposes only, using endorsed software, as listed on the ACT licensing register.

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 certificates 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 use, 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 while using the NatHERS accredited software tool are presented in this report and further details or data files may be available from the assessor.

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782125

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit GFU1, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 47.1 Unconditioned\* 6.7 Total 53.7 Garage 0.0



### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

#### 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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

33.2 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	19.8	13.3
oad limits	N/A	N/A

### Features determining load limits

1

Floor Type (lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=FuGetpQvj . When using either link, ensure you are visiting hstar.com.au





### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 8.3 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	Approva	I Stage	Constru Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupa
Genuine certificate check		r	r		
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 Certificate?					
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					



0011782125 NatHERS Certificate     8.3 Star Rating as of 13 Mar 2025					HOUSE
	Approva	al Stage	Constru Stage	ction	
Certificate check	ked	brity/ ked	p	ority ked	her
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e perform	ance asse	ssment is i	not conduc	ted)
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	S assessi	ment)		
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					
			4		Secolaria da

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.

#### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	34.93
Bedroom 1	Bedroom	12.16
Glazed Common	Glazed Common Area	15.52
Bath/Ldy	Unconditioned	6.65

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHGC*		Substitution tolerance ranges		
	Description U-value*		SHGC lower limit	SHGC upper limit		
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain Iow-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID Window Maximum S		SHGC*	Substitution tolerance ranges		
WIND	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Availa	able				

# Window and glazed door schedule

Window ID	Window no.	Height [mm]			Opening %	Orientation	Window shading device*
ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
ALM-004-03 A	n/a	1500	1520	Fixed	00	E	No
ALM-003-01 A	n/a	1000	990	Awning	90	Ν	No
ALM-003-01 A	n/a	1000	990	Awning	90	Ν	No
ALM-004-03 A	n/a	1000	1020	Fixed	00	Ν	No
ALM-004-03 A	n/a	2700	2410	Sliding	45	E	Yes
ALM-001-01 A	n/a	2700	1000	Casement	90	Ν	No
ALM-002-01 A	n/a	2700	600	Fixed	00	Ν	No
ALM-002-01 A	n/a	2700	600	Fixed	00	Ν	No
	ID ALM-004-03 A ALM-003-01 A ALM-003-01 A ALM-004-03 A ALM-003-01 A ALM-003-01 A ALM-004-03 A ALM-004-03 A ALM-004-03 A	ID         no.           ALM-004-03 A         n/a           ALM-003-01 A         n/a           ALM-004-03 A         n/a           ALM-001-01 A         n/a	ID         no.         [mm]           ALM-004-03 A         n/a         2700           ALM-003-01 A         n/a         1500           ALM-004-03 A         n/a         1000           ALM-003-01 A         n/a         1000           ALM-003-01 A         n/a         1000           ALM-003-01 A         n/a         2700           ALM-004-03 A         n/a         2700           ALM-004-03 A         n/a         2700           ALM-004-03 A         n/a         2700           ALM-001-01 A         n/a         2700	ID         no.         [mm]         [mm]           ALM-004-03 A         n/a         2700         2410           ALM-003-01 A         n/a         1500         1040           ALM-004-03 A         n/a         1500         1520           ALM-003-01 A         n/a         1000         990           ALM-003-01 A         n/a         1000         990           ALM-003-01 A         n/a         1000         1020           ALM-004-03 A         n/a         2700         2410           ALM-004-03 A         n/a         2700         1000           ALM-004-03 A         n/a         2700         600	ID         no.         [mm]         [mm]         type           ALM-004-03 A         n/a         2700         2410         Sliding           ALM-003-01 A         n/a         1500         1040         Awning           ALM-003-01 A         n/a         1500         1040         Awning           ALM-003-01 A         n/a         1500         1040         Awning           ALM-003-01 A         n/a         1500         1520         Fixed           ALM-004-03 A         n/a         1000         990         Awning           ALM-003-01 A         n/a         1000         990         Awning           ALM-003-01 A         n/a         1000         990         Awning           ALM-003-01 A         n/a         1000         990         Awning           ALM-004-03 A         n/a         1000         1020         Fixed           ALM-004-03 A         n/a         2700         2410         Sliding           ALM-001-01 A         n/a         2700         600         Fixed	ID         no.         [mm]         [mm]         type         %           ALM-004-03 A         n/a         2700         2410         Sliding         45           ALM-003-01 A         n/a         1500         1040         Awning         90           ALM-003-01 A         n/a         1500         1040         Awning         90           ALM-003-01 A         n/a         1500         1040         Awning         90           ALM-003-01 A         n/a         1500         1520         Fixed         00           ALM-003-01 A         n/a         1000         990         Awning         90           ALM-003-01 A         n/a         1000         990         Awning         90           ALM-003-01 A         n/a         1000         990         Awning         90           ALM-003-01 A         n/a         1000         1020         Fixed         00           ALM-004-03 A         n/a         2700         2410         Sliding         45           ALM-001-01 A         n/a         2700         1000         Casement         90           ALM-002-01 A         n/a         2700         600         Fixed         00 <td>ID         no.         [mm]         [mm]         type         %         Orientation           ALM-004-03 A         n/a         2700         2410         Sliding         45         N           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1520         Fixed         00         E           ALM-004-03 A         n/a         1000         990         Awning         90         N           ALM-003-01 A         n/a         1000         990         Awning         90         N           ALM-003-01 A         n/a         1000         1020         Fixed         00         N           ALM-004-03 A         n/a         2700         2410         Sliding         45         E           ALM-001-01 A         n/a         2700         1000         Casement         90         N           ALM-002-01 A         n/a         2700         600</td>	ID         no.         [mm]         [mm]         type         %         Orientation           ALM-004-03 A         n/a         2700         2410         Sliding         45         N           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1040         Awning         90         E           ALM-003-01 A         n/a         1500         1520         Fixed         00         E           ALM-004-03 A         n/a         1000         990         Awning         90         N           ALM-003-01 A         n/a         1000         990         Awning         90         N           ALM-003-01 A         n/a         1000         1020         Fixed         00         N           ALM-004-03 A         n/a         2700         2410         Sliding         45         E           ALM-001-01 A         n/a         2700         1000         Casement         90         N           ALM-002-01 A         n/a         2700         600

0011782125 NatHERS Certificate8.3 Star Rating as of 13 Mar 2025								HOUSE
Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bath/Ldy	ALM-003-01 A	n/a	1500	600	Awning	90	E	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID Window Description	Maximum	SHGC*	Substitution to	lerance ranges	
	Description U-value*		3600	SHGC lower limit	SHGC upper limit
No Data Availa	able				

### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
Window ID	Description	U-value*	SHGC	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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientatio	on Outdoor shade	Diffuser
No Data Ava	ilable					
External	door sche	edule				

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					_



# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3600	Ν	3600	No
Kitchen/Living	EW-2	500	4295	Е	0	No
Kitchen/Living	EW-1	2200	4295	E	600	No
Bedroom 1	EW-1	2700	1800	W	2600	No
Bedroom 1	EW-1	2700	4000	Ν	500	No
Bedroom 1	EW-1	2700	3095	E	4200	No
Glazed Common	EW-1	2700	2563	Ν	2300	Yes
Bath/Ldy	EW-2	500	2495	E	0	No
Bath/Ldy	EW-1	2200	2495	E	600	No
Bath/Ldy	EW-2	500	1300	S	0	No
Bath/Ldy	EW-1	2200	1300	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	31.05	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	8.91	No insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	5.13	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Suspended Concrete Slab 300mm	35.07	Enclosed	Bulk Insulation in Contact with Floor R2	n Ceramic Tiles 8mm

0011782125 NatHERS Certificate

8.3 Star Rating as of 13 Mar 2025



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 1	Suspended Concrete Slab 300mm	12.16	Enclosed	Bulk Insulation in Contact with Floor R2	<sup>1</sup> Carpet+Rubber Underlay 18mm
Glazed Common	Suspended Concrete Slab 300mm	15.52	Basement Carpark	Bulk Insulation ir Contact with Floor R2	ו Ceramic Tiles 8mm
Bath/Ldy	Suspended Concrete Slab 300mm	6.65	Enclosed	Bulk Insulation ir Contact with Floor R2	n Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# Ceiling fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
None Present		0.00	



### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation	Fuel type	eff	nimum iciency/ ormance		imended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation	Fuel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		ubstitution e ranges upper limit	Assessed daily load [litres]
No Data Available		OLK 2016	/010				[nues]
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capae	
No Data Available							
Onsite Renewable	e Energy Sch	nedule					
System Type	Orientation		Syst	em Size O	r Generation	Capacity	

No Data Available



### **Battery** Schedule

System Type

Size [Battery Storage Capacity]

No Data Available



### 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.

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#### 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.

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### Glossary

AFRC	Australian Fenestration Rating Council
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
Assessed floor area	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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
<b>Reflective wrap</b> (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
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.
Skylight (also known as roof lights	
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782166

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit GFU2, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 72.7 Unconditioned\* 0.0 Total 72.7 Garage 0.0



### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

#### 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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars the more energy efficient

# **HOUSE** ENERGY RATING SCHEME

# 56.8 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Adelled	41.2	15.6
oad limits	N/A	N/A

### Features determining load limits

Floor Type (lowest conditioned area)	N/A
	12.
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=cmEdXvzZg . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit GFU2, 80-82 Showground Road, GOSFORD, NSW, 2250



### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 6.6 Star Rating as of 13 Mar 2025

Certificate check	Approva	I Stage	Constru Stage	ction	HOUSE
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupar
Genuine certificate check		Т	Т	ſı	1
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 Certificate?					
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					



				HOUSE		
Approva	I Stage	Constru Stage	ction			
Jecked	thority/ iecked	cked	thority lecked	Other		
Assessor ch	Consent Au Surveyor ch	Builder che	Consent Au Surveyor ch	Occupancy/Other		
ided in t	he NatHE	RS asse	ssment)			
Whole of Home performance check (not applicable if a Whole of Home performance assessment is not conducted)						
NatHERS	assessi	nent)				
	ń	0	ņ			
	Pagessourchecked and and an transition pagessourchecked and an transition pagessourchecked and an transition and an transition an transiti	Ided in the NatHE       Identities       Id	Approval Stage     Stage       Stage<	Stage         Stage		

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.

#### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	34.05
Bedroom 1	Bedroom	12.08
Bath/Ldy	Daytime	5.79
Bedroom 2	Bedroom	10.97
Entry	Daytime	9.78

# Window and glazed door type and performance

### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
willdow iD	Description	U-value*	3666	SHGC lower limit	SHGC upper limit
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description	n U-value*		SHGC lower limit	SHGC upper limit
No Data Availa	able				

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	2170	Sliding	45	E	Yes
Kitchen/Living	ALM-003-01 A	n/a	1700	1090	Awning	90	S	No
Bedroom 1	ALM-004-03 A	n/a	1700	2400	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	1700	2100	Fixed	00	S	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window Maximum SHGC* ——		Substitution to	Substitution tolerance ranges		
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
No Data Avail	able					



#### Custom roof windows\*

Window ID	Window ID Window Maximum S	SHGC*	Substitution tolerance ranges		
	Description U-value*		3660	SHGC lower limit	SHGC upper limit
No Data Avai	lable				

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Avail	able					

## External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	7100	E	3700	Yes
Kitchen/Living	EW-1	2700	4700	S	400	No
Kitchen/Living	EW-1	2700	1500	W	3900	No
Bedroom 1	EW-1	2700	1500	Е	3900	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit GFU2, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782166 NatHERS Certificate

6.6 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Bedroom 1	EW-1	2700	3400	S	0	No
Bedroom 1	EW-1	2700	500	W	0	No
Bedroom 2	EW-1	2700	3890	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	52.65	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	47.43	No insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Suspended Concrete Slab 300mm	34.05	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 1	Suspended Concrete Slab 300mm	12.08	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Bath/Ldy	Suspended Concrete Slab 300mm	5.79	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 2	Suspended Concrete Slab 300mm	10.97	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Entry	Suspended Concrete Slab 300mm	9.78	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm



## Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

## **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of  $5W/m^2$  is used for lighting, therefore lighting is not included in the appliance schedule.

0011782166 NatHERS Certificate	6.6 Star	Rating as of 1	3 Mar 2025				HOU
Cooling system							
Appliance/ system type	Loc	cation F	uel type	effi	nimum ciency/ ormance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Loc	cation F	uel type	effi	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
-	Fuel type	Hot Water	Minimum efficiency	Zone 3		Ibstitution e ranges	Assessed daily load
	Fuel type		Minimum efficiency /STC	Zone 3 STC -			Assessed daily load [litres]
Appliance/ system type	Fuel type	Water	efficiency		toleranc	e ranges	daily load
Appliance/ system type No Data Available	Fuel type	Water	efficiency		toleranc	e ranges	daily load
Appliance/ system type No Data Available Pool/spa equipment	Fuel type	Water	efficiency		toleranc lower limit m y/	e ranges	daily load [litres]
Appliance/ system type No Data Available Pool/spa equipment	Fuel type	Water CER Zone	efficiency	STC -	toleranc lower limit m y/	e ranges upper limit Recomm	daily load [litres]
Appliance/ system type No Data Available Pool/spa equipment Appliance/ system type No Data Available		Water CER Zone	efficiency	STC -	toleranc lower limit m y/	e ranges upper limit Recomm	daily load [litres]
Pool/spa equipment Appliance/ system type No Data Available Onsite Renewable El		Water CER Zone	efficiency /STC	STC -	toleranc lower limit m y/	e ranges upper limit Recomm capac	daily load [litres]

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]	
No Data Available		



### Explanatory notes

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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 p           Assessed floor area         the f           Ceiling penetrations         Excl           COP         Coeling	tralian Fenestration Rating Council predicted amount of energy required for heating and cooling, based on standard occupancy assumptions. floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the rarea in the design documents. ures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. ludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts. fficient of performance
Assessed floor area the f floor Ceiling penetrations Excl heat COP Coel	floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the r area in the design documents. ures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. ludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts. fficient of performance
COP Coef	Ing and cooling ducts. fficient of performance
2.70	
a	
circu	ne within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some umstances it will include garages.
	dows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating eme) rating.
Default windows wind meth	lows that are representative of a specific type of window product and whose properties have been derived by statistical hods.
input input	
	is your homes rating without solar or batteries.
defin	net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as ned in the ABCB Housing Provisions Standard).
venti	e signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ilated corridor in a Class 2 building.
•	exposure categories below.
	ain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
scatt	ain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with tered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
	ain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
· · · · · · · · · · · _ · · _ · /	ain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
from from	rides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies upper levels.
	NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ss 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
	me that achieves a net zero energy value*.
	openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value a pro	issumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, ovisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note can be found at www.nathers.gov.au
Recommended capacity this i personality	is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified on.
Reflective wrap (also known as can linsul	be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides lative properties.
Roof window for N space	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 ce, and generally does not have a diffuser.
Shading features inclu	Ides neighbouring buildings, fences, and wing walls, but excludes eaves.
	NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
subs	fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and sequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar it transmits.
boug	all-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ght and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
Thermal breaks but is	materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such olystyrene insulation sheeting or plastic strips
	rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	ne within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features proving	rides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes acy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
	ce fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading ures* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782190

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit GFU3, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 79.0 Unconditioned\* 0.0 Total 79.0 Garage 0.0

CONEDIPA TASESSON

### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

#### 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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

40.8 MJ/m<sup>2</sup>

The more stars

the more energy efficient

NATIONWIDE

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
lodelled	24.0	16.7
oad limits	N/A	N/A

### Features determining load limits

M

1.

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=QByppOoxY . When using either link, ensure you are visiting hstar.com.au





### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



### 7.7 Star Rating as of 13 Mar 2025

					HOUSE	
Certificate check	Approval Stage			Construction Stage		
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Asses	Conse Surve)	Builde	Conse Survey	Occup	
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 Certificate?						
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						

#### 7.7 Star Rating as of 13 Mar 2025

	HO
Construction	6575
Stage	

### **Certificate check**

Continued

Approva	l Stage	Construe 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	e performa	ance asses	ssment is r	not conduc	ted)
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 I	NatHERS	assessi	nent)		
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.

### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	38.71
Bedroom 1	Bedroom	14.64
Bath/Ldy	Daytime	10.45
Bedroom 2	Bedroom	10.13
Glazed Common	Glazed Common Area	16.42
Entry	Daytime	5.11

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum U-value* SHGC*		Substitution tolerance ranges		
WINdow ID	Description			SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges				
	Description	U-value*	3160	SHGC lower limit	SHGC upper limit			
No Data Availa	able							

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1400	Fixed	00	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1700	1570	Fixed	00	S	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1540	Fixed	00	W	No
Bedroom 1	ALM-004-03 A	n/a	1700	1500	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Glazed Common	ALM-001-01 A	n/a	2050	1000	Casement	90	W	No

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Location	Window ID	Window no.	Height [mm]	Width Window [mm] type	Opening %	Orientation	Window shading device*	
Glazed Common	ALM-002-01 A	n/a	2700	800 Fixed	00	W	No	
Glazed Common	ALM-002-01 A	n/a	650	1000 Louvre	90	W	No	

# Roof window\* type and performance value

### Default roof windows\*

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

### Custom roof windows\*

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

## 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser		
No Data Available								
External door schedule								

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					



# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	4100	Ν	5100	No
Kitchen/Living	EW-1	2700	9495	S	0	No
Kitchen/Living	EW-1	2700	4100	W	0	No
Bedroom 1	EW-1	2700	1800	S	0	Yes
Bedroom 1	EW-1	2700	600	E	0	No
Bedroom 1	EW-1	2700	1995	S	0	No
Bedroom 2	EW-1	2700	2995	W	4100	Yes
Bedroom 2	EW-2	2700	1000	Ν	2100	No
Glazed Common	EW-1	2700	2063	W	3800	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	43.48	No insulation
IW-002	AAC, plaster on studs	51.57	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	0.00	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Suspended Concrete Slab 300mm	38.71	Basement Carpark	Bulk Insulation i Contact with Floor R2	n Ceramic Tiles 8mm

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Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bedroom 1	Suspended Concrete Slab 300mm	14.64	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Bath/Ldy	Suspended Concrete Slab 300mm	10.45	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 2	Suspended Concrete Slab 300mm	10.13	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Glazed Common	Suspended Concrete Slab 300mm	16.42	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Entry	Suspended Concrete Slab 300mm	5.11	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

# Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed	
Kitchen/Living	1	Exhaust Fans	300	Sealed	
Bath/Ldy	1	Exhaust Fans	300	Sealed	

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit GFU3, 80-82 Showground Road , GOSFORD , NSW , 2250



### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction [R-value]		Solar absorptance	Roof shade [colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

## Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				
Heating system				
Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			·	

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7.7 Star Rating as of 13 Mar 2025



#### Hot water system

Appliance/ system type	Fuel type	Hot Fuel type Water	Minimum efficiency /STC	Zone 3 STC	Zone 3 Substitution tolerance ranges		Assessed daily load
	CEI	CER Zone			lower limit	upper limit	[litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	cy/	Recomm capac	
No Data Available							

# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

## **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



### **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

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
<b>Reflective wrap</b> (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
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.
Skylight (also known as roof lights	b) for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)
window shading device	features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782224

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit GFU4, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\* Conditioned\* 76.5

Unconditioned<sup>\*</sup> 76.5 Unconditioned<sup>\*</sup> 0.0 Total 76.5 Garage 0.0

CONEDIPO TASESSOT

### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE HOUSE ENERGY RATING SCHEME

# 56.7 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	50.7	6.0
.oad limits	N/A	N/A

#### Features determining load limits

Floor Type	N/A
(lowest conditioned area)	DV/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=SLFTfcVXO. When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit GFU4, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost



#### 6.6 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	I Stage	Constru Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	hecked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyor	Builder checked	Consent Surveyor	Occupan
Genuine certificate check		Т	Т	ſı	
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 Certificate?					
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					



0011782224 NatHERS Certificate6.6 Star Rating as of 13 Mar 2025					HOUSE
	Approva	I Stage	Constru Stage	ction	
Certificate check	lecked	thority/ ecked	cked	thority lecked	Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	RS asse	ssment)	
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	e performa	ance asse	ssment is i	not conduc	ted)
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	assessi	nent)		
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	0	ñ	0	0	

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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Glazed Common	Glazed Common Area	10.84
Bath/Ldy	Daytime	6.59
Kitchen/Living	Kitchen/Living	41.33
Bedroom 1	Bedroom	14.31
Hallway	Daytime	3.04
Bedroom 2	Bedroom	11.27

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
WINDOW ID	Description	U-value*		SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description U-value*	SHGC	SHGC lower limit	SHGC upper limit	
No Data Availa	able				

# Window and glazed door schedule

Window ID	Window no.	Height [mm]			Opening %	Orientation	Window shading device*
ALM-002-01 A	n/a	2700	800	Fixed	00	W	No
ALM-001-01 A	n/a	2050	1000	Casement	90	W	No
ALM-002-01 A	n/a	650	1000	Louvre	90	W	No
ALM-004-03 A	n/a	1200	1570	Fixed	00	W	No
ALM-003-01 A	n/a	1200	830	Awning	90	W	No
ALM-003-01 A	n/a	1200	830	Awning	90	W	No
ALM-004-03 A	n/a	1200	750	Fixed	00	W	No
ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes
ALM-004-03 A	n/a	1500	1570	Fixed	00	Ν	No
	ID         ALM-002-01 A         ALM-001-01 A         ALM-002-01 A         ALM-002-01 A         ALM-003-01 A         ALM-003-01 A         ALM-003-01 A         ALM-004-03 A         ALM-004-03 A	ID         no.           ALM-002-01 A         n/a           ALM-001-01 A         n/a           ALM-002-01 A         n/a           ALM-002-01 A         n/a           ALM-002-01 A         n/a           ALM-003-01 A         n/a           ALM-004-03 A         n/a           ALM-004-03 A         n/a	ID         no.         [mm]           ALM-002-01 A         n/a         2700           ALM-001-01 A         n/a         2050           ALM-002-01 A         n/a         650           ALM-002-01 A         n/a         1200           ALM-004-03 A         n/a         1200           ALM-003-01 A         n/a         1200           ALM-003-01 A         n/a         1200           ALM-003-01 A         n/a         1200           ALM-003-01 A         n/a         2700	ID         no.         [mm]         [mm]           ALM-002-01 A         n/a         2700         800           ALM-001-01 A         n/a         2050         1000           ALM-002-01 A         n/a         650         1000           ALM-002-01 A         n/a         650         1000           ALM-002-01 A         n/a         1200         1570           ALM-003-01 A         n/a         1200         830           ALM-003-01 A         n/a         1200         830           ALM-003-01 A         n/a         1200         750           ALM-004-03 A         n/a         2700         2410	ID         no.         [mm]         [mm]         type           ALM-002-01 A         n/a         2700         800         Fixed           ALM-001-01 A         n/a         2050         1000         Casement           ALM-002-01 A         n/a         650         1000         Louvre           ALM-002-01 A         n/a         650         1000         Louvre           ALM-002-01 A         n/a         1200         1570         Fixed           ALM-003-01 A         n/a         1200         830         Awning           ALM-003-01 A         n/a         1200         830         Awning           ALM-003-01 A         n/a         1200         750         Fixed           ALM-004-03 A         n/a         1200         2410         Sliding	ID         no.         [mm]         [mm]         type         %           ALM-002-01 A         n/a         2700         800         Fixed         00           ALM-001-01 A         n/a         2050         1000         Casement         90           ALM-002-01 A         n/a         650         1000         Louvre         90           ALM-002-01 A         n/a         650         1000         Louvre         90           ALM-002-01 A         n/a         1200         1570         Fixed         00           ALM-003-01 A         n/a         1200         830         Awning         90           ALM-003-01 A         n/a         1200         830         Awning         90           ALM-003-01 A         n/a         1200         750         Fixed         00           ALM-004-03 A         n/a         1200         750         Fixed         00           ALM-004-03 A         n/a         2700         2410         Sliding         45	ID         no.         [mm]         [mm]         type         %         Orientation           ALM-002-01 A         n/a         2700         800         Fixed         00         W           ALM-001-01 A         n/a         2050         1000         Casement         90         W           ALM-002-01 A         n/a         650         1000         Louvre         90         W           ALM-002-01 A         n/a         650         1000         Louvre         90         W           ALM-002-01 A         n/a         650         1000         Louvre         90         W           ALM-003-01 A         n/a         1200         1570         Fixed         00         W           ALM-003-01 A         n/a         1200         830         Awning         90         W           ALM-003-01 A         n/a         1200         750         Fixed         00         W           ALM-004-03 A         n/a         1200         750         Fixed         00         W           ALM-004-03 A         n/a         2700         2410         Sliding         45         N

0011782224 NatHERS	6.6 Star Rating	<b>as of</b> 13 Ma	ar 2025				HOUSE	
Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Bedroom 2	ALM-004-03 A	n/a	1500	1570	Fixed	00	Ν	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description U-value*		3600	SHGC lower limit	SHGC upper limit
No Data Availa	able				

### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
WINdow ID	Description	U-value*	3660	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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser			
No Data Available									
External	door sche	dule							

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				



# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Glazed Common	EW-2	2700	1963	W	3900	Yes
Kitchen/Living	EW-2	2700	7363	W	5900	No
Kitchen/Living	EW-3	2700	4495	Ν	4100	No
Bedroom 1	EW-1	2700	1500	W	10400	No
Bedroom 1	EW-1	2700	3395	Ν	2600	No
Bedroom 2	EW-1	2700	3695	Ν	2600	Yes

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	41.58	No Insulation
IW-002	Concrete Panel/Blocks filled, plaster on studs	17.55	No Insulation
IW-003	Steel Stud Frame, Direct Fix Plasterboard	42.39	No insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Glazed Common	Suspended Concrete Slab 300mm	10.96	Basement Carpark	Bulk Insulation in Contact with Floor R2	n Ceramic Tiles 8mm
Bath/Ldy	Suspended Concrete Slab 300mm	6.59	Basement Carpark	Bulk Insulation in Contact with Floor R2	n Ceramic Tiles 8mm

0011782224 NatHERS Certificate

6.6 Star Rating as of 13 Mar 2025



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Suspended Concrete Slab 300mm	41.33	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 1	Suspended Concrete Slab 300mm	14.31	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm
Hallway	Suspended Concrete Slab 300mm	3.04	Basement Carpark	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 2	Suspended Concrete Slab 300mm	11.27	Basement Carpark	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Hallway	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Bath/Ldy	1	Exhaust Fans	300	Sealed
Kitchen/Living	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900

0011782224 NatHERS Certificate	6.6 Star Rating as of 13 Mar 2025		HOUSE
Location	Quantity	Diameter [mm]	
Bedroom 1	1	900	
Bedroom 2	1	900	

## Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

## Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

### Cooling system

Appliance/ system type	Lo	cation	Fuel type	eff	inimum iciency/ formance		mended acity	
No Data Available								
Heating system								
Appliance/ system type	Lo	cation	Fuel type	Minimum efficiency/ performance			Recommended capacity	
No Data Available								
Hot water system								
Appliance/ system type	Fuel type	Hot Water	Minimum efficiency	Zone 3		Ibstitution e ranges	Assessed daily load	
		CER Zone	/STC	STC	lower limit	upper limit	[litres]	
No Data Available								

0011782224 NatHERS Certificate Pool/spa equipment	6.6 Star Rating as of 13 Mar 2025		HOUSE
Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

System Type Orientation		System Size Or Generation Capacity
No Data Available		

# Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



## 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

AFRC	Australian Fongatation Dating Council
Arro Annual energy load	Australian Fenestration Rating Council the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
<u> </u>	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the
Assessed floor area	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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
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.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782265

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

## Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L1U1, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Suburban

## Plans

Main plan Prepared by BGYGP DTA Architects

## Construction and environment

## Assessed floor area [m2]\*

Conditioned\* 50.6 Unconditioned\* 2.1 Total 52.7 Garage 0.0

CONEDIPR TARESSON

## Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

KGT KATING SCHEME

The more stars

the more energy efficient

NATIONWIDE

34.1 MJ/m<sup>2</sup> Predicted annual energy load for

heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

## Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	16.1	18.0
oad limits	N/A	N/A

## Features determining load limits

1

Floor Type (lowest conditioned area)	N/A
	10.
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=iTMvlgYLJ . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U1, 80-82 Showground Road, GOSFORD, NSW, 2250



### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 8.2 Star Rating as of 13 Mar 2025

-					HOUSE
Certificate check	Approva	I Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder checked	Consent Surveyo	Occupar
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 Certificate?					
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					

0011782265 NatHERS Certificate8.2 Star Rating as of 13 Mar 2025					HOUSE
	Approva	l Stage	Constru Stage	ction	
Certificate check	lecked	hority/ ecked	ked	hority ecked	Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	RS asse	ssment)	
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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessi	ment)		
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	n	ñ	ñ	ñ	

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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.13
Bedroom 1	Bedroom	12.28
Bath	Daytime	4.99
Entry	Daytime	2.19
Ldy	Unconditioned	2.1
Glazed Common	Glazed Common Area	4.64

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3666	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Vindow Maximum SHGC*		Substitution tolerance range				
	Description U-value*	U-value*	3660	SHGC lower limit	SHGC upper limit			
No Data Available								

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	E	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-004-03 A	n/a	1500	1020	Fixed	00	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	Yes
Ldy	ALM-003-01 A	n/a	1500	600	Awning	90	E	No

0011782265 NatHERS	8.2 Star Rating as		HOUSE					
Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Glazed Common	ALM-002-01 A	A n/a	2700	2670	Louvre	25	E	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description U-value*		3600	SHGC lower limit	SHGC upper limit	
No Data Availa	able					

### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
WINdow ID	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				

## 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²] Or	rientation	Outdoor shade	Diffuser
No Data Ava	No Data Available						
Externa	l door sche	edule					
Location		Height [mm]	Width [mm]		Opening %	Orientatio	on

No Data Available



# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3500	Ν	3500	No
Kitchen/Living	EW-2	2700	500	E	400	No
Kitchen/Living	EW-1	600	4595	E	0	No
Kitchen/Living	EW-3	2100	4595	E	400	No
Bedroom 1	EW-1	2700	4000	Ν	400	No
Bedroom 1	EW-1	2700	3095	E	3900	No
Ldy	EW-1	600	1695	E	0	No
Ldy	EW-3	2100	1695	E	400	No
Ldy	EW-2	2700	1000	S	3000	No
Glazed Common	EW-3	2700	2963	E	1000	Yes
Glazed Common	EW-2	2700	1600	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	22.95	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	27.90	No insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.64	No Insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	31.13	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	12.28	None	No Insulation	Carpet+Rubber Underlay 18mm

0011782265 NatHERS Certificate



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Bath	Concrete Slab, Unit Below 300mm	4.99	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	2.19	None	No Insulation	Ceramic Tiles 8mm
Ldy	Concrete Slab, Unit Below 300mm	2.10	None	No Insulation	Ceramic Tiles 8mm
Glazed Common	Concrete Slab, Unit Below 300mm	4.64	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	

# Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	



## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

## Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation	Fuel type	effi	nimum ciency/ ormance		imended bacity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation	Fuel type	effi	nimum ciency/ ormance		mended bacity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency e /STC	Zone 3 STC -		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimur efficienc performa	у/	Recomm capa	
No Data Available							
Onsite Renewable	e Energy Sch	edule					
System Type	Orientation		Syst	em Size Or	Generation	Capacity	

No Data Available



## **Battery** Schedule

System Type

Size [Battery Storage Capacity]

No Data Available



## 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

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
Skylight (also known as roof lights	
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782299

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

## Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L1U2, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Suburban

## Plans

Main plan Prepared by BGYGP DTA Architects

## Construction and environment

## Assessed floor area [m2]\*

Conditioned\* 55.1 Unconditioned\* 0.0 Total 55.1 Garage 0.0

CONEDIPO TOPESSON

## Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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.

