# Nationwide House Energy Rating Scheme\* — Class 2 summary

Certificate Number: WDMBTPK06A Date of Certificate: 20 Feb 2020

★ Average star rating: 6.8



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

of interest: **the building**Software: **FirstRate5 v5.2.11** 

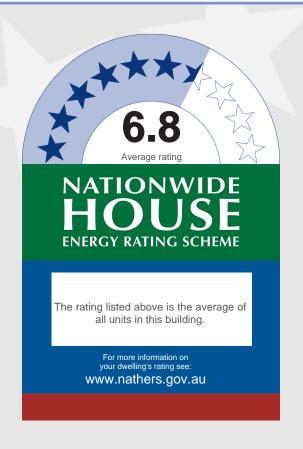
AAO: BDAV

# **Dwelling details**

Address: 2 Delmar Parade

Suburb: **DEE WHY**State: **NSW**Postcode: **2099** 

# **Summary of all dwellings**



# **Certification details**

		Annual the	rmal performance loa	ds (MJ/m2)	
Certificate number	Unit number	Heating load	Cooling load	Total load	Star rating
0IKJZMIU76	1.01	17.4	26.9	44.3	6.6
S0IDT1707L	1.02	13.1	27.5	40.6	6.9
5F3MCF4ZQT	1.03	18.5	27.5	46	6.4
V46VSEZ9BB	1.04	9.4	15.9	25.3	8.1
37TPP4YH58	1.05	1.9	29.1	31	7.6
UST4RAI2F9	1.06	1.7	12.2	13.9	9
9FIY0CSW48	1.07	0.2	20.9	21.1	8.4
ASFRDVHYD7	1.08	25.9	22.8	48.7	6.2
64L61CKCES	1.09	2.7	25.2	27.9	7.8
673BBMCF1K	1.10	17.1	24.5	41.6	6.8
HP09OBMC15	1.11	13.4	22.2	35.6	7.2
2TYIDF4L6Y	1.12	13.4	22.2	35.6	7.2
1QSLCDZEP0	1.13	13.4	22.2	35.6	7.2
TB630RDLS0	1.14	25.4	21.7	47.1	6.3
ZHN83DA20L	2.01	18.4	25.7	44.1	6.6
V4OBSG4JFK	2.02	27.6	27.8	55.4	5.7
					continue

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

# Nationwide House Energy Rating Scheme\* — Class 2 summary



Date of Certificate: 20 Feb 2020

★ Average star rating: 6.8



# Summary of all dwellings continued

# **Certification details continued**

Certificate number	Unit number	Heating load	rmal performance load	Total load	Star rating
2YHP9FOTZ5	2.03	20.6	28.1	48.7	 6.2
NP4MXUY19H	2.04	9.4	15.9	25.3	 8.1
6R05ZU8235	2.05	1.9	29.1	31	7.6
M9HT3I05EQ	2.06	2	11.6	13.6	9
5MAHWWLAW0	2.07	0.2	20.9	21.1	8.4
L1AJHCW5RC	2.08	27.5	21.7	49.2	6.1
65ISLELEB1	2.09	3.2	25.5	28.7	7.8
BB2OA64GF3	2.10	17.1	24.5	41.6	6.8
LQZAL4JI65	2.11	13.4	22.2	35.6	7.2
JVYHYXS3ZX	2.12	14.4	22.5	36.9	7.2
XOVS5SCJ5S	2.13	13.4	22.2	35.6	7.2
DZ4ICTBNK5	2.14	25.4	21.7	47.1	6.3
IB7D5KY8SD	3.01	19.1	24.3	43.4	6.6
HWLBTBDAIS	3.02	27.6	27.8	55.4	5.7
5CM9SNTBGI	3.03	22.7	26.2	48.9	6.2
Z5QC90EQCN	3.04	10.6	14.6	25.2	8.1
X7ZQEXZ45Z	3.05	2.6	26.3	28.9	7.8
OD5VSEOD3O	3.06	2	11.6	13.6	9
E0TQEMDQFQ	3.07	0.3	18.1	18.4	8.6
LZ5ICE6211	3.08	27.5	21.7	49.2	6.1
4DXSHV94T5	3.09	3.2	25.5	28.7	7.8
NJ6KEKCG9G	3.10	19.2	22.7	41.9	6.8
0XQ9IVPIFS	3.11	15.3	22.5	37.8	7.1
MMLFX0ZVEI	3.12	14.4	22.5	36.9	7.2
2NA2OJMNKC	3.13	15.3	22.5	37.8	7.1
WBXMXTFM38	3.14	27.5	21.3	48.8	6.2
A6UZE9CBFV	4.01	37.4	19.7	57.1	5.6
ERR4AGFK0T	4.02	41	25	66	5
IVX1DGO21Z	4.03	37.3	20.4	57.7	5.5
Z9RD8ND6KK	4.04	33.4	22	55.4	5.7
ZVHUUALQMG	4.05	19.8	15	34.8	7.3

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

# Nationwide House Energy Rating Scheme\* — Class 2 summary



Date of Certificate: 20 Feb 2020

★ Average star rating: 6.8



# Summary of all dwellings continued

### Certification details continued

		Annual the	rmal performance load	ds (MJ/m2)	
Certificate number	Unit number	Heating load	Cooling load	Total load	Star rating
IBR9HDX15T	4.06	16.9	18.3	35.2	7.3
2HV7WEAO6X	4.07	2.7	20.9	23.6	8.2
CI9Q3WODGD	4.08	11.1	26.4	37.5	7.1
58QURXSS55	4.09	3	19.7	22.7	8.3
0MB1RSAJ8Q	4.10	4.7	22.2	26.9	7.9
YLS8ZHAMXL	5.01	38.2	19.3	57.5	5.5
XA1RV2SIKQ	5.02	41.8	24.6	66.4	4.9
WX2G2TVQYP	5.03	38	19.7	57.7	5.5
5QUHBA32CG	5.04	34.1	20.7	54.8	5.7
NVQ2XE59UY	5.05	20.5	15.3	35.8	7.2
7FRZMLSBRZ	5.06	16.9	18.3	35.2	7.3
2AKIJGQTQV	5.07	22.3	22.1	44.4	6.6
8ZFECAHATX	5.08	21.2	24.2	45.4	6.4
YW5ASZ845Z	5.09	20.6	15	35.6	7.2
R2KNNNLHSQ	5.10	17.8	20.7	38.5	7
I5HN3M0J2A	6.01	41.7	15.9	57.6	5.5
7ZZMG5U9DL	6.02	35.5	17.1	52.6	5.9
B8WRG2BYHP	6.03	29	19	48	6.3
QDEUP508S7	6.04	21.5	16.8	38.3	7
4VU4LH20Q7	6.05	33.7	17.1	50.8	6
GCWF6KI0GB	6.06	36.9	21.3	58.2	5.4
LBCMU4UE7K	6.07	34.1	24.7	58.8	5.4
FWQGQQO2G8	6.08	40.2	17.6	57.8	5.5
9LHJJOQ8YF	6.10	30.9	20	50.9	6

This building achieves an average star rating of: 6.8

Certificate Number: 01KJZMIU76 Date of Certificate: 20 Jan 2020 ★Star rating: 6.6



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

1.01, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56

number: Exposure: suburban

**Key construction and insulation materials** 

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

68.7

73.1

4.4

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

17.4 Heating: 26.9 Cooling: TOTAL: 44.3

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 4.3 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=0IKJZMIU76



★Star rating: 6.6



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7	
Window ID	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 134	2400	2800	ESE	Bedroom 18		No	
ALM-002-01 A	Opening 135	2400	2800	ESE	Bedroom 19		No	
ALM-002-01 A	Opening 137	2400	1600	ESE	Kitchen/Living		No	
			1400	NNE	Kitchen/Living		No	

Roof windows and skylight type and performance value						
ID	Window type				U-value	SHGC
Roof window	and skylight schedule					
					Outdoor	Indoor shade/

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Bedroom 18	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 18	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 19	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	1.6	ESE	Entry Hallway	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.7	NNE	Entry Hallway	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	21	WNW	Entry Hallway	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	7.7	WNW	Bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No





Certificate Number: **0IKJZMIU76** 

20 Jan 2020 ★Star rating: 6.6

2 : AFS - AFS 162mm (75mm Glasswool)	4.5	NNE	Kitchen/Living	Yes	Yes
Internal wall type					
Туре	Area (r	m²) Insula	ation		
1 : FR5 - Internal Plasterboard Stud Wall	70.6				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 18	FR5 - 300mm concrete slab	13.6	Enclosed	R0.0	Carpet
Bedroom 19	FR5 - 300mm concrete slab	14.1	Enclosed	R0.0	Carpet
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
Entry Hallway	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Tiles
Bath	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 300mm concrete slab	26	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 01KJZMIU76 Date of Certificate: 20 Jan 2020

★Star rating: 6.6



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 0MB1RSAJ8Q Date of Certificate: 20 Jan 2020 ★Star rating: 7.9



# **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

4.10, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

87.6

3.7

91.3

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

4.7 Heating: Cooling: 22.2 TOTAL: 26,9

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions **26.9** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=0MB1RSAJ8Q

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



★Star rating: **7.9** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A Aluminium B SG Clear							0.7
Windows schee	dule						
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
		Height (mm) 2700	Width (mm) 2700	Orientation NW	Zone name Bedroom 1		Outdoor shac

ID	Window type		U-value	SHGC
Root windo	w and skylight schedule			
			Outdoor	Indoor sha

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	B) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.9	NW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	13.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.1	SSW	Study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	SE	Bedroom 2	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	11.3	NNE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3	SE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NE	Entry	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	3.6	NNE	Kitchen/Living 24	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	8.1	ESE	Kitchen/Living 24	No	No







# **Building Features**

Certificate Number: 0MB1RSAJ8Q

2 : AFS - AFS 200mm (75mm Glasswool)	22.4	NNE	Kitchen/Living 24	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	11.9	NW	Kitchen/Living 24	No	No
Internal wall type					
Internal wall type					
Internal wall type  Type	Area	(m²) Insula	ition		

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 1	FR5 - 200mm concrete slab Lined	12.8	Enclosed	R0.0	Carpet	
Ensuite	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles	
Study	FR5 - 200mm concrete slab Lined	11.1	Enclosed	R0.0	Carpet	
Bathroom	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles	
Bedroom 2	FR5 - 200mm concrete slab Lined	12.4	Enclosed	R0.0	Carpet	
Entry	FR5 - 200mm concrete slab Lined	5.2	Enclosed	R0.0	Tiles	
Kitchen/Living 24	FR5 - 200mm concrete slab Lined	41.5	Enclosed	R0.0	Tiles	

Ceiling type								
Location	Material		Added insulation	Roof space above				
Ceiling penetrations								
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed				
Ceiling fans								
Location	Number Diameter (mm)							

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **0MB1RSAJ8Q** Date of Certificate: **20 Jan 2020** ★Star rating: **7.9** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 0XQ9IVPIFS Date of Certificate: 20 Jan 2020 ★Star rating: 7.1



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

3.11, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 37.8 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 5.8 Unconditioned: Garage: TOTAL: 59.5

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

15.3 Heating: Cooling: 22.5 TOTAL: 37.8

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=0XQ9IVPIFS

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







# **Building Features**

Certificate Number: 0XQ9IVPIFS

Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows schee	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm)	Width (mm)	Orientation WNW	Zone name Kitchen/Living		Outdoor shad	
			. ,				Outdoor shad No No	

Roof windows ar	d skylight type and performan	ce value			
ID	Window type			U-value	SHGC
Roof window and	skylight schedule				
ID	Roof window/ skylight no. Area (	m²) Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No

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





# **Building Features**

Certificate Number: 0XQ9IVPIFS

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	46.6	

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles		
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles		
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles		
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles		
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet		

Ceiling type								
Location	Material	Added insulation Roof sp	pace above					
Ceiling penetrations								
Location	Number Type	Width (mm) Length (mm) Seal/	unsealed					
Ceiling fans								
Location	Number Diameter (mm)							

Roof type				
Material	Added insulation	Roof colour		
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium		

Certificate Number: **0XQ9IVPIFS** Date of Certificate: **20 Jan 2020** 

★Star rating: 7.1



### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 1QSLCDZEP0 Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



# **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 1.13, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 7.2 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.6 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Post: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7
Unconditioned: 5.8
Garage: TOTAL: 59.5

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 13.4

 Cooling:
 22.2

 TOTAL:
 35.6

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=1QSLCDZEP0

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

Certificate Number: 1QSLCDZEP0 Date of Certificate: 20 Jan 2020

★Star rating: **7.2** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm)	Width (mm)	Orientation WNW	Zone name Kitchen/Living		Outdoor shade

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No







Area (m²)	Insulation
46.6	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type						
Location	Material		Added insulation	Roof space above		
Ceiling penetrations						
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed		
Ceiling fans						
Location	Number Diameter (mm)					

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 1QSLCDZEP0 Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



# **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 2AKIJGQTQV Date of Certificate: 20 Jan 2020 ★ Star rating: 6.6



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

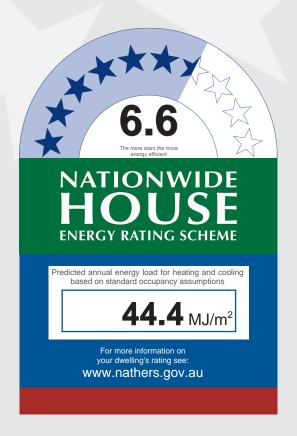
Address: 5.07, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open



# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Conditioned: 68.8 Unconditioned: 4.6 Garage: -TOTAL: 73.4

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 22.3

 Cooling:
 22.1

 TOTAL:
 44.4

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLand ing?PublicId=2AKIJGQTQV

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



★Star rating: 6.6



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
		2700	2800	NNE	Kitchen/Living		No
ALM-002-01 A	Opening 261	2700	2000				
ALM-002-01 A ALM-002-01 A	Opening 261 Opening 262	2700	2700	NW	Kitchen/Living		No

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8	SSW	Study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8	ESE	Study	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	12.2	NW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	ESE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	SSW	Entry	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	6	ESE	Entry	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Bath	No	No







# **Building Features**

Certificate Number: 2AKIJGQTQV

1 : AFS - AFS 200mm (75mm Glasswool)	10.5	NNE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom	Yes	Yes
Internal wall type					
Internal wall type					
Internal wall type  Type	Area	(m²) Insulat	ion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Study	FR5 - 200mm concrete slab Lined	8.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 200mm concrete slab Lined	35.1	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	13.5	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles
Bedroom	FR5 - 200mm concrete slab Lined	11.4	Enclosed	R0.0	Carpet

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling peneti	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 2AKIJGQTQV Date of Certificate: 20 Jan 2020 ★ Star rating: 6.6



### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: 2HV7WEAO6X Date of Certificate: 20 Jan 2020 ★Star rating: 8.2



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

4.07, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

78.9

83.4

4.5

# **Annual thermal** performance loads (MJ/m<sup>2</sup>)

2.7 Heating: Cooling: 20.9 TOTAL: 23.6

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 23.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=2HV7WEAO6X

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



★Star rating: 8.2



# **Building Features**

Certificate Number: 2HV7WEAO6X

Window ID	Window type	U-value	SHGC				
ALM-002-01 A Aluminium B SG Clear						6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
		Height (mm) 2700	Width (mm) 2700	Orientation NW	Zone name Bedroom 1		Outdoor shac

Roof windo	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Root windo	w and skylight schedule	

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.9	NW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	13.7	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.3	SSW	Study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5	ESE	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6	ESE	Entry	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11.5	NNE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	21.1	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.3	NW	Kitchen/Living	No	No





# **Building Features**

Certificate Number: 2HV7WEAO6X

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	69.8	

Date of Certificate: 20 Jan 2020

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	12.9	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Study	FR5 - 200mm concrete slab Lined	4.4	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	11.2	Enclosed	R0.0	Carpet
Bath	FR5 - 200mm concrete slab Lined	4.5	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	7.5	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	39.2	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	A	dded insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 2HV7WEAO6X Date of Certificate: 20 Jan 2020

★Star rating: 8.2



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 2NA2OJMNKC Date of Certificate: 20 Jan 2020 ★Star rating: 7.1



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 3.13, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 7.1 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 37.8 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 Unconditioned: 5.8 Garage: -TOTAL: 59.5

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 15.3

 Cooling:
 22.5

 TOTAL:
 37.8

# **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

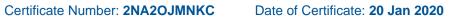
If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=2NA2OJMNKC

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



★Star rating: **7.1** 



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows schee	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
			0054	WNW	Kitchen/Living		No	
ALM-002-01 A	Opening 219	2700	3954	VVINVV	reteriori, Erving			
ALM-002-01 A ALM-002-01 A	Opening 219 Opening 230	2700 2100	823	ESE	Bedroom		No	

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation 2	Outdoor Indoor shade/ Zone name shade diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	B) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No





# **Building Features**

Certificate Number: 2NA2OJMNKC

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	46.6	
1 : FR5 - Internal Plasterboard Stud Wall	46.6	-