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

17.9 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

## Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	9.1	8.8
Load limits	N/A	N/A

## Features determining load limits

Floor Type	N/A
(lowest conditioned area)	DVP
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=WxwZAFzCu . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U2, 80-82 Showground Road , GOSFORD , NSW , 2250

## About the ratings

#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost



#### 9.5 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	Approva	Il Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assess	Consei Survey	Builder	Consei Survey	Occup
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 Certificate?					
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					



0011782299 NatHERS Certificate9.5 Star Rating as of 13 Mar 2025					HOUSE
	Approva	al Stage	Constru Stage	ction	
Certificate check	hecked	uthority/ hecked	scked	uthority hecked	/Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	S assessi	ment)		
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					
	Alexal		A	1	the stand of the

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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.17
Entry	Daytime	4.22
Bedroom 1	Bedroom	13.73
Bath/Ldy	Daytime	6.01

# Window and glazed door type and performance

### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
willdow iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
Window ID	Description U-value*		3660	SHGC lower limit SHGC upper lim		
No Data Availa	able					

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

## Default roof windows\*

Window ID	Window ID SHGC* —	Substitution to	Substitution tolerance ranges		
window iD	Description U-value*		3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				



#### Custom roof windows\*

Window ID	Window ID Window	Maximum	SHGC*	Substitution to	elerance ranges
Window ID	Description U-value*		3660	SHGC lower limit	SHGC upper limit
No Data Avai	lable				

## Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

## Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Avail	lable					

## External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3500	W	3300	No
Kitchen/Living	EW-1	1200	4000	Ν	0	No
Kitchen/Living	EW-2	1500	4000	Ν	400	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U2, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782299 NatHERS Certificate

9.5 Star Rating as of 13 Mar 2025

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]	
Bedroom 1	EW-1	2700	3295	Ν	3900	Yes	

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.59	No insulation
IW-002	AAC, plaster on studs	21.33	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	24.57	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	26.07	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	5.10	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.22	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.73	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.01	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed	
Kitchen/Living	1	Exhaust Fans	300	Sealed	
Bath/Ldy	1	Exhaust Fans	300	Sealed	



## **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

## Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Loo	cation	Fuel type	eff	inimum iciency/ <sup>;</sup> ormance	 mended acity
No Data Available						
Heating system						
Appliance/ system type	Lo	cation	Fuel type	eff	inimum iciency/ formance	 mended acity
No Data Available						
Hot water system						
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency e /STC	Zone 3 STC	Zone 3 Sub tolerance lower limit	Assessed daily load [litres]
No Data Available						

Pool/spa equipment			
Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



## 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

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
<b>Reflective wrap</b> (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
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.
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.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782323

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

## Property

Address

Lot/DP NCC class' Floor/all Floors Type

Unit L1U3, 80-82 Showground Road, GOSFORD, NSW, 2250 Lot 10.11 DP 503890 2 G of 1 floors New Home

## Plans

Main plan Prepared by BGYGP **DTA Architects** 

## Construction and environment

#### Assessed floor area [m2]\* Conditioned\* 55.0 Unconditioned\* 0.0 Total 55.0

Exposure type Suburban NatHERS climate zone 15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

Garage

## Accredited assessor

Name **Business** name Email Phone Accreditation No. Assessor Accrediting Organisation **Design Matters National** 

0.0

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

#### 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 J3D3 and J3D15 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

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

# 18.6 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions

> For more information on your dwelling's rating see: www.nathers.gov.au

## Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	7.8	10.8
Load limits	N/A	N/A

### Features determining load limits

Floor Type	N/A
(lowest conditioned area)	DV/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=cMbbOqRXY When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U3, 80-82 Showground Road , GOSFORD , NSW , 2250



### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



### 9.4 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	check Approval Stage				
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesse	Consen Surveyc	Builder	Consen	Occupa
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		1	1	ſı	
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 Certificate?					
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					

#### 9.4 Star Rating as of 13 Mar 2025

Approva	al Stage	Constru Stage	ction	
ecked	hority/ ecked	ked	hority scked	Other
ssessor ch		-	Consent Aut Surveyor che	Occupancy/C
	essor checked	Aut	Approval Stage Stage Stage dev cyce cyce cyce cyce cyce cyce cyce cy	Authority checked hecked Authority/ checked checked checked

#### 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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessi	nent)	0	
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					

## **Other NCC requirements**

'Additional notes' table below?

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.

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#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	30.78
Entry	Daytime	4.37
Bedroom 1	Bedroom	13.67
Bath/Ldy	Daytime	6.23

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain Iow-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Vindow Maximum		Substitution tolerance ranges			
willdow iD	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit		
No Data Avail	able						

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

### Default roof windows\*

Window ID	Window	Maximum	SHGC* -	Substitution tolerance ranges		
window iD	Description	ion U-value* SHGC		SHGC lower limit	SHGC upper limit	
No Data Avail	able					



#### Custom roof windows\*

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

### 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	Skylight shaft reflectance
No Data Available		

### Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Available						

### External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					

### External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3600	W	3300	No
Kitchen/Living	EW-1	2700	4000	Ν	400	No
Kitchen/Living	EW-1	2700	3500	Е	0	No
Bedroom 1	EW-1	2700	3295	Ν	4000	Yes

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U3, 80-82 Showground Road , GOSFORD , NSW , 2250



### Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.86	No insulation
IW-002	AAC, plaster on studs	32.40	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.37	No Insulation

### Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	22.38	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	8.40	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.37	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.67	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.23	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

### Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900

0011782323 NatHERS Certificate	9.4 Star Rating as of 13 Mar 2025		HOUSE
Location	Quantity	Diameter [mm]	
Bedroom 1	1	900	

### Roof type

Construction	Added insulation [R-value]	Solar absorptance	Roof shade [colour]
None Present		0.00	

### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	efficiency/		mmended pacity	
No Data Available								
Heating system								
Appliance/ system type	Lo	cation F	uel type	Minimum efficiency/ performance			Recommended capacity	
No Data Available								
Hot water system								
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>ibstitution</b> e ranges upper limit	Assessed daily load [litres]	
No Data Available							[]	

Minimum efficiency/ erformance	Recommended capacity
e	efficiency/

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

### Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

ustralian Fenestration Rating Council e predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
e floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the por area in the design documents.
atures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. cludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and pating and cooling ducts.
pefficient of performance
zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some rcumstances it will include garages.
ndows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating cheme) rating.
ndows that are representative of a specific type of window product and whose properties have been derived by statistical ethods.
nergy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity put
nis is your homes rating without solar or batteries.
ne net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as fined in the ABCB Housing Provisions Standard).
ese signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ntilated corridor in a Class 2 building.
e exposure categories below.
rrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
rrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with attered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
rrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
rrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
ovides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies om upper levels.
e NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ass 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
home that achieves a net zero energy value*.
e openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
n assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note id can be found at www.nathers.gov.au
is is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the one or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified erson.
an be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides sulative properties.
r 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 pace, and generally does not have a diffuser.
cludes neighbouring buildings, fences, and wing walls, but excludes eaves.
r NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
e fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and ubsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar at it transmits.
nall-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
e materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, it is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such polystyrene insulation sheeting or plastic strips
e rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
ovides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes ivacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
evice fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading atures* (eg eaves and balconies)

### Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782349

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L1U4, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\* Conditioned\* 50.0

Unconditioned\* 0.0 Total 50.0 Garage 0.0

CREDIPE TASESSOT

### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au</u>.

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

Thermal performance Star rating

The more stars the more energy efficient

### NATIONWIDE HOUSE ENERGY RATING SCHEME

## 61.9 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	27.1	34.9
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=bSxQOduro . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U4, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost



#### 6.3 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	Il Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assess	Consen Survey	Builder	Consen Surveyo	Occupa
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 Certificate?					
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					



0011782349 NatHERS Certificate6.3 Star Rating as of 13 Mar 2025					HOUSE
	Approva	al Stage	Constru Stage	ction	
Certificate check	hecked	thority/ necked	cked	thority necked	Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e performa	ance asses	ssment is i	not conduc	ted)
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	S assessi	ment)		
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.

#### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	28.05
Entry	Daytime	3.92
Bedroom 1	Bedroom	11.95
Bath/Ldy	Daytime	6.05
Glazed Common	Glazed Common Area	7.57

### Window and glazed door type and performance

#### Default windows\*

Window ID	D Window Maximum SHGC		SHGC*	Substitution to	lerance ranges
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				

### Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1690	Awning	90	Ν	Yes
Bedroom 1	ALM-004-03 A	n/a	1500	2400	Fixed	00	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No



### Roof window\* type and performance value

Default roof windows\*

Description     U-value*     SHGC lower limit     SHGC upper       No Data Available     Custom roof windows*     Maximum     SHGC*     Substitution tolerance ranges       Window ID     Window     Maximum     SHGC*     SHGC lower limit     SHGC upper	Mindow ID	Window	Maximum	<b>6</b> HCC*	Substitution to	tolerance ranges	
Custom roof windows* Window ID Window Maximum SHGC* Substitution tolerance ranges Description U-value* SHGC lower limit SHGC upper		Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
Window ID Window Maximum SHGC* Substitution tolerance ranges Description U-value* SHGC lower limit SHGC upper	No Data Availa	able					
Window ID Description U-value* SHGC* SHGC lower limit SHGC upper	Custom roof w	indows*					
Description U-value* SHGC lower limit SHGC upper		Window	Maximum	01100+	Substitution tolerance ranges		
	window ID	Description	U-value*	SHGC	SHGC lower limit	SHGC upper limit	
No Data Available	No Data Availa	able					

### Root window<sup>\*</sup> 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	Skylight shaft reflectance
No Data Available		

### Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

### External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

### External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	1200	4495	W	0	No
Kitchen/Living	EW-2	1500	4495	W	600	No
Kitchen/Living	EW-1	2700	5800	Ν	2900	Yes
Kitchen/Living	EW-1	2700	1100	E	0	No
Bedroom 1	EW-1	2700	3195	S	0	No
Bedroom 1	EW-1	2700	600	W	600	No
Bedroom 1	EW-1	1200	3195	W	0	Yes
Bedroom 1	EW-2	1500	3195	W	600	No
Glazed Common	EW-1	2700	900	S	0	No
Glazed Common	EW-1	2700	2163	W	1100	Yes

### Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	33.48	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	30.60	No insulation

### Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	1.75	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	26.30	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm
Entry	Suspended Concrete Slab 300mm	3.92	Totally Open	Bulk Insulation in Contact with Floor R2	Ceramic Tiles 8mm
Bedroom 1	Suspended Concrete Slab 300mm	11.95	Totally Open	Bulk Insulation in Contact with Floor R2	Carpet+Rubber Underlay 18mm

0011782349 NatHERS Certificate



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering	1252592
Bath/Ldy	Concrete Slab, Unit Below 300mm	4.15	None	No Insulation	Ceramic Tiles 8mm	
Bath/Ldy	Suspended Concrete Slab 150mm	1.90	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm	
Glazed Common	Concrete Slab, Unit Below 300mm	3.47	None	No Insulation	Ceramic Tiles 8mm	
Glazed Common	Suspended Concrete Slab 150mm	4.10	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm	

### Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	

### **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

### Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	



### Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]		Thermal break [R-value]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	ocation	Fuel type	Minimum efficiency/ performance		Recommended capacity	
No Data Available							
Heating system							
Appliance/ system type	Lo	ocation	Fuel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water	Minimum efficiency	Zone 3 STC		ubstitution e ranges	Assessed daily load
No Data Available		CER Zone	e /STC		lower limit	upper limit	[litres]
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capa	
No Data Available							
Onsite Renewable	e Energy Sch	nedule					
System Type	Orientation		Syst	em Size O	r Generation	Capacity	

No Data Available



### **Battery** Schedule

System Type

Size [Battery Storage Capacity]

No Data Available



#### 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

stralian Fenestration Rating Council predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
a floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the or area in the design documents.
atures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. cludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ating and cooling ducts.
efficient of performance
zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some cumstances it will include garages.
ndows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating heme) rating.
ndows that are representative of a specific type of window product and whose properties have been derived by statistical thods.
ergy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity out
is is your homes rating without solar or batteries.
e net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as fined in the ABCB Housing Provisions Standard).
ese signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ntilated corridor in a Class 2 building.
e exposure categories below.
rain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
rain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with attered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
rain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
rain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
ovides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies m upper levels.
e NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ass 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
nome that achieves a net zero energy value*.
e openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note d can be found at www.nathers.gov.au
s is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the ne or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified rson.
n be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides sulative properties.
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 ace, and generally does not have a diffuser.
ludes neighbouring buildings, fences, and wing walls, but excludes eaves.
NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
<ul> <li>fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and bsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar at it transmits.</li> </ul>
nall-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ught and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
<ul> <li>materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, t is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such polystyrene insulation sheeting or plastic strips</li> </ul>
a rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
byides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes vacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
vice fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading atures* (eg eaves and balconies)

### Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782364

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L1U5, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Suburban

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 79.0 Unconditioned\* 0.0 Total 79.0 Garage 0.0

CORDINAL Tagest

### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

## 45.4 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
lodelled	29.5	15.9
oad limits	N/A	N/A

#### Features determining load limits

M

1.

Floor Type	N/A
(lowest conditioned area)	DV/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=EozrUhXHq . When using either link, ensure you are visiting hstar.com.au





#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 7.4 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	Il Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Asses	Conse Surve)	Builde	Conse Survey	Occup
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		1	1	ſı	1
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 Certificate?					
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					

#### 7.4 Star Rating as of 13 Mar 2025

	Approva	l Stage	Constru Stage	ction	
Certificate check Continued	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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessi	nent)		
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.

#### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	38.71
Bedroom 1	Bedroom	14.64
Bath/Ldy	Daytime	10.45
Bedroom 2	Bedroom	10.03
Glazed Common	Glazed Common Area	20.52
Entry	Daytime	5.11

### Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum U-value* SHGC*		Substitution tolerance ranges		
	Description			SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

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

### Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1400	Fixed	00	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1700	1570	Fixed	00	S	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1540	Fixed	00	W	No
Bedroom 1	ALM-004-03 A	n/a	1700	1500	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U5, 80-82 Showground Road , GOSFORD , NSW , 2250



### Roof window\* type and performance value

Default roof windows\*

Window ID	Window	Maximum	<b>6</b> HCC*	Substitution tolerance ranges		
window ID	D Description U-value* SHGC*		SHGC	SHGC lower limit	SHGC upper limit	
No Data Avail	able					
Custom roof w	vindows*					
Window ID	Window	Maximum	SUCC*	Substitution to	lerance ranges	
Window ID	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
No Data Avail	able					
No Data Avail	able					

### Root 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	Skylight shaft reflectance
No Data Available		

### Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser	
No Data Available							

### External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

### External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	4100	Ν	5100	No
Kitchen/Living	EW-1	2700	9495	S	0	No
Kitchen/Living	EW-1	2700	4100	W	0	No
Bedroom 1	EW-2	2700	1800	S	0	Yes
Bedroom 1	EW-1	2700	600	Е	0	No
Bedroom 1	EW-1	2700	1995	S	0	No
Bedroom 2	EW-1	2700	2958	W	4100	Yes
Glazed Common	EW-2	2700	2100	W	1800	Yes
Glazed Common	EW-1	2700	1000	S	7100	No

### Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	43.48	No insulation
IW-002	AAC, plaster on studs	59.67	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	0.00	No Insulation

### Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	38.71	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	14.64	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	10.45	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.03	None	No Insulation	Carpet+Rubber Underlay 18mm
Glazed Common	Concrete Slab, Unit Below 300mm	16.25	None	No Insulation	Ceramic Tiles 8mm
Glazed Common	Suspended Concrete Slab 150mm	4.27	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	5.11	None	No Insulation	Ceramic Tiles 8mm



### Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

### **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed	
Kitchen/Living	1	Exhaust Fans	300	Sealed	
Bath/Ldy	1	Exhaust Fans	300	Sealed	

### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

### Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

#### 0011782364 NatHERS Certificate

#### 7.4 Star Rating as of 13 Mar 2025



Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	inimum ïciency/ formance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	inimum iciency/ formance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		ubstitution e ranges upper limit	Assessec daily loac [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficiene performa	cy/	Recomm capac	
No Data Available							

### **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

### **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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.

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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	Australian Fenestration Rating Council
Annual energy loau	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
	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.
COP	Coefficient of performance
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.
	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
	This is your homes rating without solar or batteries.
Ellergy 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).
	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.
	see exposure categories below.
	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).
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Holizolital shauling leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
	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.
	a home that achieves a net zero energy value*.
	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.
	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

### Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782117

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class' Floor/all Floors Type

Unit L1U6, 80-82 Showground Road, GOSFORD, NSW, 2250 Lot 10.11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Suburban

### Plans

Main plan Prepared by BGYGP **DTA Architects** 

### Construction and environment

### Assessed floor area [m2]\*

Conditioned\* 72.7 Unconditioned\* 0.0 Total 72.7 Garage 0.0

### Accredited assessor

Name **Business** name Email Phone Accreditation No. Assessor Accrediting Organisation **Design Matters National** 

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

#### 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 J3D3 and J3D15 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

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

46.7 MJ/m<sup>2</sup> Predicted annual energy load for

heating and cooling based on standard occupancy assumptions

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	29.0	17.7
Load limits	N/A	N/A

#### Features determining load limits

Floor Type	AUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=RcGNctUGf When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U6, 80-82 Showground Road , GOSFORD , NSW , 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 7.3 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	Approva	Il Stage	Construe Stage		
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupa
Genuine certificate check		n	r		
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		1	Т		
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 Certificate?					
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					

#### 7.3 Star Rating as of 13 Mar 2025

	Approva	I Stage	Constru Stage	ction	
Certificate check	ecked	ority/	pey	nority scked	Other
Continued	Assessor che	Consent Auth Surveyor che	Builder checl	Consent Auth Surveyor che	Occupancy/C
Additional NCC requirements for thermal per	formance (not included in t	he NatHE	ERS asse	ssment)	

# 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 performance 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	assessi	nent)	

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.

#### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	34.05
Bedroom 1	Bedroom	12.08
Bath/Ldy	Daytime	5.79
Bedroom 2	Bedroom	10.97
Entry	Daytime	9.78

### Window and glazed door type and performance

#### Default windows\*

Window ID	Window	indow Maximum		Substitution tolerance ranges		
willdow iD	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges			
willdow iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit		
No Data Availa	able						

### Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	2170	Sliding	45	E	Yes
Kitchen/Living	ALM-003-01 A	n/a	1700	1090	Awning	90	S	No
Bedroom 1	ALM-004-03 A	n/a	1700	2400	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	1700	2100	Fixed	00	S	No

### Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description U-value*		3660	SHGC lower limit	SHGC upper limit	
No Data Avail	able					



#### Custom roof windows\*

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

### 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	Skylight shaft reflectance
No Data Available		

### Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Available						

### External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

### External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	7100	Е	3700	Yes
Kitchen/Living	EW-1	2700	4700	S	400	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L1U6, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782117 NatHERS Certificate

7.3 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Kitchen/Living	EW-1	2700	1500	W	3900	No
Bedroom 1	EW-1	2700	1500	Е	3900	No
Bedroom 1	EW-1	2700	3400	S	0	No
Bedroom 1	EW-1	2700	500	W	0	No
Bedroom 2	EW-1	2700	895	S	0	No
Bedroom 2	EW-2	2700	2200	S	0	No
Bedroom 2	EW-3	2700	795	S	0	No

### Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	52.65	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	47.43	No insulation

### Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	34.05	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	12.08	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	5.79	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.97	None	No Insulation	Carpet+Rubber Underlay 18mm
Entry	Concrete Slab, Unit Below 300mm	9.78	None	No Insulation	Ceramic Tiles 8mm

### Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	



### **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

### Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system				
Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Appliance/ system type	Lo	cation Fu	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water	Minimum efficiency	Zone 3 STC		ubstitution e ranges	Assesse daily load
No Data Available		CER Zone	/STC	010	lower limit	upper limit	[litres]
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

### Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### Explanatory notes

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### Glossary

AFRC	Australian Fenestration Rating Council
	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.
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COP	Coefficient of performance
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.
	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.
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
<u></u>	This is your homes rating without solar or batteries.
Lifergy 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).
Elitrance 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.
	see exposure categories below.
	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).
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shaung leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
	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.
	a home that achieves a net zero energy value*.
	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.
	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.
¥	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
3103	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 Regulator (CER)
I hermal 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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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).
	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782158

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U1, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 50.1 Unconditioned\* 2.3 Total 52.4 Garage 0.0

CONEDIPE TRESSOT

### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

37.5 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Adelled	22.5	15.0
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=NbjxwWGzt . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U1, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 7.9 Star Rating as of 13 Mar 2025

······································					HOUSE	
Certificate check	Approval Stage				<u> </u>	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesse	Consen Surveyc	Builder	Consen	Occupa	
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 Certificate?						
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						

#### 7 9 Star Pating as of 13 Mar 2025

0011702150 NathERS Certificate	7.9 Star Rating as of 13 Mar 2025					
		Approva	al Stage	Constru Stage	ction	
Certificate check		ecked	ority/	cked	nority scked	Other
Continued		Assessor che	Consent Auth Surveyor che	Builder checl	Consent Auth Surveyor che	Occupancy/C

#### 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 Hom	e performa	ance asse	ssment is i	not conduc	cted)
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	assessi	ment)		
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					

#### Have provisional values\* been used in the assessment and, if 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.

#### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.35
Bedroom 1	Bedroom	11.97
Bath	Daytime	4.79
Entry	Daytime	2.02
Ldy	Unconditioned	2.26
Glazed Common	Glazed Common Area	4.35

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum U-value*		Substitution tolerance ranges		
	Description			SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

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

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	E	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-004-03 A	n/a	1500	1020	Fixed	00	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	Yes
Ldy	ALM-003-01 A	n/a	1500	600	Awning	90	E	No

0011782158 NatHERS	7.9 Star Rating as of 13 Mar 2025						HOUSE	
Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Glazed Common	ALM-002-01 A	A n/a	2700	2670	Louvre	25	E	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	on tolerance ranges	
	Description	U-value*	3600	SHGC lower limit	SHGC upper limit	
No Data Availa	able					

#### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
Window ID	Description	U-value*	3660	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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] O	Drientation	Outdoor shade	Diffuser	
No Data Ava	No Data Available							
External door schedule								
Location		Height [mm]	Width [mm]		Opening %	Orientatio	on	

No Data Available



# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3600	Ν	3500	No
Kitchen/Living	EW-1	2700	500	E	400	No
Kitchen/Living	EW-1	2700	4595	E	400	No
Bedroom 1	EW-1	2700	3900	Ν	400	No
Bedroom 1	EW-1	2700	3095	E	4000	No
Ldy	EW-1	2700	1695	E	400	No
Ldy	EW-1	2700	1100	S	3000	No
Glazed Common	EW-2	2700	2963	E	1100	Yes
Glazed Common	EW-1	2700	1500	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	22.68	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	27.64	No insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.64	No Insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	31.35	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	11.97	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 300mm	4.79	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	2.02	None	No Insulation	Ceramic Tiles 8mm



Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering	
Ldy	Concrete Slab, Unit Below 300mm	2.26	None	No Insulation	Ceramic Tiles 8mm	
Glazed Common	Concrete Slab, Unit Below 300mm	4.35	None	No Insulation	Ceramic Tiles 8mm	

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	

## **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ldy	1	Exhaust Fans	300	Sealed

# Ceiling fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	



### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation	Fuel type	Minimum efficiency/ performance		Recommended capacity	
No Data Available							
Heating system							
Appliance/ system type	Lo	cation	Fuel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency e /STC	Zone 3 STC -		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimum efficiency/ performance		Recommended capacity	
No Data Available							
Onsite Renewable	e Energy Sch	nedule					
System Type	Orientation		Syst	em Size O	r Generation	Capacity	

No Data Available



### **Battery** Schedule

System Type

Size [Battery Storage Capacity]

No Data Available



#### 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

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
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.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)
<b>...</b>	

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782182

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U2, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 55.1 Unconditioned\* 0.0 Total 55.1 Garage 0.0

Garage

### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

### Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

13.8 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

Heating	Cooling	
3.9	9.9	
N/A	N/A	
	3.9	3.9 9.9

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=fDjCsauhw . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U2, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 9.9 Star Rating as of 13 Mar 2025

Certificate check	Approva	I Stage	Constru Stage	ction	HOUSE
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	hecked	uthority/ hecked		uthority hecked	/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	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 Certificate?					
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					



0011782182 NatHERS Certificate9.9 Star Rating as of 13 Mar 2025					HOUSE
	Approval Stage		Constru Stage	ction	
Certificate check	lecked	hority/ ecked	ked	thority ecked	Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu-	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e performa	ance asses	ssment is I	not conduc	ted)
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	S assessi	ment)		
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	n	<u></u>	n	n	

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.

#### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.17
Entry	Daytime	4.22
Bedroom 1	Bedroom	13.73
Bath/Ldy	Daytime	6.01

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain Iow-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

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

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

#### Default roof windows\*

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



#### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	elerance ranges
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avai	lable				

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Avail	lable					

## External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3500	W	3300	No
Kitchen/Living	EW-1	1200	4000	Ν	0	No
Kitchen/Living	EW-2	1500	4000	Ν	300	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U2, 80-82 Showground Road , GOSFORD , NSW , 2250

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9.9 Star Rating as of 13 Mar 2025

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]	
Bedroom 1	EW-1	2700	3295	Ν	3800	No	

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.59	No insulation
IW-002	AAC, plaster on studs	21.33	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	24.57	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	31.17	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.22	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.73	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.01	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed	
Kitchen/Living	1	Exhaust Fans	300	Sealed	
Bath/Ldy	1	Exhaust Fans	300	Sealed	



### **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

## Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation	Fuel type	eff	nimum iciency/ ormance	 mended acity		
No Data Available								
Heating system								
Appliance/ system type	Lo	cation	Fuel type	Minimum efficiency/ performance		 Recommended capacity		
No Data Available								
Hot water system								
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency e /STC	Zone 3 STC	Zone 3 Sul tolerance	Assessed daily load [litres]		
No Data Available								

Pool/spa equipment	9.9 Star Rating as of 13 Mar 2025		HOUSE
Appliance/ system type	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
Skylight (also known as roof lights	
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)
Window shading device	

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782216

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U3, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 55.0 Unconditioned\* 0.0 Total 55.0 Garage 0.0

CONFEDITOR S

### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

19.2 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	9.7	9.5
Load limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=xztdQNSYI . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U3, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 9.4 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approval Stage Constructi Stage			ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assess	Consen Survey	Builder	Consen Surveyo	Occupa
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 Certificate?					
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					

#### 9.4 Star Rating as of 13 Mar 2025

		Approval Stage		Construction Stage	
Certificate check Continued	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 Hom	e performa	ance asses	ssment is r	not conduc	cted)
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	assessi	nent)		
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.

#### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	30.78
Entry	Daytime	4.37
Bedroom 1	Bedroom	13.67
Bath/Ldy	Daytime	6.23

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHG(		Substitution to	Substitution tolerance ranges		
	Description	U-value*	3666	SHGC lower limit	SHGC upper limit		
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56		
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54		

#### Custom windows\*

Window ID	Window	Maximum	SHGC* -	Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
No Data Avail	able					

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
window iD	Description U-value*		3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				



#### Custom roof windows\*

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

## Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

## External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3600	W	3300	No
Kitchen/Living	EW-1	2700	4000	Ν	400	No
Kitchen/Living	EW-1	2700	3500	Е	0	No
Bedroom 1	EW-1	2700	3295	Ν	4000	Yes

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U3, 80-82 Showground Road , GOSFORD , NSW , 2250



# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.86	No insulation
IW-002	AAC, plaster on studs	32.40	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.37	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	30.78	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.37	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.67	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.23	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900



# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							



# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

AFRC	Australian Fenestration Rating Council					
	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, 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.					
	Coefficient of performance					
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.					
	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.					
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input					
	This is your homes rating without solar or batteries.					
Lifergy 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).					
Elitrance 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.					
	see exposure categories below.					
	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).					
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.					
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.					
Horizontal shaung leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.					
	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.					
	a home that achieves a net zero energy value*.					
	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.					
	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.					
¥	includes neighbouring buildings, fences, and wing walls, but excludes eaves.					
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.					
	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.					
3103	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 Regulator (CER)					
I hermal 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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips					
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.					
	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).					
	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)					

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782240

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U4, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 50.0 Unconditioned\* 0.0 Total 50.0 Garage 0.0

Garage

### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

**NCC** Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars the more energy efficient

# **HOUSE** ENERGY RATING SCHEME

# 50.8 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	17.1	33.6
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=ByDKVgDOo . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U4, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 7 Star Rating as of 13 Mar 2025

Certificate check	Approva	I Stage	Constru Stage	ction	HOUSE
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder checked	Consent Surveyo	Occupar
Genuine certificate check		Т	ſı	ſı	
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	<u> </u>	n	^	^	<u> </u>
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 Certificate?					
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					

	1			k
1		-	1	1
1	14			

0011782240 NatHERS Certificate7 Star Rating as of 13 Mar 2025					HOUSE
	Approva	Il Stage	Stage       Stage       Quisent Authority/       Consent Authority/       Stage       Raininger       Raininger	ction	
Certificate check	ked	rity/ ked	p	rity ked	ler
Continued	Assessor checked	Consent Autho Surveyor checl	Builder checke	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 performance assessment is not conducted) Appliances					
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	assessi	ment)		
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. Add but are not limited to: condensation, structural and fire safety requirements and any st requirements.					

Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	28.05
Entry	Daytime	3.92
Bedroom 1	Bedroom	11.95
Bath/Ldy	Daytime	6.05
Glazed Common	Glazed Common Area	7.57

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges			
WIND	Description	U-value*	3660	SHGC lower limit	SHGC upper limit		
No Data Avail	able						

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1690	Awning	90	Ν	Yes
Bedroom 1	ALM-004-03 A	n/a	1500	2400	Fixed	00	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No



# Roof window\* type and performance value

Default roof windows\*

Window ID	Window	Maximum	SHCC*	Substitution tolerance ranges		
	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
No Data Avail	able					
Custom roof w	vindows*					
	Window	Maximum	81100*	Substitution to	lerance ranges	
Aline devel ID			SHGC*	SHGC lower limit	SHGC upper limit	
Window ID	Description	U-value*		OTIOC IOwer IIIIII		
Window ID No Data Avail	-	U-value*				
	-	U-value*				

#### I 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	4495	W	600	No
Kitchen/Living	EW-1	2700	5800	Ν	2900	Yes
Kitchen/Living	EW-1	2700	1100	E	0	No
Bedroom 1	EW-1	2700	3195	S	0	No
Bedroom 1	EW-1	2700	600	W	600	No
Bedroom 1	EW-1	2700	3195	W	600	Yes
Glazed Common	EW-1	2700	900	S	0	No
Glazed Common	EW-1	2700	2163	W	1100	Yes

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	33.48	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	30.60	No insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	28.05	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	3.92	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	11.95	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.05	None	No Insulation	Ceramic Tiles 8mm
Glazed Common	Concrete Slab, Unit Below 300mm	7.57	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	

0011782240 NatHER	S Certificate 7 Star Rating as of 13 Mar 20	25	HOUSE
Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]	rame spacing [mm] Steel thickness [BMT,mm]	
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

0011782240 NatHERS Certificate	7 Star I	Rating as of 13 M	/lar 2025				HOUS
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							[
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							
Onsite Renewable E	nergy Sch	nedule					
System Type Orie	entation		Syste	em Size O	r Generation	Capacity	

Size [Battery Storage Capacity]

No Data Available

System Type

No Data Available

Battery Schedule



#### 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 p           Assessed floor area         the f           Ceiling penetrations         Excl           COP         Coeling	tralian Fenestration Rating Council predicted amount of energy required for heating and cooling, based on standard occupancy assumptions. floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the r area in the design documents. ures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. ludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts. fficient of performance
Assessed floor area the f floor Ceiling penetrations Excl heat COP Coel	floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the r area in the design documents. ures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. ludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts. fficient of performance
COP Coef	Ing and cooling ducts. fficient of performance
2.70	
a	
circu	ne within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some umstances it will include garages.
	dows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating eme) rating.
Default windows wind meth	lows that are representative of a specific type of window product and whose properties have been derived by statistical hods.
input input	
	is your homes rating without solar or batteries.
defin	net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as ned in the ABCB Housing Provisions Standard).
venti	e signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ilated corridor in a Class 2 building.
•	exposure categories below.
	ain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
scatt	ain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with tered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
	ain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
· · · · · · · · · · · _ · · _ · /	ain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
from from	rides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies upper levels.
	NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ss 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
	me that achieves a net zero energy value*.
	openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value a pro	issumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, ovisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note can be found at www.nathers.gov.au
Recommended capacity this i personality	is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified on.
Reflective wrap (also known as can linsul	be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides lative properties.
Roof window for N space	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 ce, and generally does not have a diffuser.
Shading features inclu	Ides neighbouring buildings, fences, and wing walls, but excludes eaves.
	NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
subs	fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and sequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar it transmits.
boug	all-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ght and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
Thermal breaks but is	materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such olystyrene insulation sheeting or plastic strips
	rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	ne within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features proving	rides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes acy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
	ce fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading ures* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782273

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U5, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

### Plans

Main plan Prepared by BGYGP DTA Architects

### Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 79.0 Unconditioned\* 0.0 Total 79.0 Garage 0.0

CONEDI PRO

### Accredited assessor

NameDeaBusiness nameGreeEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

### Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE HOUSE ENERGY RATING SCHEME

# 48.8 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	34.7	14.1
Load limits	N/A	N/A

#### Features determining load limits

Floor Type	N/A
(lowest conditioned area)	DV/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=dZOgxoAhj . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U5, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost



#### 7.2 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	I Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupai
Genuine certificate check	1	Т	Т		
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 Certificate?					
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					

**Certificate check** 

Continued

#### 7.2

Star Rating as of 13 Mar 2025					HOUSE
	Approva	l Stage	Construe Stage	ction	
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other

AGED .