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles	
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles	
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles	
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet	

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling penet	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 2NA2OJMNKC Date of Certificate: 20 Jan 2020 ★Star rating: 7.1



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 2TYIDF4L6Y Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 1.12, 2 Delmar Parade

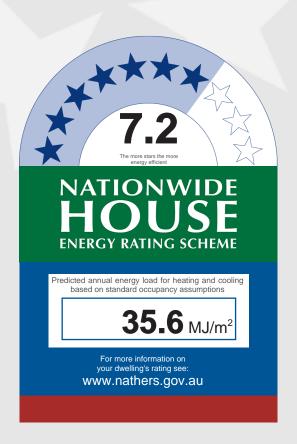
Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS

number: - climate zone: 56

Exposure: suburban



# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Single Clear

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Net floor area (m<sup>2</sup>)

Conditioned: 53.7 Unconditioned: 5.8 Garage: -TOTAL: 59.5

# Annual thermal performance loads (MJ/m²)

 Heating:
 13.4

 Cooling:
 22.2

 TOTAL:
 35.6

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLand ing?PublicId=2TYIDF4L6Y

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







# **Building Features**

Certificate Number: 2TYIDF4L6Y

Window ID	Window type	U-value	SHGC				
ALM-002-01 A	Aluminium B SG Clear						0.7
Windows schee	dule						
Window ID	Window no	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm) 2700	Width (mm) 3954	Orientation WNW	Zone name Kitchen/Living		Outdoor shad
Window ID  ALM-002-01 A  ALM-002-01 A			· /				Outdoor shad No No

Roof windows an	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation	Insulation				
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No	
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)		NNE	Bedroom	Yes	No	



Certificate Number: 2TYIDF4L6Y

Date of Certificate: 20 Jan 2020

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	46.6	

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles	
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles	
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles	
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet	

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 2TYIDF4L6Y Date of Certificate: 20 Jan 2020

★Star rating: 7.2



### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: 2YHP9FOTZ5 Date of Certificate: 20 Feb 2020 ★Star rating: 6.2



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

2.03, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

72.9

3.7

76.6

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

20.6 Heating: Cooling: 28.1 TOTAL: 48.7

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 48.7 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=2YHP9FOTZ5

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



★Star rating: **6.2** 



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Window ID	<b>dule</b> Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
ALM-002-01 A	Opening 152	2100	2735	ESE	Bedroom 1		No
ALM-002-01 A	Opening 153	2100	2786	ESE	Bedroom 2		No
		0400	3273	ESE	Kitchen/Living		No
ALM-002-01 A	Opening 155	2100	3213	ESE	Ritchen/Living		INO

Roof wind	ows and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	WNW	Day 18	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Unconditioned 19	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	NNE	Ensuite	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Ensuite	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	NNE	W.I.R	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	ESE	Bedroom 2	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	21.7	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	ESE	Kitchen/Living	No	No		

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



★Star rating: **6.2** 



# **Building Features**

Certificate Number: 2YHP9FOTZ5

1 : AFS - AFS 162mm (75mm Glasswool)	5.2	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	WNW	Kitchen/Living	No	No
Internal wall type					
Internal wan type					
Туре	Area (	m²) Insulat	ion		

Floors								
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering			
Day 18	FR5 - 300mm concrete slab	8.8	Enclosed	R0.0	Tiles			
Unconditioned 19	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles			
Ensuite	FR5 - 300mm concrete slab	3.9	Enclosed	R0.0	Tiles			
Bedroom 1	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet			
W.I.R	FR5 - 300mm concrete slab	2.2	Enclosed	R0.0	Tiles			
Bedroom 2	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Carpet			
Kitchen/Living	FR5 - 300mm concrete slab	36.2	Enclosed	R0.0	Tiles			

Ceiling type								
Location	Material			Added insulation	Roof space above			
Ceiling penetrations								
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed			
Ceiling fans								
Location	Number	Diameter (mm)						

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 2YHP9FOTZ5 Date of Certificate: 20 Feb 2020

★Star rating: 6.2



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 4DXSHV94T5 Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

3.09, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 28.7 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 48.6 Unconditioned: 6 Garage: TOTAL: 54.6

### **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

3.2 Heating: 25.5 Cooling: TOTAL: 28.7

#### **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=4DXSHV94T5

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

Roof window/ skylight no. Area (m²)



★Star rating: 7.8

shade

diffuser



# **Building Features**

ID

Aluminium P CC						
Aluminium b SG	Clear	Aluminium B SG Clear				
e						
Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
Opening 218	2100	3933	WNW	Kitchen/Living		No
d skylight type (	and performan	nce value				
Window type					U-value	SHGC
	Window no. Opening 218	Window no. Height (mm) Opening 218 2100  I skylight type and performan	Window no. Height (mm) Width (mm) Opening 218 2100 3933  I skylight type and performance value	Window no. Height (mm) Width (mm) Orientation Opening 218 2100 3933 WNW  I skylight type and performance value	Window no. Height (mm) Width (mm) Orientation Zone name Opening 218 2100 3933 WNW Kitchen/Living  I skylight type and performance value	Window no. Height (mm) Width (mm) Orientation Zone name Opening 218 2100 3933 WNW Kitchen/Living  I skylight type and performance value

Orientation Zone name

Туре	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	20.6	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	14.9	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	NNE	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	SSW	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No	
Internal wall type						
Туре	Area (m	<sup>2</sup> ) Insulation	1			
1 : FR5 - Internal Plasterboard Stud Wall	36.8					





★Star rating: **7.8** 

# **Building Features**

Certificate Number: 4DXSHV94T5

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Kitchen/Living	FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles		
Bathroom	FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles		
Hallway	FR5 - 300mm concrete slab	7.1	Enclosed	R0.0	Tiles		
Bedroom 1	FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet		

Ceiling type							
Location	Material	A	added insulation	Roof space above			
Ceiling penetrations							
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed			
Ceiling fans							
Location	Number Diameter (mm)						

Added insulation	Roof colour
0.0	medium

Certificate Number: 4DXSHV94T5 Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 4VU4LH20Q7 Date of Certificate: 20 Jan 2020 ★Star rating: 6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 6.05, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

# Key construction and insulation materials (see following pages for details) Ceiling pe (see following

\_\_\_\_\_\_

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: **As indicated** Roof: **As indicated** 

Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

69.5

3.7

73.2

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

Heating: **33.7**Cooling: **17.1**TOTAL: **50.8** 

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 50.8 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=4VU4LH20Q7



★Star rating: 6



Window ID	Window type		U-value	SHGC				
GJA-013-01 A	Type 131 Alumir	Type 131 Aluminium Sliding Window SG 3Clr						
Windows sched								
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
GJA-013-01 A	Opening 224	2700	1833	NNE	Bedroom 1		No	
GJA-013-01 A	Opening 225	2700	2643	NW	Bedroom 1		No	
GJA-013-01 A	Opening 223	2700	2548	NNE	Bedroom 2		No	
GJA-013-01 A	Opening 221	2700	2526	NNE	Kitchen/Living		No	
							No	

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type		External wall type						
Туре	Insulation				Wall wrap			
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)						
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No			
External wall schedule								
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves			
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	NNE	Bedroom 1	Yes	Yes			
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	NW	Bedroom 1	No	No			
2 : AFS - AFS 200mm (75mm Glasswool)	12.1	SSW	Bedroom 1	No	No			
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Ensuite	No	No			
2 : AFS - AFS 200mm (75mm Glasswool)	0.5	WNW	WIR	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	NNE	Bedroom 2	Yes	Yes			
1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 2	Yes	Yes			
2 : AFS - AFS 200mm (75mm Glasswool)	6.8	SSW	Kitchen/Living	No	No			
2 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Kitchen/Living	Yes	No			







# **Building Features**

Certificate Number: 4VU4LH20Q7

2 : AFS - AFS 200mm (75mm Glasswool)	17.8	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Bath	No	No
Internal wall type					
Internal wall type  Type	Area	(m²) Insula	tion		

Floors	Floors								
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering				
Bedroom 1	FR5 - 200mm concrete slab Lined	12.1	Enclosed	R0.0	Carpet				
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles				
WIR	FR5 - 200mm concrete slab Lined	4.1	Enclosed	R0.0	Carpet				
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet				
Kitchen/Living	FR5 - 200mm concrete slab Lined	39.1	Enclosed	R0.0	Tiles				
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles				