### 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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessi	nent)		
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.

#### **Additional notes**

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U5, 80-82 Showground Road , GOSFORD , NSW , 2250



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	38.71
Bedroom 1	Bedroom	14.64
Bath/Ldy	Daytime	10.45
Bedroom 2	Bedroom	10.03
Glazed Common	Glazed Common Area	20.52
Entry	Daytime	5.11

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	SHG		Substitution tolerance ranges		
	Description	U-value*	3160	SHGC lower limit	SHGC upper limit	
No Data Availa	able					

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1400	Fixed	00	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1700	1570	Fixed	00	S	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1540	Fixed	00	W	No
Bedroom 1	ALM-004-03 A	n/a	1700	1500	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U5, 80-82 Showground Road , GOSFORD , NSW , 2250



# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	w Maximum	SHGC*	Substitution tolerance ranges		
	Description U-value*		SHGC lower limit	SHGC upper limit		
No Data Avai	able					
Custom roof v	vindows*					
Window ID	Window	Maximum	01100+	Substitution to	lerance ranges	
	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit	
	Description	e Talac				

### 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
No Data Availa	able						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U5, 80-82 Showground Road , GOSFORD , NSW , 2250



# External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Kitchen/Living	EW-1	2700	4100	Ν	5100	No
Kitchen/Living	EW-1	2700	395	S	0	No
Kitchen/Living	EW-2	2700	1600	S	0	No
Kitchen/Living	EW-1	2700	7500	S	0	No
Kitchen/Living	EW-1	2700	4100	W	0	No
Bedroom 1	EW-2	2700	1800	S	0	Yes
Bedroom 1	EW-1	2700	600	E	0	No
Bedroom 1	EW-1	2700	1995	S	0	No
Bedroom 2	EW-1	2700	2958	W	4100	Yes
Glazed Common	EW-3	2700	2100	W	1800	Yes
Glazed Common	EW-1	2700	1000	S	7100	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	43.48	No insulation
IW-002	AAC, plaster on studs	59.67	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	0.00	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	38.71	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	14.64	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	10.45	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.03	None	No Insulation	Carpet+Rubber Underlay 18mm
Glazed Common	Concrete Slab, Unit Below 300mm	20.52	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	5.11	None	No Insulation	Ceramic Tiles 8mm



# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed	
Kitchen/Living	1	Exhaust Fans	300	Sealed	
Bath/Ldy	1	Exhaust Fans	300	Sealed	

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

#### 0011782273 NatHERS Certificate

#### 7.2 Star Rating as of 13 Mar 2025



Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	inimum ïciency/ formance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	inimum iciency/ formance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		ubstitution e ranges upper limit	Assessec daily loac [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficiene performa	cy/	Recomm capac	
No Data Available							

# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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.

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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.

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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.

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### Glossary

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
<b>Reflective wrap</b> (also known as foil)	can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides insulative properties.
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.
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.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782307

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L2U6, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

### Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 72.7 Unconditioned\* 0.0 Total 72.7 Garage 0.0

Sarage

### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

49.9 MJ/m<sup>2</sup>

The more stars

the more energy efficient

NATIONWIDE

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
lodelled	33.9	16.1
oad limits	N/A	N/A

#### Features determining load limits

1

Floor Type (lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=HOzvWDTPU . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U6, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 7.1 Star Rating as of 13 Mar 2025

Cartificate check	Approva	l Stage	Constru	ction	HOUSE
Certificate check			Stage		
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder checked	Consent Surveyo	Occupar
Genuine certificate check			0		
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 Certificate?					
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					

#### 7.1 Star Rating as of 13 Mar 2025

	Approva	Approval Stage		Construction Stage	
Certificate check	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal perform	nance (not included in t	he NatHE	ERS asse	essment)	ñ
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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessr	nent)	'n	

-			
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.

#### **Additional notes**



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	34.05
Bedroom 1	Bedroom	12.08
Bath/Ldy	Daytime	5.79
Bedroom 2	Bedroom	10.97
Entry	Daytime	9.78

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
willdow iD	Description	U-value*	3666	SHGC lower limit	SHGC upper limit
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
willdow iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Availa	able				

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	2170	Sliding	45	E	Yes
Kitchen/Living	ALM-003-01 A	n/a	1700	1090	Awning	90	S	No
Bedroom 1	ALM-004-03 A	n/a	1700	2400	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	1700	2100	Fixed	00	S	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC* -	Substitution to	lerance ranges
window iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				



#### Custom roof windows\*

Window ID	Window	Maximum	SHGC* -	Substitution to	lerance ranges
	Description	U-value*		SHGC lower limit	SHGC upper limit
No Data Avai	lable				

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	7100	Е	3700	Yes
Kitchen/Living	EW-1	2700	4700	S	400	No
Kitchen/Living	EW-1	2700	1500	W	3900	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L2U6, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782307 NatHERS Certificate

7.1 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Bedroom 1	EW-1	2700	1500	Е	3900	No
Bedroom 1	EW-1	2700	300	S	0	No
Bedroom 1	EW-1	2700	3100	S	0	No
Bedroom 1	EW-1	2700	500	W	0	No
Bedroom 2	EW-1	2700	895	S	0	No
Bedroom 2	EW-2	2700	2200	S	0	No
Bedroom 2	EW-1	2700	795	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	52.65	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	47.43	No insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	34.05	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	12.08	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	5.79	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.97	None	No Insulation	Carpet+Rubber Underlay 18mm
Entry	Concrete Slab, Unit Below 300mm	9.78	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	



### **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

Cooling system				
Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>Ibstitution</b> e ranges upper limit	Assesse daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### **Explanatory notes**

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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

AFRC       Australian Fenestration Rating Council         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 consister floor area in the design documents.         Ceiling penetrations       features that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys a Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant light heating and cooling ducts.         COP       Coefficient of performance       a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. 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 Scheme) rating.         Default windows       windows that are representative of a specific type of window product and whose properties have been derived by stat methods.         EER       Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electing input         Energy value       The net cost to society including, but not limited to, costs to the building user, the environment and energy networks of defined in the ABCB Housing Provisions Standard).         Entrance door       the set signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a	nd flues. s, and / Rating / Rating tistical ctricity
Assessed floor area         the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consister floor area in the design documents.           Ceiling penetrations         features that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys a Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant light heating and cooling ducts.           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 Scheme) rating.           Default windows         windows that are representative of a specific type of window product and whose properties have been derived by state methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of elec input           Energy value         The net cost to society including, but not limited to, costs to the building user, the environment and energy networks ventilated corridor in a Class 2 building.	nd flues. s, and / Rating / Rating tistical ctricity
heating and cooling ducts.         COP       Coefficient of performance         Conditioned       a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. 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 Scheme) rating.         Default windows       windows that are representative of a specific type of window product and whose properties have been derived by state the the type.         EER       Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electing.         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 of 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 mice output or in a Class 2 building.	In some / Rating tistical ctricity
Conditioned         a zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. 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 Scheme) rating.           Default windows         windows that are representative of a specific type of window product and whose properties have been derived by sta methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of elect 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 of 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 mi- ventilated corridor in a Class 2 building.	/ Rating tistical ctricity as
Continioned         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 Scheme) rating.           Default windows         windows that are representative of a specific type of window product and whose properties have been derived by sta methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of elect 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 of 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 mice	/ Rating tistical ctricity as
Classical windows         Scheme) rating.           Default windows         windows that are representative of a specific type of window product and whose properties have been derived by state methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electing use           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 of 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 midentiated corridor in a Class 2 building.	tistical ctricity as
Beradit windows         methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electing use           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 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 microtect or in a Class 2 building.	ctricity as
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 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 minerate corridor in a Class 2 building.	as
Energy value         The net cost to society including, but not limited to, costs to the building user, the environment and energy networks 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 miventilated corridor in a Class 2 building.	
Entrance door         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 minimum ventilated corridor in a Class 2 building.	
ventilated córridor in a Class 2 building.	nimallv
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 flot	
Exposure category – open terrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farml scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).	
Exposure category – protected terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland and	eas.
Exposure category – suburban terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.	<u> </u>
Horizontal shading feature provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or b	
National Construction Code (NCC) Class         the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NC Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.	C
Net zero home a home that achieves a net zero energy value*.	
<b>Opening percentage</b> 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 docur a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Techni and can be found at www.nathers.gov.au	cal Note
Recommended capacity this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably quereson.	in the alified
Reflective wrap (also known as foil) can be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provid insulative properties.	es
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 space, and generally does not have a diffuser.	s an attic
Shading features includes neighbouring buildings, fences, and wing walls, but excludes eaves.	
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.	
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 heat it transmits.	
STCs Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CE	
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 but is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal break as polystyrene insulation sheeting or plastic strips	includes, ks such
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 assumptio	
Vertical shading features provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritation).	Includes ge trees).
Window shading device device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical sh features* (eg eaves and balconies)	ading

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782331

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L3U1, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 50.1 Unconditioned\* 2.3 Total 52.4 Garage 0.0



### Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

# 38.3 MJ/m<sup>2</sup>

The more stars

the more energy efficient

NATIONWIDE

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Adelled	24.4	13.8
oad limits	N/A	N/A

#### Features determining load limits

Floor Type (lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

### 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 hstar.com.au/QR/Generate? p=hNtdiBEhq . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U1, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 7.9 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	Approva	I Stage	Constru Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesse	Consen Surveyc	Builder	Consen	Occupa
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		Т	Т	1	
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 Certificate?					
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					

#### 7 9 Star Rating as of 13 Mar 2025

1	2
54000	
HOU	ISE .

1.9 Star Rating as OF 15 Mai 2025					HOUSE	
	Approva	al Stage	Constru Stage	ction		
Certificate check	ecked	hority/ ecked	ked	hority ecked	Other	
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Additional NCC requirements for thermal performance (not include	uded in t	he NatHE	ERS asse	ssment)		
Thermal bridging						
Does the dwelling meet the NCC requirement for thermal bridging?						
Insulation installation method	1					
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 Hom	e perform	ance asse	ssment is i	not conduc	ted)	
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	S assessi	ment)			
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 Add	itional requi	irements the	at must also	be satisfied	linclude	

Note: I his 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.

#### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.35
Bedroom 1	Bedroom	11.97
Bath	Daytime	4.79
Entry	Daytime	2.02
Ldy	Unconditioned	2.26
Glazed Common	Glazed Common Area	4.35

# Window and glazed door type and performance

#### Default windows\*

Window ID		Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*		SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window Maximum SHGC* ——	Substitution to	Substitution tolerance ranges		
	Description	U-value*	3000	SHGC lower limit	SHGC upper limit
No Data Availa	able				

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	E	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-003-01 A	n/a	1500	990	Awning	10	Ν	No
Bedroom 1	ALM-004-03 A	n/a	1500	1020	Fixed	00	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	Yes
Ldy	ALM-003-01 A	n/a	1500	600	Awning	90	E	No

0011782331 NatHERS	Certificate	7.9 Star Rating a	<b>s of</b> 13 Mar	2025				HOUSE
Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Glazed Common	ALM-002-01 A	n/a	2700	2670	Louvre	25	E	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID SHGC*	Substitution to	lerance ranges			
window iD	Description	U-value*	3600	SHGC lower limit	SHGC upper limit
No Data Availa	able				

#### Custom roof windows\*

Window Maximum SHGC*	Substitution to	Substitution tolerance ranges			
window iD	Description	U-value*	SHGC	SHGC lower limit	SHGC upper limit
No Data Avail	able				

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Avai	lable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] O	Drientation	Outdoor shade	Diffuser
No Data Ava	No Data Available						
External door schedule							
Location		Height [mm]	Width [mm]		Opening %	Orientatio	n

No Data Available



# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3600	Ν	3500	No
Kitchen/Living	EW-1	2700	500	E	400	No
Kitchen/Living	EW-1	2700	4595	E	400	No
Bedroom 1	EW-1	2700	3900	Ν	400	No
Bedroom 1	EW-1	2700	3095	E	4000	No
Ldy	EW-1	2700	1695	E	400	No
Ldy	EW-1	2700	1100	S	3000	No
Glazed Common	EW-1	2700	2963	E	1100	Yes
Glazed Common	EW-1	2700	1500	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	22.68	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	27.64	No insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.64	No Insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	31.35	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	11.97	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath	Concrete Slab, Unit Below 300mm	4.79	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	2.02	None	No Insulation	Ceramic Tiles 8mm
Ldy	Concrete Slab, Unit Below 300mm	2.26	None	No Insulation	Ceramic Tiles 8mm



Lo	ocation	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
G	lazed Common	Concrete Slab, Unit Below	4.35	None	No Insulation	Ceramic Tiles 8mm
		300mm			Insulation	

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bath	Concrete, Plasterboard with Steel Frame	No insulation	
Bath	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Ldy	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	

# Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed
Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light



### 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation	Fuel type	eff	nimum ciency/ ormance		imended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation	Fuel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency e /STC	Zone 3 STC -		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type	9	Minimu efficienc performa	;y/	Recomm capad	
No Data Available							
Onsite Renewable	e Energy Sch	nedule					
System Type	Orientation		Syst	em Size O	r Generation	Capacity	

No Data Available



### **Battery** Schedule

System Type

Size [Battery Storage Capacity]

No Data Available



#### 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.

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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.

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### Glossary

AFRC	Australian Fenestration Rating Council
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, 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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
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Shading features	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
Skylight (also known as roof lights)	
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eq eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782356

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

#### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L3U2, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

## Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 55.1 Unconditioned\* 0.0 Total 55.1 Garage 0.0



#### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

**NCC Requirements** 

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

# 16.2 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Modelled	7.0	9.2
Load limits	N/A	N/A

#### Features determining load limits

Floor Type (lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

# 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 hstar.com.au/QR/Generate? p=BFAfMQFhp . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U2, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions

No Whole of Home performance assessment conducted for this certificate

Cost



#### 9.7 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	Il Stage	Construction Stage		
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Asses	Consei Survey	Builder	Consei Survey	Occup
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 Certificate?					
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					

0011782356 NatHERS Certificate	9.7 Star Rating as of 13 Mar 2025						
		Approval Stage		Construction Stage			
Certificate check		ecked	hority/ scked	ked	hority scked	Other	
Continued		Assessor cho	Consent Autl Surveyor che	Builder chec	Consent Auth Surveyor che	Occupancy/C	

#### 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 Hom	e performa	ance asses	ssment is r	not conduc	cted)		
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.