Ceiling type					
Location	Material		Added insulation	Roof space above	
Bedroom 1	Plasterboard		R3.0	No	
Ensuite	Plasterboard		R3.0	No	
WIR			R3.0	No No No	
Bedroom 2			R3.0		
Kitchen/Living	Plasterboard	Plasterboard			
Bath	Plasterboard		R3.0	No	
Ceiling penetra	tions				
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed	
Ceiling fans					
Location	Number Diameter (mm)				
LUCATION	Number Diameter (mm)				

#### **Roof type**

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



★Star rating: 6



Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 4VU4LH20Q7 Date of Certificate: 20 Jan 2020

**★**Star rating: 6



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 5CM9SNTBGI Date of Certificate: 20 Feb 2020 ★Star rating: 6.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

3.03, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 48.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 72.9 Unconditioned: 3.7 Garage: TOTAL: 76.6

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

#### **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

#### 22.7 Heating: Cooling: 26.2 TOTAL: 48.9

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=5CM9SNTBGI

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



★Star rating: **6.2** 



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7	
Window ID	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 152	2100	2735	ESE	Bedroom 1		No	
ALM-002-01 A	Opening 153	2100	2786	ESE	Bedroom 2		No	
ALM-002-01 A	Opening 155	2100	3273	ESE	Kitchen/Living		No	
	Opening 154	2100	1984	NNE	Kitchen/Living		No	

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	WNW	Day 18	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Unconditioned 19	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	NNE	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	NNE	W.I.R	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	21.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	ESE	Kitchen/Living	No	No





★Star rating: **6.2** 

# **Building Features**

Certificate Number: 5CM9SNTBGI

1 : AFS - AFS 162mm (75mm Glasswool)	5.2	NNE	Kitchen/Living	Yes	Yes Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	WNW	Kitchen/Living	No	No
Internal wall type					
Internal wall type Type	Area	(m²) Insulat	ion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Day 18	FR5 - 300mm concrete slab	8.8	Enclosed	R0.0	Tiles
Unconditioned 19	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.9	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	2.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	36.2	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	/	Added insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **5CM9SNTBGI** Date of Certificate: **20 Feb 2020** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

★Star rating: 6.2

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: 5F3MCF4ZQT Date of Certificate: 20 Feb 2020 ★Star rating: 6.4



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.03, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56

number: Exposure: suburban

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Unconditioned:

Insulation:

**Single Clear** 

72.9

3.7

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

Heating:

Garage: 18.5 TOTAL: 76.6 27.5 Cooling: TOTAL: 46

#### Plan documents

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions **46** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=5F3MCF4ZQT

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



★Star rating: **6.4** 



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 152	2100	2735	ESE	Bedroom 1		No	
ALM-002-01 A	Opening 153	2100	2786	ESE	Bedroom 2		No	
ALIVI-002-01 A							N.I.	
ALM-002-01 A	Opening 155	2100	3273	ESE	Kitchen/Living		No	

Roof windo	ows and skylight type and per	formance v	alue			
ID	Window type				U-value	SHGC
Roof windo	ow and skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool		No			
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	4.8	WNW	Day 18	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Unconditioned 19	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	NNE	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	NNE	W.I.R	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	ESE	Bedroom 2	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	21.7	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	ESE	Kitchen/Living	No	No	



★Star rating: **6.4** 



# **Building Features**

Certificate Number: 5F3MCF4ZQT

1 : AFS - AFS 162mm (75mm Glasswool)	5.2	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	- <del>5.2</del> 6.6	WNW	Kitchen/Living  Kitchen/Living		No
1 : AFS - AFS 162mm (75mm Glasswool)	3.2	WNW	Kitchen/Living	No	No
Internal wall type					
Type	Area	(m²) Insulat	ion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Day 18	FR5 - 300mm concrete slab	8.8	Enclosed	R0.0	Tiles
Unconditioned 19	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.9	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	2.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	36.2	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	etrations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **5F3MCF4ZQT** Date of Certificate: **20 Feb 2020** ★

★Star rating: **6.4** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: **5MAHWWLAW0** Date of Certificate: **20 Jan 2020** ★Star rating: **8.4** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 2.07, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# RATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 21.1 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44.9
Unconditioned: 3.7
Garage: TOTAL: 48.6

# Annual thermal performance loads (MJ/m²)

Heating: **0.2**Cooling: **20.9**TOTAL: **21.1** 

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=5MAHWWLAW0



★Star rating: 8.4



and performance	value							
Window type					U-value	SHGC		
Aluminium B SG	Aluminium B SG Clear							
lule								
Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade		
Opening 204	2100	1947	NNE	Bedroom		No		
Opening 203	2100	3514	NNE	Kitchen/Living		No		
	Window type Aluminium B SG  Jule  Window no.  Opening 204	Aluminium B SG Clear  Iule  Window no. Height (mm)  Opening 204 2100	Window type Aluminium B SG Clear  Jule  Window no. Height (mm) Width (mm) Opening 204 2100 1947	Window type Aluminium B SG Clear  Jule  Window no. Height (mm) Width (mm) Orientation Opening 204 2100 1947 NNE	Window type Aluminium B SG Clear  Jule  Window no. Height (mm) Width (mm) Orientation Zone name Opening 204 2100 1947 NNE Bedroom	Window type  Aluminium B SG Clear  6.7   Sule  Window no. Height (mm) Width (mm) Orientation Zone name Opening 204 2100 1947 NNE Bedroom		

					U-value	
ID	Window type	Window type				SHGC
Root windo	w and skylight schedule					
					Outdoor	Indoor sha

Туре	Insulation				
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	NNE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.9	WNW	Bedroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	WNW	Bedroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	20.9	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	WNW	Hall	No	No





★Star rating: 8.4

# **Building Features**

Certificate Number: 5MAHWWLAW0

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	27.4	

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bathroom	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles	
Bedroom	FR5 - 300mm concrete slab	10.8	Enclosed	R0.0	Carpet	
Kitchen/Living	FR5 - 300mm concrete slab	32.5	Enclosed	R0.0	Tiles	
Hall	FR5 - 300mm concrete slab	1.6	Enclosed	R0.0	Tiles	

Ceiling type				
Location	Material	A	Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 5MAHWWLAW0 Date of Certificate: 20 Jan 2020

★Star rating: 8.4



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: **5QUHBA32CG** Date of Certificate: **20 Jan 2020** ★Star rating: **5.7** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 5.04, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

Insulation:

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

66

4.3

70.3

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

# Annual thermal performance loads (MJ/m²)

(MJ/m

Heating: **34.1** Cooling: **20.7** TOTAL: **54.8** 

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# 5.7 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 54.8 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=5QUHBA32CG





★Star rating: **5.7** 



# **Building Features**

Certificate Number: 5QUHBA32CG

Window ID	Window type	Window type  Type 131 Aluminium Sliding Window SG 3Clr					
GJA-013-01 A	Type 131 Alumir						
Windows sche					_		
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
GJA-013-01 A	Opening 207	2700	2700	ESE	Bedroom 18		No
	Opening 208	2700	2700	ESE	Bedroom 21		No
GJA-013-01 A	<u></u>						
GJA-013-01 A GJA-013-01 A	Opening 210	2700	3100	ESE	Kitchen/Living 24		No

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap			
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No			
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)							
External wall schedule								
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves			
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	NNE	Bedroom 18	No	No			
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 18	Yes	Yes			
1 : AFS - AFS 200mm (75mm Glasswool)	4.5	NNE	Night 19	No	No			
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 21	Yes	Yes			
1 : AFS - AFS 200mm (75mm Glasswool)	6.2	WNW	Day 22	Yes	Yes			
1 : AFS - AFS 200mm (75mm Glasswool)	14.5	WNW	Day 22	No	No			
1 : AFS - AFS 200mm (75mm Glasswool)	2.6	NNE	Day 22	No	No			
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	WNW	Unconditioned 23	No	No			
1 : AFS - AFS 200mm (75mm Glasswool)	4.8	SSW	Unconditioned 23	No	No			
1 : AFS - AFS 200mm (75mm Glasswool)	11.5	SSW	Kitchen/Living 24	No	No			

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





# **Building Features**

Certificate Number: 5QUHBA32CG

2 : AFS - AFS 162mm (75mm Glasswool)	7.8	SSW	Kitchen/Living 24	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living 24	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living 24	Yes	Yes
Internal wall type					
Internal wall type  Type	Area	(m²) Insula	tion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 18	FR5 - 200mm concrete slab Lined	9.4	Enclosed	R0.0	Carpet
Night 19	FR5 - 200mm concrete slab Lined	2.6	Enclosed	R0.0	Carpet
Night 20	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
Bedroom 21	FR5 - 200mm concrete slab Lined	11.3	Enclosed	R0.0	Carpet
Day 22	FR5 - 200mm concrete slab Lined	10.3	Enclosed	R0.0	Tiles
Unconditioned 23	FR5 - 200mm concrete slab Lined	4.3	Enclosed	R0.0	Tiles
Kitchen/Living 24	FR5 - 200mm concrete slab Lined	28.4	Enclosed	R0.0	Tiles

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penet	trations				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **5QUHBA32CG** Date of Certificate: **20 Jan 2020** ★Star rating: **5.7** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 6R05ZU8235 Date of Certificate: 20 Jan 2020 ★ Star rating: 7.6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 2.05, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: **suburban** 

# 7.6 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 31 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 80.2
Unconditioned: 3.6
Garage: TOTAL: 83.8

# Annual thermal performance loads (MJ/m²)

lviJ/III )

Heating: 1.9
Cooling: 29.1
TOTAL: 31

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=6R05ZU8235

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







Window ID	Window type	Window type Aluminium B SG Clear						
ALM-002-01 A	Aluminium B SG							
Windows schee	<b>dule</b> Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace	
ALM-002-01 A	Opening 187	2100	2935	ESE	Bedroom 2		No	
	Opening 184	2100	3759	NNE	Kitchen/Living		No	
ALM-002-01 A								
ALM-002-01 A ALM-002-01 A	Opening 185	2100	2935	NNE	Bedroom 1		No	

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

External wall type		External wall type							
Туре	Insulation				Wall wrap				
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No				
External wall schedule									
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves				
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Bedroom 2	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	NNE	Kitchen/Living	No	Yes				
1 : AFS - AFS 162mm (75mm Glasswool)	17.3	WNW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	WNW	Entry	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	6.8	SSW	Entry	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Pantry	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes				
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	W.I.R	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	ESE	Ensuite	No	No				





1 : AFS - AFS 162mm (75mm Glasswool)	1.6	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Bathroom	No	No
Internal wall type					
Internal wall type  Type	Area	(m²) Insulat	ion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	FR5 - 300mm concrete slab	11.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	37.7	Enclosed	R0.0	Tiles
Entry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Pantry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	9.4	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	4.6	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

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

Certificate Number: **6R05ZU8235** Date of Certificate: **20 Jan 2020** 

★Star rating: 7.6



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: **7FRZMLSBRZ** Date of Certificate: **20 Jan 2020** ★Star rating: **7.3** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 5.06, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

Insulation:

# Key construction and insulation materials (see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Single Clear

69.5

3.7

73.2

# Annual thermal performance loads (MJ/m²)

Heating: 16.9
Cooling: 18.3
TOTAL: 35.2

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

7.3
The more stars the more energy efficient

NATIONWIDE HOUSE ENERGY RATING SCHEME

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

35.2 MJ/m²

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

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=7FRZMLSBRZ



★Star rating: **7.3** 



Window ID	Window type	U-value	SHGC				
GJA-013-01 A	Type 131 Alumir	Type 131 Aluminium Sliding Window SG 3Clr					
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
GJA-013-01 A	Opening 224	2700	1833	NNE	Bedroom 1		No
GJA-013-01 A	Opening 225	2700	2643	NW	Bedroom 1		No
GJA-013-01 A	Opening 223	2700	2548	NNE	Bedroom 2		No
GJA-013-01 A	Opening 221	2700	2526	NNE	Kitchen/Living		No
GJA-013-01 A	Opening 222	2700	2724	NNE	Kitchen/Living		No

Roof windows and skylight type and performance value							
ID	Window type				U-value	SHGC	
Roof window and	skylight schedule						
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser	

Туре	Insulation				Wall wrap	
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)				
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	NNE	Bedroom 1	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	NW	Bedroom 1	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	12.1	SSW	Bedroom 1	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Ensuite	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	0.5	WNW	WIR	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	NNE	Bedroom 2	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 2	Yes	Yes	
2 : AFS - AFS 200mm (75mm Glasswool)	6.8	SSW	Kitchen/Living	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Kitchen/Living	Yes	No	







# **Building Features**

Certificate Number: 7FRZMLSBRZ

2 : AFS - AFS 200mm (75mm Glasswool)	17.8	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Bath	No	No
,					
Internal wall type					
	Area				

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 1	FR5 - 200mm concrete slab Lined	12.1	Enclosed	R0.0	Carpet	
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles	
WIR	FR5 - 200mm concrete slab Lined	4.1	Enclosed	R0.0	Carpet	
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet	
Kitchen/Living	FR5 - 200mm concrete slab Lined	39.1	Enclosed	R0.0	Tiles	
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles	

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **7FRZMLSBRZ** Date of Certificate: **20 Jan 2020** ★Star rating: **7.3** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: **7ZZMG5U9DL** Date of Certificate: **20 Jan 2020** ★Star rating: **5.9** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 6.02, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Single Clear

73.8

77.7

3.9

# Annual thermal performance loads (MJ/m²)

Heating: **35.5**Cooling: **17.1**TOTAL: **52.6** 

# **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# 5.9 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 52.6 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=7ZZMG5U9DL

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



★Star rating: 5.9



Window ID	Window type	Window type						
GJA-070-04 A	Type 245 Alumir	nium Sliding Door	SG 4Clr			6.27	0.73	
Windows sche	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
Window ID GJA-070-04 A	Window no. Opening 301	Height (mm) 2700	Width (mm) 2400	Orientation ESE	Zone name Bedroom 1		Outdoor shade	

Roof windows an	nd skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	l skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.033	B) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.2	SSW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3	WNW	Bedroom 1	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	10.9	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Ensuite	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Ensuite	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	WNW	Entry	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	0.5	ESE	Entry	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	7.1	NNE	Entry	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	WNW	Bath	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	Yes	Yes





★Star rating: 5.9

# **Building Features**

Certificate Number: 7ZZMG5U9DL

2 : AFS - AFS 200mm (75mm Glasswool)	24.5	NNE	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	10.2	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Kitchen/Living	No	No
Internal wall type					
Туре	Area	(m²) Insulat	ion		
1 : FR5 - Internal Plasterboard Stud Wall	63.3				

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Bedroom 1	FR5 - 200mm concrete slab Lined	16.1	Enclosed	R0.0	Carpet		
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles		
Entry	FR5 - 200mm concrete slab Lined	7.3	Enclosed	R0.0	Tiles		
Bath	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles		
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet		
Kitchen/Living	FR5 - 200mm concrete slab Lined	35.8	Enclosed	R0.0	Tiles		

Location	Material	Added insulation	Roof space above	
Bedroom 1	Plasterboard	R3.0	No	
Ensuite	Plasterboard	R3.0	No	
Entry	Plasterboard	R3.0	No	
Bath	Plasterboard	R3.0	No	
Bedroom 2	Plasterboard	R3.0	No	
Kitchen/Living	Plasterboard	R3.0	No	
Ceiling penetra	tions			
Location	Number Type V	Vidth (mm) Length (mm	) Seal/ unsealed	
Ceiling fans				
Location	Number Diameter (mm)			

# **Roof type**

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





Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	dark

Certificate Number: **7ZZMG5U9DL** Date of Certificate: **20 Jan 2020** ★Star rating: **5.9** 



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 8ZFECAHATX Date of Certificate: 20 Jan 2020 ★Star rating: 6.4



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

5.08, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

70.4

3.7

74.1

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

21.2 Heating: Cooling: 24.2 TOTAL: 45.4

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 45.4 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=8ZFECAHATX







Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7	
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
Window ID	Window no	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
			,					
	Opening 268	2700	2400	WNW	Bedroom 1		No	
ALM-002-01 A			,					
ALM-002-01 A ALM-002-01 A ALM-002-01 A	Opening 268	2700	2400	WNW	Bedroom 1		No	

Roof wind	ows and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation	Insulation					
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No		
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 200mm (75mm Glasswool)	8	NNE	Bedroom 1	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 1	Yes	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	NNE	WIR	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Ensuite	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	6.4	ESE	Bath	No	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Bath	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	3.8	ESE	Entry	No	Yes		
2 : AFS - AFS 162mm (75mm Glasswool)	11.7	NNE	Kitchen/Living 2	Yes	Yes		
2 : AFS - AFS 162mm (75mm Glasswool)	11.9	NW	Kitchen/Living 2	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Kitchen/Living 2	No	No		





★Star rating: **6.4** 

1 : AFS - AFS 200mm (75mm Glasswool)	22.4	SSW	Kitchen/Living 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 2	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	No	Yes
Internal wall type					
		, 2,	4:		
Туре	Area	(m²) Insula	tion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	8.8	Enclosed	R0.0	Carpet
WIR	FR5 - 200mm concrete slab Lined	3.6	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	8	Enclosed	R0.0	Tiles
Kitchen/Living 2	FR5 - 200mm concrete slab Lined	34.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 200mm concrete slab Lined	11.7	Enclosed	R0.0	Carpet

Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: 8ZFECAHATX Date of Certificate: 20 Jan 2020



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

★Star rating: 6.4

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: 9FIY0CSW48 Date of Certificate: 20 Jan 2020 ★Star rating: 8.4



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

1.07, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions **21.1** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44.9 Unconditioned: 3.7 Garage: TOTAL: 48.6

# **Annual thermal** performance loads (MJ/m<sup>2</sup>)

Heating: 20.9 Cooling:

TOTAL:

0.2

21.1

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=9FIY0CSW48

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

Certificate Number: **9FIY0CSW48** Date of Certificate: **20 Jan 2020** 

★Star rating: 8.4



Window ID	Window type					U-value	SHGC
ALM-002-01 A	-002-01 A Aluminium B SG Clear						0.7
Windows sched	lule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
		Height (mm)	Width (mm) 1947	Orientation NNE	Zone name Bedroom		Outdoor shad

	ows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof windo	ow and skylight schedule	

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	NNE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.9	WNW	Bedroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	WNW	Bedroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	20.9	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	WNW	Hall	No	No



Certificate Number: 9FIY0CSW48 Date of Certificate: 20 Jan 2020 ★ Star rating: 8.4

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	27.4	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bathroom	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	32.5	Enclosed	R0.0	Tiles
Hall	FR5 - 300mm concrete slab	1.6	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	A	Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 9FIY0CSW48 Date of Certificate: 20 Jan 2020 ★ Star rating: 8.4



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: 9LHJJOQ8YF Date of Certificate: 20 Jan 2020

**★**Star rating: 6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

### **Dwelling details**

Address: 6.10, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

Insulation:

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: **As indicated** Floor: **As indicated** 

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

72.2

3.7

75.9

# Annual thermal performance loads (MJ/m²)

(INIO/W

Heating: **30.9** Cooling: **20** TOTAL: **50.9** 

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 50.9 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=9LHJJOQ8YF





★Star rating: 6



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG Clear						0.7
Windows sche	dule						
Windows schee	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
		Height (mm) 2700	Width (mm) 2500	Orientation WNW	Zone name Bedroom 1		Outdoor shad

Roof window	s and skylight type and performance val	lue	
ID	Window type		U-value SHGC
Roof window	and skylight schedule		
ID	Roof window/ skylight no. Area (m²)	Orientation Zone name	Outdoor Indoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.3	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	SSW	Study	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	SE	Bedroom 2	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	11.3	NNE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3	SE	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NE	Entry	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	3.6	NNE	Kitchen/Living 24	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	8.1	ESE	Kitchen/Living 24	No	No





★Star rating: 6

2 : AFS - AFS 200mm (75mm Glasswool)	12	NNE	Kitchen/Living 24	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	9	NNE	Kitchen/Living 24	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living 24	No	Yes
Internal wall type					
Internal wall type  Type	Area (	(m²) Insulat	ion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	10.3	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles
Study	FR5 - 200mm concrete slab Lined	4.9	Enclosed	R0.0	Carpet
Bathroom	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 200mm concrete slab Lined	12.4	Enclosed	R0.0	Carpet
Entry	FR5 - 200mm concrete slab Lined	5.2	Enclosed	R0.0	Tiles
Kitchen/Living 24	FR5 - 200mm concrete slab Lined	34.9	Enclosed	R0.0	Tiles

Location	Material		Added insulation	Roof space above
Bedroom 1	Plasterboard		R3.0	No
Ensuite	Plasterboard		R3.0	No
Study	Plasterboard		R3.0	No
Bathroom	Plasterboard		R3.0	No
Bedroom 2	Plasterboard		R3.0	No
Entry	Plasterboard		R3.0	No
Kitchen/Living 24	Plasterboard		R3.0	No
Ceiling penetrati	ons Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				





★Star rating: 6

**Building Features** 

Certificate Number: 9LHJJOQ8YF

# Roof typeMaterialAdded insulationRoof colourSlab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab0.0medium

Certificate Number: 9LHJJOQ8YF Date of Certificate: 20 Jan 2020

**★**Star rating: 6



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 37TPP4YH58 Date of Certificate: 20 Jan 2020 ★Star rating: 7.6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

1.05, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56

number: Exposure: suburban

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

80.2

83.8

3.6

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

1.9 Heating: Cooling: 29.1 TOTAL: 31

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions $MJ/m^2$ For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=37TPP4YH58

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

Certificate Number: **37TPP4YH58** Date of Certificate: **20 Jan 2020** 

★Star rating: 7.6



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
ALM-002-01 A	Opening 187	2100	2935	ESE	Bedroom 2		No
ALM-002-01 A	Opening 184	2100	3759	NNE	Kitchen/Living		No
				NINIE	Dades and 4		No
ALM-002-01 A	Opening 185	2100	2935	NNE	Bedroom 1		INO

Roof windows and skylight type and performance value						
ID	Window type				U-value	SHGC
Roof windo	ow and skylight schedule					
ID	Roof window/ skylight n	o. Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wra
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	17.3	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	WNW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.8	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Pantry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	W.I.R	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	ESE	Ensuite	No	No

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







1 : AFS - AFS 162mm (75mm Glasswool)	1.6	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Bathroom	No	No
( ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '					
Internal wall type					
	Area				

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	FR5 - 300mm concrete slab	11.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	37.7	Enclosed	R0.0	Tiles
Entry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Pantry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	9.4	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	4.6	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **37TPP4YH58** Date of Certificate: **20 Jan 2020** ★ Star rating: **7.6** 



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: **58QURXSS55** Date of Certificate: **20 Jan 2020** ★ Star rating: **8.3** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

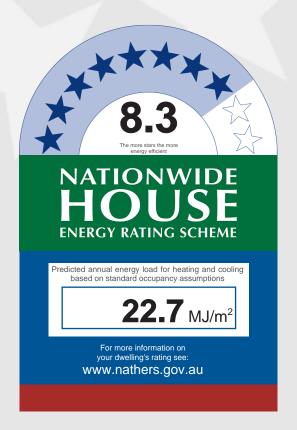
Address: 4.09, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: **56** 

Exposure: open



# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 65.8
Unconditioned: 5.3
Garage: TOTAL: 71.1

# Annual thermal performance loads (MJ/m²)

(MJ/m²)

Heating: 3
Cooling: 19.7
TOTAL: 22.7

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=58QURXSS55

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



★Star rating: 8.3



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
		Height (mm) 2100	Width (mm)	Orientation ESE	Zone name Bedroom 2		Outdoor shad

Vindow type				I I malma	01100
				U-value	SHGC
ylight schedule					
y	light schedule				

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	No	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	9.6	NNE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	SSW	Bedroom 2	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	9.6	SSW	Bedroom 1	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Bath	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	20.2	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	12.2	NW	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	22.8	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.3	ESE	Day 22	Yes	No
2 : AFS - AFS 200mm (75mm Glasswool)	7.8	WNW	Ensuite	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	4.4	SSW	Ensuite	No	No







Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	52.4	

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet	
Bedroom 1	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet	
Bath	FR5 - 200mm concrete slab Lined	5.3	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - 200mm concrete slab Lined	34.5	Enclosed	R0.0	Tiles	
Day 22	FR5 - 200mm concrete slab Lined	5.4	Enclosed	R0.0	Tiles	
Ensuite	FR5 - 200mm concrete slab Lined	4.7	Enclosed	R0.0	Tiles	

Ceiling type						
Location	Material	,	Added insulation	Roof space above		
Ceiling penetrations						
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed		
Ceiling fans						
Location	Number Diameter (mm)					

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **58QURXSS55** Date of Certificate: **20 Jan 2020** ★ Star rating: **8.3** 



#### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 64L61CKCES Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

1.09, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56

number: Exposure: suburban

**Key construction and insulation materials** 

(see following pages for details)

Construction: Wall: As indicated Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

48.6

54.6

6

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

2.7 Heating: Cooling: 25.2 TOTAL: 27.9

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 27.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

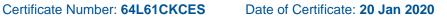
NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=64L61CKCES



★Star rating: **7.8** 



Window ID	Window type						SHGC
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace

Roof windows	and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window a	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	20.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	14.9	NNE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	NNE	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No
Internal wall type					
Туре	Area (m	<sup>2</sup> ) Insulation	1		
1 : FR5 - Internal Plasterboard Stud Wall	36.8				