#### **Additional notes**



# Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	31.17
Entry	Daytime	4.22
Bedroom 1	Bedroom	13.73
Bath/Ldy	Daytime	6.01

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
willdow iD	Description	U-value*		SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
WIND	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
No Data Availa	able					

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
WINdow ID	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				



#### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
No Data Avai	lable					

# 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3500	W	3300	No
Kitchen/Living	EW-1	2700	4000	Ν	300	No
Bedroom 1	EW-1	2700	3295	Ν	3800	Yes



# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.59	No insulation
IW-002	AAC, plaster on studs	21.33	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	24.57	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	31.17	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.22	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.73	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.01	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]	
Kitchen/Living	1	900	
Bedroom 1	1	900	



# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>bstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							



# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### Explanatory notes

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	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
	This is your homes rating without solar or batteries.
Ellergy 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).
	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.
	see exposure categories below.
	terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
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	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
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	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782133

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

#### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L3U3, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

## Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

## Assessed floor area [m2]\*

Conditioned\* 54.6 Unconditioned\* 0.0 Total 54.6 Garage 0.0 Exposure type Open NatHERS climate zone 15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au



## Accredited assessor

NameDeaBusiness nameGreEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

Yes

Dean Gorman

8544 1683

DMN/13/1645

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

# 19.7 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	10.3	9.4
oad limits	N/A	N/A

#### Features determining load limits

Floor Type (lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

# 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 hstar.com.au/QR/Generate? p=nxVsjOhsh . When using either link, ensure you are visiting hstar.com.au





#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 9.4 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	I Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assess	Consen Survey	Builder	Consen Surveyo	Occupa
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 Certificate?					
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					



0011782133 NatHERS Certificate9.4 Star Rating as of 13 Mar 2025					HOUSE
	Approva	al Stage	Constru Stage	ction	
Certificate check	cked	ority/ :ked	eq	ority sked	ther
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e perform	ance asse	ssment is i	not conduc	ted)
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	S assessi	ment)	0	
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					
Network This Contificants and a second the analysis of signature manufactory is the NCCC A data				he estated	in alunda

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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	30.38
Entry	Daytime	4.37
Bedroom 1	Bedroom	13.67
Bath/Ldy	Daytime	6.23

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHGC* -		Substitution tolerance ranges		
willdow iD	Description	U-value*	3666	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
willdow iD	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	560	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1580	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1010	Awning	90	Ν	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	Yes

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHCC*	Substitution tolerance ranges		
window iD	Description	U-value*	U-value* SHGC* SHG	SHGC lower limit	SHGC upper limit	
No Data Avail	able					



#### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
No Data Avai	No Data Available					

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3500	W	3300	No
Kitchen/Living	EW-1	2700	4000	Ν	500	No
Kitchen/Living	EW-1	2700	3400	Е	0	No
Bedroom 1	EW-1	2700	3295	Ν	4000	Yes

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U3, 80-82 Showground Road , GOSFORD , NSW , 2250



# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	17.86	No insulation
IW-002	AAC, plaster on studs	32.40	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.37	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	30.38	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	4.37	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.67	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.23	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]	
Kitchen/Living	1	900	
Bedroom 1	1	900	



# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# Thermal bridging schedule for steel frame elements

Building element	Steel section dimensions [height x width, mm]	Frame spacing [mm]		Thermal break [R-value]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							



# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

AFRC         Australian Fenestration Rating Council           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 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 flue Excludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, an heating and cooling ducts.           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 Rat Scheme) rating.           Default windows         windows that are representative of a specific type of window product and whose properties have been derived by statistic methods.           EER         Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricit 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).           Exposure category – open         terrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise	
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Conditioneda zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In so circumstances it will include garages.Custom windowswindows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rat Scheme) rating.Default windowswindows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rat Scheme) rating.Default windowswindows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rat Scheme) rating.Default windowswindows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rat Scheme) rating.Default windowswindows that are representative of a specific type of window product and whose properties have been derived by statistic methods.EEREnergy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity inputEnergy useThis is your homes rating without solar or batteries.Energy valueThe 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 doorthese signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minima ventilated corridor in a Class 2 building.Exposure category – exposedterrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).Exposure category – openterrain with numerous, closely spaced obstructions below 10m	
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Custom windowsScheme) rating.Default windowswindows that are representative of a specific type of window product and whose properties have been derived by statistic: methods.EEREnergy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity inputEnergy useThis is your homes rating without solar or batteries.Energy valueThe 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 doorthese signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minima ventilated corridor in a Class 2 building.Exposuresee exposure categories below.Exposure category – exposedterrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).Exposure category – openterrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.Horizontal shading featureprovides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balcor from upper levels.National Construction Code (NCC) Classthe 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.	ne
Default windows         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 minima ventilated corridor in a Class 2 building.           Exposure         see exposure category – exposed           Exposure category – open         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 now obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland v scattered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).           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 balcor from upper levels.           National Construction Code         the NCC groups buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.	ng
LER       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 minima 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 no obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland vertilated sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).         Exposure category – protected       terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.         Provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balcor from upper levels.         National Construction Code       the NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC         NCC) Class       Class 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.	ıl
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	ies
Net zero home a home that achieves a net zero energy value*	
5	
<b>Opening percentage</b> 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 documenta a provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical N and can be found at www.nathers.gov.au	ote
Recommended capacity this is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in th zone or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualifier person.	Ę
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 space, and generally does not have a diffuser.	attic
Shading features includes neighbouring buildings, fences, and wing walls, but excludes eaves.	
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.	
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 heat it transmits.	solar
STCs Small-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may bought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)	
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 inclue but is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks su as polystyrene insulation sheeting or plastic strips	des, ch
U-value the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.	
<b>Unconditioned</b> a zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.	
Vertical shading features provides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Inclu privacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage tree)	des
Window shading device device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)	es).

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782141

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

## Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L3U4, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

## Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 50.0 Unconditioned\* 0.0 Total 50.0 Garage 0.0

CREDING D

## Accredited assessor

NameDeaBusiness nameGreeEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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.

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

Thermal performance Star rating

50.0 MJ/m<sup>2</sup>

The more stars

the more energy efficient

NATIONWIDE

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Adelled	18.6	31.4
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

# 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 hstar.com.au/QR/Generate? p=TvkEBEvdA. When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U4, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 7.1 Star Rating as of 13 Mar 2025

Certificate check	Approva	Il Stage	Construe Stage			
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder o	Consent Surveyo	Occupar	
Genuine certificate check		Т	1			
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			λ			
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 Certificate?						
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						

#### 7.1 Star Rating as of 13 Mar 2025

	Approval		I Stage Stage				
Certificate check	checked	Authority/ checked	ked	uthority checked	Other		
Continued		Consent Auth Surveyor che	Builder checked	Consent Autl Surveyor che	Occupancy/Other		
Additional NCC requirements for thermal performance (not in	cluded in t	he NatHE	RS asse	essment)			
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?	
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#### Whole of Home performance check (not applicable if a Whole of Home performance 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 l	NatHERS	assessr	nent)	
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? Image: Check Provisional values\* check Image: Check Have provisional values\* been used in the assessment and, if so, are they noted in 'Additional notes' table below? Image: Check

#### **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.

#### **Additional notes**



# Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	28.05
Entry	Daytime	3.92
Bedroom 1	Bedroom	11.95
Bath/Ldy	Daytime	6.05
Glazed Common	Glazed Common Area	7.57

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHGC*		Substitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	

#### Custom windows\*

Window ID	Window Maximum		SHGC*	Substitution tolerance ranges		
	Description	U-value*	3660 -	SHGC lower limit	SHGC upper limit	
No Data Avail	able					

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1040	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1520	Fixed	00	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1690	Awning	90	Ν	Yes
Bedroom 1	ALM-004-03 A	n/a	1500	2400	Fixed	00	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No



# Roof window\* type and performance value

Default roof windows\*

Window ID     Internation       Description     U-value*       SHGC*     SHGC lower limit	SHGC upper limit
Custom roof windows*	
Window Maximum SHGC* Substitution t	olerance ranges
Window ID Description U-value* SHGC* SHGC Iower limit	SHGC upper limit
No Data Available	

#### Window Opening Outdoor Indoor Window Height Width Location Orientation ID % [mm] [mm] shade shade no. No Data Available

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance	
No Data Available			

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	4495	W	600	No
Kitchen/Living	EW-1	2700	5800	Ν	2900	Yes
Kitchen/Living	EW-1	2700	1100	E	0	No
Bedroom 1	EW-1	2700	3195	S	0	No
Bedroom 1	EW-1	2700	600	W	600	No
Bedroom 1	EW-1	2700	3195	W	600	Yes
Glazed Common	EW-1	2700	900	S	0	No
Glazed Common	EW-1	2700	2163	W	1100	Yes

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	33.48	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	30.60	No insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	28.05	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	3.92	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	11.95	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.05	None	No Insulation	Ceramic Tiles 8mm
Glazed Common	Concrete Slab, Unit Below 300mm	7.57	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

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Location	Construction material/type		Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Bedroom 1	Concrete, Plast	erboard with Steel Frame	Bulk Insulation R3	
Bath/Ldy	Concrete, Plast	erboard with Steel Frame	No insulation	
Glazed Common	Concrete, Plast	erboard with Steel Frame	No insulation	

# Ceiling penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	struction [R-value]		Roof shade [colour]
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location Fuel type		Minimum efficiency/ performance	Recommended capacity
No Data Available				

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Heating system							
Appliance/ system type	Lo	cation F	uel type	effi	nimum ciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC -		ubstitution e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimur efficienc performar	;y/	Recomm capad	
No Data Available							

# Onsite Renewable Energy Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# Battery Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	

CONT.



#### 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.

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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

AFRC	Australian Fenestration Rating Council
Annual energy load	the predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
	the floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the
Assessed floor area	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.
COP	Coefficient of performance
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.
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 – protected	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
Exposure category – suburban	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.
Skylight (also known as roof lights	s) for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)
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# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782174

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

## Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L3U5, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

## Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 79.0 Unconditioned\* 0.0 Total 79.0 Garage 0.0

CORDINA Tagestot

#### Accredited assessor

NameDeaBusiness nameGreeEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

# Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE HOUSE ENERGY RATING SCHEME

# 49.5 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Adelled	35.4	14.1
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	N/A
(lowest conditioned area)	DV/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

# 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 hstar.com.au/QR/Generate? p=UrpPnBICV . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U5, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 7.1 Star Rating as of 13 Mar 2025

······································					HOUSE
Certificate check	Approva	Il Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupar
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		Λ			
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 Certificate?					
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					

#### 7.1 Star Rating as of 13 Mar 2025

					100000000	
	Approva	I Stage	Construction Stage			
Certificate check	Assesssor checked Assesssor checked Consent Authority/ Surveyor checked Consent Authority/ Consent Authority Surveyor checked Surveyor checked	Other				
Continued		Consent Auti Surveyor che		4 -	Occupancy/C	
Additional NCC requirements for thermal performance (not inclu	uded in ti	he NatHE	RS asse	ssment)		
Thermal bridging						
Does the dwelling meet the NCC requirement for thermal bridging?						
Insulation installation method						
						1

#### **Building sealing**

Has the insulation been installed according to the NCC requirements?

#### Whole of Home performance check (not applicable if a Whole of Home performance 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	assessi	nent)	
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.

#### **Additional notes**



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	38.71
Bedroom 1	Bedroom	14.64
Bath/Ldy	Daytime	10.45
Bedroom 2	Bedroom	10.03
Glazed Common	Glazed Common Area	20.52
Entry	Daytime	5.11

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges			
	Description	U-value*		SHGC lower limit	SHGC upper limit		
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56		
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54		

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description	U-value*	SHGC" -	SHGC lower limit SHGC upper lim	
No Data Availa	able				

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1400	Fixed	00	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1700	1570	Fixed	00	S	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1030	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1540	Fixed	00	W	No
Bedroom 1	ALM-004-03 A	n/a	1700	1500	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U5, 80-82 Showground Road , GOSFORD , NSW , 2250



# Roof window\* type and performance value

Default roof windows\*

Window ID	Window	Maximum U-value*	<b>6</b> HCC*	Substitution tolerance ranges		
	Description		SHGC*	SHGC lower limit	SHGC upper limit	
No Data Avail	able					
Custom roof w	vindows*					
Window ID	Window	Maximum U-value*	81100*	Substitution tolerance ranges		
Window ID	Description		SHGC*	SHGC lower limit	SHGC upper limit	
No Data Avail	able					
No Data Avail	able					

## Root 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m²]	Orientation	Outdoor shade	Diffuser
No Data Available							

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation R2.5	No

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# External wall schedule

Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Kitchen/Living	EW-1	2700	4100	Ν	5100	No
Kitchen/Living	EW-1	2700	395	S	0	No
Kitchen/Living	EW-2	2700	1600	S	0	No
Kitchen/Living	EW-1	2700	7500	S	0	No
Kitchen/Living	EW-1	2700	4100	W	0	No
Bedroom 1	EW-3	2700	1800	S	600	Yes
Bedroom 1	EW-1	2700	600	E	1800	No
Bedroom 1	EW-1	2700	1995	S	0	No
Bedroom 2	EW-1	2700	2958	W	4100	Yes
Glazed Common	EW-3	2700	2100	W	1200	Yes
Glazed Common	EW-1	2700	1000	S	7100	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	43.48	No insulation
IW-002	AAC, plaster on studs	59.67	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	0.00	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	38.71	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	14.64	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	10.45	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.03	None	No Insulation	Carpet+Rubber Underlay 18mm
Glazed Common	Concrete Slab, Unit Below 300mm	20.52	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	5.11	None	No Insulation	Ceramic Tiles 8mm



# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Glazed Common	Concrete, Plasterboard with Steel Frame	No insulation	
Entry	Concrete, Plasterboard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

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#### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Lo	cation F	uel type	effi	nimum ciency/ ormance		mended acity
No Data Available							
leating system							
Appliance/ system type	Lo	cation F	uel type	effi	nimum iciency/ ormance		mended acity
No Data Available							
lot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC -		<b>bstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							

# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]	
No Data Available		



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Custom windows	windows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating Scheme) rating.
	windows that are representative of a specific type of window product and whose properties have been derived by statistical methods.
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
	This is your homes rating without solar or batteries.
Ellergy 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).
	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.
	see exposure categories below.
	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).
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Holizolital shauling leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
	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.
	a home that achieves a net zero energy value*.
	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.
	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
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 Regulator (CER)
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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782208

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

#### Property

Address

Lot/DP NCC class' Floor/all Floors Type

Unit L3U6, 80-82 Showground Road, GOSFORD, NSW, 2250 Lot 10.11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

### Plans

Main plan Prepared by BGYGP **DTA Architects** 

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 72.7 Unconditioned\* 0.0 Total 72.7 Garage 0.0



### Accredited assessor

Dean Gorman Name **Business** name Greenview Consulting Pty Ltd Email dean@greenview.net.au Phone 8544 1683 Accreditation No. DMN/13/1645 Assessor Accrediting Organisation **Design Matters National** 

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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

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

Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE

# 50.7 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Aodelled	36.2	14.6
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=FxYFSwRNI. When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U6, 80-82 Showground Road , GOSFORD , NSW , 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 7 Star Rating as of 13 Mar 2025

	A	L Store	Construction		HOUSE	
Certificate check	Approva	li Stage	Stage			
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder o	Consent Surveyo	Occupar	
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 Certificate?						
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						

	1			k
1		-	1	1
1	14			

0011782208 NatHERS Certificate         7 Star Rating as of 13 Mar 2025					HOUSE
	Approva	al Stage	Constru Stage	ction	
Certificate check Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e perform	ance asse	ssment is i	not conduc	ted)
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	S assessi	ment)		
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. Add	itional requi	rements that	t 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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	34.05
Bedroom 1	Bedroom	12.08
Bath/Ldy	Daytime	5.79
Bedroom 2	Bedroom	10.97
Entry	Daytime	9.78

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHGC* U-value*		Substitution tolerance ranges		
willdow iD	Description			SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

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

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	2170	Sliding	45	E	Yes
Kitchen/Living	ALM-003-01 A	n/a	1700	1090	Awning	90	S	No
Bedroom 1	ALM-004-03 A	n/a	1700	2400	Fixed	00	S	No
Bedroom 2	ALM-004-03 A	n/a	1700	2100	Fixed	00	S	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit
No Data Avail	able				



#### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3160	SHGC lower limit	SHGC upper limit	
No Data Avai	lable					

# 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	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	7100	Е	3700	Yes
Kitchen/Living	EW-1	2700	4700	S	400	No
Kitchen/Living	EW-1	2700	1500	W	7300	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L3U6, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782208 NatHERS Certificate