★Star rating: 7.8

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Kitchen/Living	FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles	
Hallway	FR5 - 300mm concrete slab	7.1	Enclosed	R0.0	Tiles	
Bedroom 1	FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet	

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type			
Material	Added insulation	Roof colour	
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium	

Certificate Number: 64L61CKCES Date of Certificate: 20 Jan 2020 ★ Star rating: 7.8



#### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 65ISLELEB1 Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 2.09, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: **suburban** 

# 7.8 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 28.7 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Conditioned: 48.6
Unconditioned: 6
Garage: TOTAL: 54.6

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 3.2

 Cooling:
 25.5

 TOTAL:
 28.7

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=65ISLELEB1

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



★Star rating: 7.8



# **Building Features**

Certificate Number: 65ISLELEB1

Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows sche	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
ALM-002-01 A	Opening 218	2100	3933	WNW	Kitchen/Living		No
Roof windows	and skylight type a	nd performan	ce value				
ID	Window type					U-value	SHGC
Boof window o	ınd skylight schedu	ılo					

Туре	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)					
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	20.6	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	14.9	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	NNE	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	SSW	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No	
	8	ESE	Bedroom 1	No	No	
Туре	Area (m	<sup>2</sup> ) Insulation	١			
1 : FR5 - Internal Plasterboard Stud Wall	36.8					



★Star rating: **7.8** 



# **Building Features**

Certificate Number: 65ISLELEB1

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	7.1	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet

Ceiling type				
Location	Material	A	dded insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 65ISLELEB1 Date of Certificate: 20 Jan 2020

★Star rating: 7.8



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: 673BBMCF1K Date of Certificate: 20 Jan 2020 ★Star rating: 6.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

1.10, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 41.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 47.7 Unconditioned: 6 Garage: TOTAL: 53.7

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

17.1 Heating: Cooling: 24.5 TOTAL: 41.6

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=673BBMCF1K

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



★Star rating: **6.8** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
	Opening 218	2700	3933	WNW	Kitchen/Living		No
ALM-002-01 A	-11- 3 -						
ALM-002-01 A ALM-002-01 A	Opening 220	2400	800	SSW	Bedroom 1		No

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	20.5	SSW	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	11.5	SSW	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	SSW	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	ESE	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	9.8	NNE	Bedroom 1	No	No







# **Building Features**

Certificate Number: 673BBMCF1K

Area (m²)	Insulation
34.2	

Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles
FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles
FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet
	FR5 - 300mm concrete slab FR5 - 300mm concrete slab FR5 - 300mm concrete slab	FR5 - 300mm concrete slab  FR5 - 300mm concrete slab  FR5 - 300mm concrete slab  6  FR5 - 300mm concrete slab  6.2	FR5 - 300mm concrete slab  FR5 - 300mm concrete slab  FR5 - 300mm concrete slab  6 Enclosed  FR5 - 300mm concrete slab  6.2 Enclosed	FR5 - 300mm concrete slab         31.1         Enclosed         R0.0           FR5 - 300mm concrete slab         6         Enclosed         R0.0           FR5 - 300mm concrete slab         6.2         Enclosed         R0.0

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: 673BBMCF1K Date of Certificate: 20 Jan 2020 ★5

★Star rating: 6.8



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: A6UZE9CBFV Date of Certificate: 20 Jan 2020 ★Star rating: 5.6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

4.01, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated Roof: As indicated

Floor: As indicated

**76** 

3.8

79.8

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

37.4 Heating: Cooling: 19.7 TOTAL: 57.1

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions **57.1** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=A6UZE9CBFV





★Star rating: **5.6** 

# **Building Features**

Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
ALM-002-01 A	Opening 179	2700	1800	NNE	Kitchen/Living		No
ALM-002-01 A	Opening 180	2700	3200	ESE	Kitchen/Living		No
ALM-002-01 A	Opening 177	2700	1800	SSW	Bedroom 1		No
		2700	2753	ESE	Bedroom 2		No

Roof wind	lows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof wind	low and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor Indoor shade/ shade diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	22.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Hallway	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	21.2	WNW	Hallway	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.5	NNE	Ensuite	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	10.5	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 1	Yes	No







# **Building Features**

Certificate Number: A6UZE9CBFV

1 : AFS - AFS 162mm (75mm Glasswool)	4.2	ESE	Bathroom	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.2	ESE	Bedroom 2	Yes	Yes
Internal wall type					
Internal wall type					
Internal wall type  Type	Area	(m²) Insula	ation		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 200mm concrete slab Lined	33.5	Enclosed	R0.0	Tiles
Hallway	FR5 - 200mm concrete slab Lined	13.2	Enclosed	R0.0	Tiles
Ensuite	FR5 - 200mm concrete slab Lined	4.3	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 200mm concrete slab Lined	13.4	Enclosed	R0.0	Carpet
Bathroom	FR5 - 200mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 200mm concrete slab Lined	11.6	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penet	trations				
Location	Number Typ	е	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number Dia	meter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **A6UZE9CBFV** Date of Certificate: **20 Jan 2020** 

★Star rating: 5.6



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: ASFRDVHYD7 Date of Certificate: 20 Jan 2020 ★Star rating: 6.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.08, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

#### **Key construction and insulation materials**

(see following pages for details)

Insulation:

Glazing:

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

44

4.1

48.1

**Aluminium** 

**Single Clear** 

### **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

25.9 Heating: Cooling: 22.8 TOTAL: 48.7

#### **Plan documents**

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 48.7 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

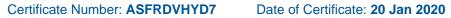
NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=ASFRDVHYD7



★Star rating: **6.2** 



# **Building Features**

Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
Window ID ALM-002-01 A	Window no. Opening 212	Height (mm) 2100	Width (mm) 3897	Orientation WNW	Zone name Kitchen/Living		Outdoor shade No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type							
Туре	Insulation				Wall wrap		
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	10.1	WNW	Kitchen/Living	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.4	NNE	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	ESE	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	9.1	ESE	Bedroom 1	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	WNW	Bedroom 1	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Entrance	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	ESE	Entrance	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.1	ESE	Bathroom	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No		







# **Building Features**

Certificate Number: ASFRDVHYD7

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	21.4	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	28	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	11.6	Enclosed	R0.0	Carpet
Entrance	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	4.1	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **ASFRDVHYD7** Date of Certificate: **20 Jan 2020** 

★Star rating: 6.2



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: B8WRG2BYHP Date of Certificate: 20 Jan 2020 ★Star rating: 6.3



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

6.03, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

101.3

106.4

5.1

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

29 Heating: Cooling: 19 TOTAL: 48

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 48 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=B8WRG2BYHP

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



★Star rating: **6.3** 



# **Building Features**

Window ID	Window type					U-value	SHGC
GJA-070-04 A	Type 245 Alumir	nium Sliding Door	SG 4Clr			6.27	0.73
Windows sche							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
GJA-070-04 A	Opening 302	2700	2500	ESE	Bedroom 18		No
	Opening 303	2700	2500	ESE	Bedroom 21		No
GJA-070-04 A							
GJA-070-04 A GJA-070-04 A	Opening 304	2700	2500	ESE	Bedroom 23		No

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

External wall type						
Туре	Insulation	Insulation				
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)				
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	9.6	NNE	Bedroom 18	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 18	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Night 19	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	5.1	WNW	Night 19	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	4.8	WNW	Night 20	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 21	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	4.4	WNW	Unconditioned 22	No	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	7.1	NNE	Unconditioned 22	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 23	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	5.4	WNW	Day 24	No	Yes	



★Star rating: **6.3** 



# **Building Features**

2 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Day 25	No	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	8	SSW	Day 25	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	23.6	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.8	WNW	Day 27	No	No

#### **Internal wall type**

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	108	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 18	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Night 19	FR5 - 200mm concrete slab Lined	4.4	Enclosed	R0.0	Tiles
Night 20	FR5 - 200mm concrete slab Lined	4.2	Enclosed	R0.0	Carpet
Bedroom 21	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Unconditioned 22	FR5 - 200mm concrete slab Lined	5.1	Enclosed	R0.0	Tiles
Bedroom 23	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Day 24	FR5 - 200mm concrete slab Lined	6.8	Enclosed	R0.0	Tiles
Day 25	FR5 - 200mm concrete slab Lined	8.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 200mm concrete slab Lined	33.4	Enclosed	R0.0	Tiles
Day 27	FR5 - 200mm concrete slab Lined	11.7	Enclosed	R0.0	Tiles

Location	Material	Added insulation	Roof space above
Bedroom 18	Plasterboard	R3.0	No
Night 19	Plasterboard	R3.0	No
Night 20	Plasterboard	R3.0	No
Bedroom 21	Plasterboard	R3.0	No
Unconditioned 22	Plasterboard	R3.0	No
Bedroom 23	Plasterboard	R3.0	No
Day 24	Plasterboard	R3.0	No
Day 25	Plasterboard	R3.0	No