7 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Bedroom 1	EW-1	2700	1500	E	12300	No
Bedroom 1	EW-1	2700	300	S	0	No
Bedroom 1	EW-1	2700	3100	S	0	No
Bedroom 1	EW-1	2700	500	W	0	No
Bedroom 2	EW-1	2700	895	S	1500	No
Bedroom 2	EW-2	2700	2200	S	1500	No
Bedroom 2	EW-1	2700	795	S	1500	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	AAC, plaster on studs	52.65	No Insulation
IW-002	Steel Stud Frame, Direct Fix Plasterboard	47.43	No insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	34.05	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	12.08	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	5.79	None	No Insulation	Ceramic Tiles 8mm
Bedroom 2	Concrete Slab, Unit Below 300mm	10.97	None	No Insulation	Carpet+Rubber Underlay 18mm
Entry	Concrete Slab, Unit Below 300mm	9.78	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	No insulation	
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	No insulation	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	No insulation	
Bedroom 2	Concrete, Plasterboard with Steel Frame	No insulation	

0011782208 NatH	ERS Certificate	7 Star Rating as of 13 Mar	2025	HOUSE
Location	Construction material/type		Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Entry	Concrete, Plasterbo	oard with Steel Frame	No insulation	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900
Bedroom 2	1	900

# Roof type

Construction Added insulation [R-value]		Solar absorptance	Roof shade [colour]
None Present		0.00	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

0011782208 NatHERS Certificate	7 Star	Rating as of 13 M	Mar 2025				HOUS
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							[
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							
Onsite Renewable E	nergy Sch	nedule					
System Type Orie	entation		Syste	em Size O	r Generation	Capacity	

Size [Battery Storage Capacity]

No Data Available

System Type

No Data Available

Battery Schedule



#### 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

ralian Fenestration Rating Council predicted amount of energy required for heating and cooling, based on standard occupancy assumptions. loor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the area in the design documents. ures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. udes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ing and cooling ducts. fficient of performance ne within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some mistances it will include garages. ows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating
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in with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with ered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
in with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
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latHERS this is typically an operable window (i.e. can be opened), will have a plaster or similar light well if there is an attic e, and generally does not have a diffuser.
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# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782232

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

#### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L4U1, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

#### Plans

Main plan Prepared by BGYGP DTA Architects

## Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 55.7 Unconditioned\* 0.0 Total 55.7 Garage 0.0

oned\* 0.0 55.7 0.0



#### Accredited assessor

NameDean GormanBusiness nameGreenview Consulting Pty LtdEmaildean@greenview.net.auPhone8544 1683Accreditation No.DMN/13/1645Assessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au</u>.

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

Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE HOUSE ENERGY RATING SCHEME

# 56.7 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	37.6	19.1
oad limits	N/A	N/A

#### Features determining load limits

Floor Type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=lcTxaboRx . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U1, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



#### 6.6 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	I Stage	Constru Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	hecked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyor	Builder checked	Consent Surveyor	Occupan
Genuine certificate check		Т	Т	ſı	
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 Certificate?					
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					



				HOUSE
Approva	I Stage	Constru Stage	ction	
lecked	thority/ ecked	cked	thority ecked	Other
Assessor ch	Consent Aut Surveyor ch	Builder cheo	Consent Aut Surveyor ch	Occupancy/Other
ided in t	he NatHE	RS asse	ssment)	
e performa	ance asses	ssment is i	not conduc	ted)
NatHERS	S assessi	nent)		
1	ň	n	n	n
	e performa	Ided in the NatHE         Identities         Ide	Approval Stage     Stage       Stage<	Stage         Stage

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.

#### Additional notes



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	30.07
Entry	Daytime	6.83
Bath	Daytime	5.83
Bedroom 1	Bedroom	12.94

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum SHGC*		Substitution tolerance ranges			
window ID	Description	U-value*	3160	SHGC lower limit	SHGC upper limit		
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56		

#### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges	
window iD	Description	U-value*		SHGC lower limit	SHGC upper limit
No Data Avail	able				

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1810	Double Hung	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Kitchen/Living	ALM-004-03 A	n/a	1500	1210	Fixed	00	S	No
Kitchen/Living	ALM-004-03 A	n/a	700	2200	Fixed	00	Ν	No
Bedroom 1	ALM-004-03 A	n/a	1500	2400	Fixed	00	S	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	Substitution tolerance ranges		
WINdow ID	Description U-value*		SHOC	SHGC lower limit	SHGC upper limit		
No Data Availa	able						



Custom roof windows\*

Window ID	Window	Maximum	SUCC*	Substitution to	erance ranges
window ID	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Avai	lable				

# 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 Skylight shaft reflectance No Data Available

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Avail	able					

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.85		Bulk Insulation R2.5	No
EW-3	Metal Clad Steel Stud Frame Direct Fix	0.85		Bulk Insulation R2.5	No
EW-4	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	6200	Е	4125	Yes

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U1, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782232 NatHERS Certificate

6.6 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]
Kitchen/Living	EW-2	1200	5095	S	0	No
Kitchen/Living	EW-3	1500	5095	S	0	No
Entry	EW-4	2700	695	Ν	0	No
Bedroom 1	EW-2	1200	3795	S	0	No
Bedroom 1	EW-3	1500	3795	S	0	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	34.02	No insulation
IW-002	AAC, plaster on studs	31.05	No Insulation

# Floor type

Location	Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	24.77	None	No Insulation	Ceramic Tiles 8mm
Kitchen/Living	Suspended Concrete Slab 150mm	5.30	None	Bulk Insulation in Contact with Floor	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	6.83	None	No Insulation	Ceramic Tiles 8mm
Bath	Concrete Slab, Unit Below 300mm	5.83	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	12.94	None	No Insulation	Carpet+Rubber Underlay 18mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bath	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	



## **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	nstruction [R-value]		Roof shade [colour]	
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light	

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				
Heating system				
Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available			P	

6.6 Star Rating as of 13 Mar 2025



#### Hot water system

Appliance/ system type	Fuel type	Hot Fuel type Water	Minimum efficiency	Zone 3 STC	Zone 3 Substitution tolerance ranges		Assessed daily load
	CER Zo	CER Zone	/STC		lower limit	upper limit	[litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	cy/	Recomm capac	
No Data Available							

# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

ustralian Fenestration Rating Council e predicted amount of energy required for heating and cooling, based on standard occupancy assumptions.
e floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the por area in the design documents.
atures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. cludes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and pating and cooling ducts.
pefficient of performance
zone within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some rcumstances it will include garages.
ndows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating cheme) rating.
ndows that are representative of a specific type of window product and whose properties have been derived by statistical ethods.
nergy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity put
nis is your homes rating without solar or batteries.
ne net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as fined in the ABCB Housing Provisions Standard).
ese signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally ntilated corridor in a Class 2 building.
e exposure categories below.
rrain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
rrain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with attered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
rrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
rrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
ovides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies om upper levels.
e NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ass 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
home that achieves a net zero energy value*.
e openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
n assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, provisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note id can be found at www.nathers.gov.au
is is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the one or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified erson.
an be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides sulative properties.
r 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 pace, and generally does not have a diffuser.
cludes neighbouring buildings, fences, and wing walls, but excludes eaves.
r NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
e fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and ubsequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar at it transmits.
nall-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ought and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
e materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, it is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such polystyrene insulation sheeting or plastic strips
e rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
zone within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
ovides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes ivacy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
evice fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading atures* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782257

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

#### Property

Address

Lot/DP NCC class' Floor/all Floors Type

Unit L4U2, 80-82 Showground Road, GOSFORD, NSW, 2250 Lot 10.11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

NatHERS climate zone

Declaration completed: no conflicts

Open

### Plans

Main plan Prepared by BGYGP **DTA Architects** 

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 54.4 Unconditioned\* 0.0 Total 54.4 Garage 0.0



### Accredited assessor

Dean Gorman Name **Business** name Greenview Consulting Pty Ltd Email dean@greenview.net.au Phone 8544 1683 Accreditation No. DMN/13/1645 Assessor Accrediting Organisation **Design Matters National** 

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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

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

Thermal performance Star rating

The more stars the more energy efficient

# NATIONWIDE

# 48.5 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
Nodelled	30.1	18.4
oad limits	N/A	N/A

#### Features determining load limits

1

Floor Type	N/A
(lowest conditioned area)	
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=ZyqDGLpKv. When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U2, 80-82 Showground Road , GOSFORD , NSW , 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost





#### 7.2 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	Il Stage	Construe Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assess	Consen Survey	Builder	Consen Surveyo	Occupa
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 Certificate?					
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					

**Certificate check** 

Continued

#### 7.2 Sta

ar Rating as of 13 Mar 2025					HOUSE
	Approval Stage		Construction Stage		
	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other

AGED .

#### 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 Hom	e performa	ance asses	ssment is r	not conduc	ted)
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	assessi	nent)		
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					

#### **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.

#### **Additional notes**



## Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	29.83
Entry	Daytime	5.38
Bath/Ldy	Daytime	6.88
Bedroom 1	Bedroom	12.32

# Window and glazed door type and performance

#### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3666	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain Iow-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

#### Custom windows\*

Window ID	Window	WindowMaximumDescriptionU-value*		Substitution tolerance ranges		
	Description			SHGC lower limit	SHGC upper limit	
No Data Avail	able					

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	1500	1010	Fixed	00	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	580	Awning	90	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	580	Awning	90	W	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-004-03 A	n/a	700	2200	Fixed	00	Ν	No
Bedroom 1	ALM-004-03 A	n/a	1500	2400	Fixed	00	S	No

# Roof window\* type and performance value

#### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description U-value*		3660	SHGC lower limit	SHGC upper limit	
No Data Avail	able					



#### Custom roof windows\*

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

# Roof window\* schedule

Location	Window ID	Window no.	Opening %	Height [mm]	Width [mm]	Orientation	Outdoor shade	Indoor shade
No Data Ava	ilable							

# Skylight\* type and performance

Skylight ID	Skylight description	Skylight shaft reflectance
No Data Available		

# Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Avail	able					

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

# External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation R2.5	No
EW-2	Metal Clad Steel Stud Frame Direct Fix	0.85		Bulk Insulation R2.5	No
EW-3	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	1200	4395	S	0	No
Kitchen/Living	EW-2	1500	4395	S	0	No

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U2, 80-82 Showground Road , GOSFORD , NSW , 2250

0011782257 NatHERS Certificate

#### 7.2 Star Rating as of 13 Mar 2025



Location	Wall ID	Height [mm]	Width [mm]	Orientation	Horizontal shading feature* maximum projection [mm]	Vertical shading feature [yes/no]	
Kitchen/Living	EW-1	1200	7100	W	0	Yes	
Kitchen/Living	EW-3	1500	7100	W	2950	No	
Bedroom 1	EW-1	1200	3395	S	0	No	
Bedroom 1	EW-2	1500	3395	S	0	No	

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	41.85	No insulation
IW-002	AAC, plaster on studs	29.97	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	29.83	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	5.38	None	No Insulation	Ceramic Tiles 8mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.88	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	11.27	None	No Insulation	Carpet+Rubber Underlay 18mm
Bedroom 1	Suspended Concrete Slab 150mm	1.05	None	No Insulation	Carpet+Rubber Underlay 18mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

\* Refer to glossary. Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U2, 80-82 Showground Road , GOSFORD , NSW , 2250

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

# Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light

# 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

#### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				
Heating system				
Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				



#### Hot water system

Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC -	Zone 3 Substitution tolerance ranges		Assessed daily load
					lower limit	upper limit	[litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	cy/	Recomm capac	
No Data Available							

# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



#### 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

AFRC	Australian Fenestration Rating Council
	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, 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.
COP	Coefficient of performance
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.
	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.
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
<u></u>	This is your homes rating without solar or batteries.
Lifergy 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).
Elitrance 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.
	see exposure categories below.
	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).
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shaung leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
	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.
	a home that achieves a net zero energy value*.
	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.
	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.
¥	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
3103	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 Regulator (CER)
I hermal 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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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).
	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782281

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L4U3, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

# Construction and environment

#### Assessed floor area [m2]\*

Conditioned\* 53.5 Unconditioned\* 0.0 Total 53.5 Garage 0.0

CREDING B

### Accredited assessor

NameDeaBusiness nameGreeEmaildeaPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

# 30.8 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

#### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
lodelled	20.2	10.5
oad limits	N/A	N/A

#### Features determining load limits

M

1.

Floor Type	NUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=nZehYRflo . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U3, 80-82 Showground Road, GOSFORD, NSW, 2250



#### 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 & 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 2022: 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

#### Energy use



Greenhouse gas emissions



Cost



### 8.4 Star Rating as of 13 Mar 2025

					HOUSE
Certificate check	Approva	I Stage	Constru Stage	ction	
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	hecked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyor	Builder checked	Consent Surveyor	Occupan
Genuine certificate check		Т	Т	ſı	
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 Certificate?					
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					



0011782281 NatHERS Certificate8.4 Star Rating as of 13 Mar 2025					HOUSE
	Approva	Approval Stage		ction	
Certificate check	necked	thority/ ecked	cked	thority ecked	Other
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other
Additional NCC requirements for thermal performance (not inclu-	uded in t	he NatHE	ERS asse	ssment)	
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 Hom	e performa	ance asses	ssment is i	not conduc	ted)
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	s assessi	ment)		
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					
			4	1 e. e	the set of a

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.

### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	30.02
Bedroom 1	Bedroom	13.41
Bath/Ldy	Daytime	6.47
Entry	Daytime	3.58
Glazed Common	Glazed Common Area	15.42

# Window and glazed door type and performance

### Default windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
	Description	U-value*	3666	SHGC lower limit	SHGC upper limit	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	

### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution tolerance ranges		
willdow iD	Description	U-value*		SHGC lower limit	SHGC upper limit	
No Data Availa	able					

# Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	W	No
Kitchen/Living	ALM-003-01 A	n/a	1500	750	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	750	Awning	90	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1500	670	Fixed	00	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	1450	Awning	90	Ν	No
Bedroom 1	ALM-003-01 A	n/a	1500	580	Awning	90	W	No
Bedroom 1	ALM-003-01 A	n/a	1500	580	Awning	90	W	No
Bedroom 1	ALM-004-03 A	n/a	1500	1010	Fixed	00	W	No
Glazed Common	ALM-002-01 A	n/a	2700	1800	Louvre	25	W	No



## Roof window\* type and performance value

Default roof windows\*

Window ID	Window	Maximum	SHCC*	Substitution to	lerance ranges
	Description	escription U-value* SHGC*	SHGC	SHGC lower limit	SHGC upper limit
No Data Avail	able				
Custom roof v	vindows*				
	Window	Maximum	01100*	Substitution to	lerance ranges
Window ID	Description	U-value*	SHGC*	SHGC lower limit	SHGC upper limit
No Data Avail	lable				
	lable				

### Root window<sup>\*</sup> 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	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ] Orientation	Outdoor shade	Diffuser
No Data Available						

## External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation
No Data Available				

## External wall type

Wall ID	Wall type	Solar absorptance	Wall shade [colour]	Bulk insulation [R-value]	Reflective wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation R2.5	No
EW-2	Steel Stud Frame Brick Veneer	0.30		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	3795	W	3500	No
Kitchen/Living	EW-1	2700	7300	Ν	900	Yes
Bedroom 1	EW-1	2700	3363	W	600	No
Bedroom 1	EW-1	2700	2900	Ν	4700	No
Glazed Common	EW-2	2700	2300	S	0	No
Glazed Common	EW-2	2700	2063	W	600	No

# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	30.78	No insulation
IW-002	AAC, plaster on studs	41.04	No Insulation
IW-003	Concrete Panel/Blocks filled, plaster on studs	8.10	No Insulation

# Floor type

Location	Construction	Area [m²]	Sub-floor ventilation	Added insulation [R-value]	Covering
Kitchen/Living	Concrete Slab, Unit Below 300mm	30.02	None	No Insulation	Ceramic Tiles 8mm
Bedroom 1	Concrete Slab, Unit Below 300mm	13.41	None	No Insulation	Carpet+Rubber Underlay 18mm
Bath/Ldy	Concrete Slab, Unit Below 300mm	6.47	None	No Insulation	Ceramic Tiles 8mm
Entry	Concrete Slab, Unit Below 300mm	3.58	None	No Insulation	Ceramic Tiles 8mm
Glazed Common	Concrete Slab, Unit Below 300mm	15.42	None	No Insulation	Ceramic Tiles 8mm

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	

0011782281 NatHERS Certificate		8.4 Star Rating as of 13 Mar	HOUSE	
Location	Construction material/type		Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Glazed Common	Concrete, Plaste	erboard with Steel Frame	Bulk Insulation R3	

## **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900

## Roof type

Construction	Added insulation	Solar	Roof shade
	[R-value]	absorptance	[colour]
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light

## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

# Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

### Cooling system

Appliance/ system type	Location	Fuel type	Minimum efficiency/ performance	Recommended capacity
No Data Available				

0011782281 NatHERS Certificate	8.4 Sta	r Rating as of 13	3 Mar 2025				HOUSE
Heating system							
Appliance/ system type	Lo	cation F	uel type	eff	nimum iciency/ ormance		mended acity
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type		Fuel type		Minimu efficienc performa	;y/	Recomm capac	
No Data Available							
Onsite Renewable E	nergy Sch	nedule					
System Type Orie	entation		Syste	em Size O	r Generation	Capacity	

Battery Schedule

No Data Available

System Type	Size [Battery Storage Capacity]
No Data Available	



### 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

AFRC	Australian Fenestration Rating Council
	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, 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.
	Coefficient of performance
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.
	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.
	Energy Efficiency Ratio, measure of how much cooling can be achieved by an air conditioner for a single kWh of electricity input
<u></u>	This is your homes rating without solar or batteries.
Lifergy 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).
Elitrance 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.
	see exposure categories below.
	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).
	terrain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	terrain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
Horizontal shaung leature	provides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies from upper levels.
	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.
	a home that achieves a net zero energy value*.
	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.
	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.
¥	includes neighbouring buildings, fences, and wing walls, but excludes eaves.
	for NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
	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.
3103	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 Regulator (CER)
I hermal 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 or continuous thermal breaks such as polystyrene insulation sheeting or plastic strips
U-value	the rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	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).
	device fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading features* (eg eaves and balconies)

# Nationwide House Energy Rating Scheme<sup>®</sup> NatHERS<sup>®</sup> Certificate No. 0011782315

Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23)

### Property

Address

Lot/DP NCC class\* Floor/all Floors Type Unit L4U4, 80-82 Showground Road, GOSFORD , NSW , 2250 Lot 10,11 DP 503890 2 G of 1 floors New Home

Exposure type

15 Williamtown

Greenview Consulting Pty Ltd

Declaration completed: no conflicts

dean@greenview.net.au

NatHERS climate zone

Open

Dean Gorman

8544 1683

DMN/13/1645

### Plans

Main plan Prepared by BGYGP DTA Architects

## Construction and environment

### Assessed floor area [m2]\*

Conditioned\* 54.6 Unconditioned\* 0.0 Total 54.6 Garage 0.0

CONEDIPO TOPESSON

### Accredited assessor

NameDealBusiness nameGreeEmaildealPhone854Accreditation No.DMAssessor Accrediting OrganisationDesign Matters National

**Declaration of interest** 

NCC Requirements

NCC provisions Strate/Territory variation Volume One

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 J3D3 and J3D15 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 <u>www.abcb.gov.au.</u>

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

Thermal performance Star rating

The more stars

the more energy efficient

NATIONWIDE

25.2 MJ/m<sup>2</sup>

Predicted annual energy load for heating and cooling based on standard occupancy assumptions.

> For more information on your dwelling's rating see: www.nathers.gov.au

### Thermal performance [MJ/m<sup>2</sup>]

Limits taken from ABCB Standard 2022

	Heating	Cooling
lodelled	16.6	8.7
oad limits	N/A	N/A

### Features determining load limits

1

Floor Type	AUA
(lowest conditioned area)	N/A
NCC climate zone 1 or 2	No
Outdoor living area	No
Outdoor living area ceiling fan	No

## 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 hstar.com.au/QR/Generate? p=LdFYmisJZ . When using either link, ensure you are visiting hstar.com.au



\* Refer to glossary Generated on 13 Mar 2025 using BERS Pro v5.2.4 (3.23) for Unit L4U4, 80-82 Showground Road, GOSFORD, NSW, 2250



### 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 & 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 2022: 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

### Energy use



Greenhouse gas emissions



Cost



### 8.9 Star Rating as of 13 Mar 2025

Certificate check	Approva	I Stage	Construction Stage		HOUSE
The checklist covers important items impacting the dwelling's ratings. It is recommended that the accuracy of the whole certificate is checked.	Assessor checked	Consent Authority/ Surveyor checked	checked	Consent Authority Surveyor checked	Occupancy/Other
Note: The boxes indicate when and by whom each item should be checked. It is not mandatory to complete this checklist.	Assesso	Consent Surveyo	Builder	Consent Surveyo	Occupar
Genuine certificate check		Т	Т	ſı	1
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 Certificate?					
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					



0011782315 NatHERS Certificate8.9 Star Rating as of 13 Mar 2025					HOUSE	
	Approva	Il Stage	Construction Stage			
Certificate check	checked	uthority/ checked	lecked	uthority checked	y/Other	
Continued	Assessor checked	Consent Authority/ Surveyor checked	Builder checked	Consent Authority Surveyor checked	Occupancy/Other	
Additional NCC requirements for thermal performance (not inclu-	uded in t	he NatHE	RS asse	ssment)		
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 Hom	e perform	ance asses	ssment is r	not conduc	ted)	
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	s assessi	ment)			
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.

### Additional notes



### Room schedule

Room	Zone Type	Area [m <sup>2</sup> ]
Kitchen/Living	Kitchen/Living	29.73
Bedroom 1	Bedroom	14.23
Entry	Daytime	4.37
Bath/Ldy	Daytime	6.23

# Window and glazed door type and performance

### Default windows\*

Window ID	Window	Maximum SHGC*		Substitution tolerance ranges		
	Description	U-value*	3666	SHGC lower limit SHGC		
ALM-003-01 A	Aluminium A DG Air Fill Clear-Clear	4.8	0.51	0.48	0.54	
ALM-004-03 A	Aluminium B DG Air Fill High Solar Gain low-E -	4.3	0.53	0.50	0.56	

### Custom windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	ibstitution tolerance ranges		
	Description	U-value*	3660	SHGC lower limit	SHGC upper limit		
No Data Availa	able						

## Window and glazed door schedule

Location	Window ID	Window no.	Height [mm]	Width [mm]	Window type	Opening %	Orientation	Window shading device*
Kitchen/Living	ALM-003-01 A	n/a	1500	1450	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	750	Awning	90	Ν	No
Kitchen/Living	ALM-003-01 A	n/a	1500	750	Awning	90	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	1500	670	Fixed	00	Ν	No
Kitchen/Living	ALM-004-03 A	n/a	2700	2410	Sliding	45	E	No
Bedroom 1	ALM-004-03 A	n/a	2700	2410	Sliding	45	Ν	No

# Roof window\* type and performance value

### Default roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	lerance ranges
	Description	U-value*	SHGC	SHGC lower limit	SHGC upper limit
No Data Avail	able				



### Custom roof windows\*

Window ID	Window	Maximum	SHGC*	Substitution to	elerance ranges
	Description	ion U-value*		SHGC lower limit	SHGC upper limit
No Data Avai	lable				

## 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	Skylight shaft reflectance
No Data Available		

## Skylight\* schedule

Location	Skylight ID	Skylight No.	Skylight shaft length [mm]	Area [m <sup>2</sup> ]	Outdoor shade	Diffuser
No Data Available						

# External door schedule

Location	Height [mm]	Width [mm]	Opening %	Orientation	
No Data Available					

# External wall type

Wall	Wall	Solar	Wall shade	Bulk insulation	Reflective
ID	type	absorptance	[colour]	[R-value]	wall wrap*
EW-1	Steel Stud Frame Brick Veneer	0.50		Bulk Insulation 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]
Kitchen/Living	EW-1	2700	6995	Ν	1000	No
Kitchen/Living	EW-1	2700	4300	Е	3500	Yes
Bedroom 1	EW-1	2700	3495	Ν	1000	Yes



# Internal wall type

Wall ID	Wall type	Area [m <sup>2</sup> ]	Bulk insulation
IW-001	Steel Stud Frame, Direct Fix Plasterboard	24.84	No insulation
IW-002	Concrete Panel/Blocks filled, plaster on studs	25.65	No Insulation
IW-003	AAC, plaster on studs	9.99	No Insulation

# Floor type

Construction	Area [m <sup>2</sup> ]	Sub-floor ventilation	Added insulation [R-value]	Covering
Concrete Slab, Unit Below	29 73	None	No	Ceramic Tiles 8mm
300mm	23.15 NULL		Insulation	
Concrete Slab, Unit Below	1/1 23	None	No	Carpet+Rubber Underlay
300mm	14.25	NONE	Insulation	18mm
Concrete Slab, Unit Below	1 37	None	No	Ceramic Tiles 8mm
300mm	4.57	None	Insulation	Ceramic mes omm
Concrete Slab, Unit Below	6.23	None	No	Ceramic Tiles 8mm
300mm	0.23	NOTE	Insulation	
	Concrete Slab, Unit Below 300mm Concrete Slab, Unit Below 300mm Concrete Slab, Unit Below 300mm Concrete Slab, Unit Below	Construction[m²]Concrete Slab, Unit Below 300mm29.73Concrete Slab, Unit Below 300mm14.23Concrete Slab, Unit Below 300mm4.37Concrete Slab, Unit Below 6.236.23	Construction[m²]ventilationConcrete Slab, Unit Below 300mm29.73NoneConcrete Slab, Unit Below 300mm14.23NoneConcrete Slab, Unit Below 300mm4.37NoneConcrete Slab, Unit Below 300mm6.23None	ConstructionArea [m²]Sub-floor ventilation [R-value]Concrete Slab, Unit Below 300mm29.73NoneNo InsulationConcrete Slab, Unit Below 300mm14.23NoneNo 

# Ceiling type

Location	Construction material/type	Bulk insulation R-value (may include edge batt values)	Reflective wrap* [yes/no]
Kitchen/Living	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bedroom 1	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Entry	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	
Bath/Ldy	Concrete, Plasterboard with Steel Frame	Bulk Insulation R3	

# **Ceiling** penetrations\*

Location	Quantity	Туре	Diameter [mm]	Sealed/unsealed
Kitchen/Living	1	Exhaust Fans	300	Sealed
Bath/Ldy	1	Exhaust Fans	300	Sealed

# **Ceiling** fans

Location	Quantity	Diameter [mm]
Kitchen/Living	1	900
Bedroom 1	1	900



## Roof type

Construction Added insulation [R-value]		Solar absorptance	Roof shade [colour]
Waterproofing Membrane	No Added Insulation, No air Gap	0.30	Light

## 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]
External Wall		600	0.75	R0.2
Ceiling		900	0.75	No
Internal Wall		600	0.75	No

### Appliance schedule

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

Note: A flat assumption of 5W/m<sup>2</sup> is used for lighting, therefore lighting is not included in the appliance schedule.

### Cooling system

Appliance/ system type	Lo	cation F	uel type	Minimum efficiency/ performance		Recommended capacity	
No Data Available							
leating system							
Appliance/ system type	Location Fuel type		Minimum efficiency/ performance		Recommended capacity		
No Data Available							
Hot water system							
Appliance/ system type	Fuel type	Hot Water CER Zone	Minimum efficiency /STC	Zone 3 STC -		<b>Ibstitution</b> e ranges upper limit	Assessed daily load [litres]
No Data Available							
Pool/spa equipment							
Appliance/ system type	Fuel type		Minimum efficiency/ performance		Recommended capacity		
No Data Available							



# **Onsite Renewable Energy** Schedule

System Type	Orientation	System Size Or Generation Capacity
No Data Available		

# **Battery** Schedule

System Type	Size [Battery Storage Capacity]
No Data Available	



### 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       Assessed floor area     the infloor       Ceiling penetrations     Exclored       COP     Coe	stralian Fenestration Rating Council predicted amount of energy required for heating and cooling, based on standard occupancy assumptions. floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the or area in the design documents. tures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. Judes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts.
Assessed floor area     the t floor       Ceiling penetrations     Faxt heat       COP     Coe	floor area modelled in the software for the purpose of the NatHERS assessment. Note, this may not be consistent with the or area in the design documents. tures that require a penetration to the ceiling, including downlights, vents, exhaust fans, range hoods, chimneys and flues. Judes fixtures attached to the ceiling with small holes through the ceiling for wiring, e.g. ceiling fans; pendant lights, and ting and cooling ducts.
COP Coe	ating and cooling ducts.
	efficient of performance
circu	one within a dwelling that is expected to require heating and cooling based on standard occupancy assumptions. In some sumstances it will include garages.
	dows listed in NatHERS software that are available on the market in Australia and have a WERS (Window Energy Rating neme) rating.
	dows that are representative of a specific type of window product and whose properties have been derived by statistical thods.
inpu inpu	
	s is your homes rating without solar or batteries.
defin defin	e net cost to society including, but not limited to, costs to the building user, the environment and energy networks (as ined in the ABCB Housing Provisions Standard).
vent vent	se signify ventilation benefits in the modelling software and must not be modelled as a door when opening to a minimally tilated corridor in a Class 2 building.
•	e exposure categories below.
	ain with no obstructions e.g. flat grazing land, ocean-frontage, desert, exposed high-rise unit (usually above 10 floors).
scat	ain with few obstructions at a similar height e.g. grasslands with few well scattered obstructions below 10m, farmland with ttered sheds, lightly vegetated bush blocks, elevated units (e.g. above 3 floors).
	ain with numerous, closely spaced obstructions below 10m e.g. suburban housing, heavily vegetated bushland areas.
	ain with numerous, closely spaced obstructions over 10 m e.g. city and industrial areas.
from from	vides shading to the building in the horizontal plane, e.g. eaves, verandahs, pergolas, carports, or overhangs or balconies n upper levels.
	NCC groups buildings by their function and use, and assigns a classification code. NatHERS software models NCC ss 1, 2 or 4 buildings and attached Class 10a buildings. Definitions can be found at www.abcb.gov.au.
	ome that achieves a net zero energy value*.
	openability percentage or operable (moveable) area of doors or windows that is used in ventilation calculations.
Provisional value a provisional value and	assumed value that does not represent an actual value. For example, if the wall colour is unspecified in the documentation, rovisional value of 'medium' must be modelled. Acceptable provisional values are outlined in the NatHERS Technical Note can be found at www.nathers.gov.au
Recommended capacity this zone pers	is the capacity or size of equipment that is recommended by NatHERS to achieve the desired comfort conditions in the ie or zones serviced. This is a recommendation and the final selection sizing should be confirmed by a suitably qualified son.
Reflective wrap (also known as can insu	be applied to walls, roofs and ceilings. When combined with an appropriate airgap and emissivity value, it provides ulative properties.
Roof window for N space	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 ice, and generally does not have a diffuser.
Shading features inclu	udes neighbouring buildings, fences, and wing walls, but excludes eaves.
	NatHERS this is typically a moulded unit with flexible reflective tubing (light well) and a diffuser at ceiling level.
subs	fraction of incident solar radiation admitted through a window, both directly transmitted as well as absorbed and sequently released inward. SHGC is expressed as a number between 0 and 1. The lower a window's SHGC, the less solar it it transmits.
bou	all-scale Technology Certificates, certificates created by the REC registry for renewable energy technologies that may be ight and sold as part of the Small-scale Renewable Energy Scheme operated by the Clean Energy Regulator (CER)
Thermal breaks but i	materials with an R-value greater than or equal to 0.2 that must separate the metal frame from the cladding. This includes, is not limited to, materials such as timber battens greater than or equal to 20mm thick or continuous thermal breaks such polystyrene insulation sheeting or plastic strips
	rate of heat transfer through a window. The lower the U-value, the better the insulating ability.
	one within a dwelling that is assumed to not require heating and cooling based on standard occupancy assumptions.
Vertical shading features prov privation	vides shading to the building in the vertical plane and can be parallel or perpendicular to the subject wall/window. Includes acy screens, other walls in the building (wing walls), fences, other buildings, vegetation (protected or listed heritage trees).
	rice fixed to windows that provides shading e.g. window awnings or screens but excludes horizontal* or vertical shading tures* (eg eaves and balconies)