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







# **Building Features**

Certificate Number: B8WRG2BYHP

Kitchen/Living	Plasterboard		R3.0	No
Day 27	Plasterboard		R3.0	No
Ceiling penetra	tions			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	dark

Certificate Number: **B8WRG2BYHP** Date of Certificate: **20 Jan 2020** 

★Star rating: 6.3



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: BB2OA64GF3 Date of Certificate: 20 Jan 2020 ★Star rating: 6.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

2.10, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 41.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 47.7 Unconditioned: 6 Garage: TOTAL: 53.7

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

17.1 Heating: Cooling: 24.5 TOTAL: 41.6

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=BB2OA64GF3

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



★Star rating: **6.8** 



# **Building Features**

Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
ALM-002-01 A	Opening 218	2700	3933	WNW	Kitchen/Living		No
ALM-002-01 A	Opening 218 Opening 220	2700 2400	3933 800	SSW	Kitchen/Living Bedroom 1		No No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	20.5	SSW	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	11.5	SSW	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	SSW	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	ESE	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Bedroom 1	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	9.8	NNE	Bedroom 1	No	No







# **Building Features**

Certificate Number: BB2OA64GF3

Area (m²)	Insulation
34.2	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penetration	ons				
Location	Number Type		Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number Diam	neter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: BB2OA64GF3 Date of Certificate: 20 Jan 2020 ★Star rating: 6.8



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: CI9Q3WODGD Date of Certificate: 20 Jan 2020 ★Star rating: 7.1



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

4.08, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

79.7

84.2

4.5

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

11.1 Heating: Cooling: 26.4 TOTAL: 37.5

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 37.5 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=CI9Q3WODGD

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



★Star rating: 7.1



# **Building Features**

Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows sche	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
WIIIGOW ID			, ,				
ALM-002-01 A	Opening 250	2700	2700	NW	Bedroom 18		No
	Opening 250 Opening 249	2700 2100	2700 800	NW ESE	Bedroom 18  Day 20		No No

Roof windov	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	v and skylight schedule	

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	9.8	NNE	Bedroom 18	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.9	NW	Bedroom 18	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.7	NNE	Bedroom 19	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8	ESE	Bedroom 19	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	SSW	Day 20	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Day 20	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.5	ESE	Day 20	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.4	SSW	Unconditioned 21	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.8	ESE	Day 22	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.8	NNE	Day 23	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Night 24	No	No



★Star rating: 7.1



# **Building Features**

Certificate Number: CI9Q3WODGD

1 : AFS - AFS 200mm (75mm Glasswool)	26.3	SSW	Kitchen/Living 25	No	No
				140	INO
Internal wall type					

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Bedroom 18	FR5 - 200mm concrete slab Lined	12.9	Enclosed	R0.0	Carpet		
Bedroom 19	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet		
Day 20	FR5 - 200mm concrete slab Lined	7.3	Enclosed	R0.0	Tiles		
Unconditioned 21	FR5 - 200mm concrete slab Lined	4.5	Enclosed	R0.0	Tiles		
Day 22	FR5 - 200mm concrete slab Lined	5.4	Enclosed	R0.0	Tiles		
Day 23	FR5 - 200mm concrete slab Lined	5.3	Enclosed	R0.0	Carpet		
Night 24	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles		
Kitchen/Living 25	FR5 - 200mm concrete slab Lined	33.6	Enclosed	R0.0	Tiles		

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	etrations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: CI9Q3WODGD Date of Certificate: 20 Jan 2020 ★Star rating: 7.1



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: **DZ4ICTBNK5** Date of Certificate: 20 Jan 2020 ★Star rating: 6.3



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

2.14, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 47.1 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 5.8 Unconditioned: Garage: TOTAL: 59.5

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

25.4 Heating: Cooling: 21.7 TOTAL: 47 1

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=DZ4ICTBNK5

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



★Star rating: **6.3** 



# **Building Features**

Window ID	Window type	Window type  Aluminium B SG Clear						
ALM-002-01 A	Aluminium B SG							
Windows schee	dule							
Window ID	Window no	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm) 2700	Width (mm) 3954	Orientation WNW	Zone name Kitchen/Living		Outdoor shad	
Window ID  ALM-002-01 A  ALM-002-01 A			. ,				Outdoor shad No No	

Roof wind	ows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof wind	ow and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

External wall type						
Туре	Insulation				Wall wrap	
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No	
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No	
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No	





★Star rating: **6.3** 

# **Building Features**

Certificate Number: **DZ4ICTBNK5** 

Area (m²)	Insulation
46.6	

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles		
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles		
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles		
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles		
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet		

Ceiling type							
Location	Material	Added insulation Roof space above					
Ceiling pene	trations						
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed					
Ceiling fans							
Location	Number Diameter (mm)						

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **DZ4ICTBNK5** Date of Certificate: **20 Jan 2020** ★ Star rating: **6.3** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: E0TQEMDQFQ Date of Certificate: 20 Jan 2020 ★Star rating: 8.6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

3.07, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 18.4 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44.9 Unconditioned: 3.7 Garage: TOTAL: 48.6

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

0.3 Heating: Cooling: 18.1 TOTAL: 18.4

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=E0TQEMDQFQ

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



★Star rating: 8.6



# **Building Features**

Window ID	Window type					U-value	SHGC
ALM-002-01 A	_M-002-01 A Aluminium B SG Clear						0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
		Height (mm) 2100	Width (mm) 1947	Orientation NNE	Zone name Bedroom		Outdoor shad

Roof wind	lows and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof wind	low and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap				
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No				
External wall schedule									
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves				
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	SSW	Bathroom	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	1.8	NNE	Bedroom	No	Yes				
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Bedroom	No	Yes				
1 : AFS - AFS 162mm (75mm Glasswool)	5.9	WNW	Bedroom	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	WNW	Bedroom	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	SSW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	WNW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	20.9	ESE	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	NNE	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	WNW	Hall	No	No				







# **Building Features**

Certificate Number: E0TQEMDQFQ

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	27.4	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bathroom	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	32.5	Enclosed	R0.0	Tiles
Hall	FR5 - 300mm concrete slab	1.6	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	Adde	ed insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **E0TQEMDQFQ** Date of Certificate: **20 Jan 2020** 

★Star rating: 8.6



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: ERR4AGFK0T Date of Certificate: 20 Jan 2020

**★**Star rating: **5** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

4.02, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

64.3

67.8

3.5

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

41 Heating: 25 Cooling: TOTAL: 66

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# NATIONWII Predicted annual energy load for heating and cooling based on standard occupancy assumptions **66** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=ERR4AGFK0T







★Star rating: **5** 

# **Building Features**

Certificate Number: ERR4AGFK0T

windows type a	and performance	value 					
Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows sched	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
ALM-002-01 A	Opening 189	2700	1800	NNE	Kitchen/Living 18		No
ALM-002-01 A	Opening 190	2700	3100	ESE	Kitchen/Living 18		No
ALM-002-01 A	Opening 187	2700	2700	ESE	Bedroom 19		No
	Opening 188	2700	1800	ESE	Bedroom 24		No

Roof wind	ows and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation							
1 : AFS - AFS 162mm (75mm Glasswool)	mm (75mm Glasswool) Rockwool batt (k = 0.033) (R2.3)				No			
External wall schedule								
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves			
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living 18	Yes	Yes			
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	WNW	Kitchen/Living 18	Yes	Yes			
1 : AFS - AFS 162mm (75mm Glasswool)	17.4	SSW	Kitchen/Living 18	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	1.9	SSW	Kitchen/Living 18	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living 18	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	NNE	Bedroom 19	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 19	Yes	Yes			
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	NNE	Night 20	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Night 20	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	NNE	Unconditioned 21	No	No			
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Day 22	No	No			

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





# **Building Features**

Certificate Number: ERR4AGFK0T

1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Day 22	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	SSW	Day 22	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.6	SSW	Day 23	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	WNW	Day 23	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 24	Yes	Yes
Internal wall type					
Туре	Area	(m <sup>2</sup> ) Insulat	tion		
1 : FR5 - Internal Plasterboard Stud Wall	64.4				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living 18	FR5 - 200mm concrete slab Lined	25.9	Enclosed	R0.0	Tiles
Bedroom 19	FR5 - 200mm concrete slab Lined	11.7	Enclosed	R0.0	Carpet
Night 20	FR5 - 200mm concrete slab Lined	4.1	Enclosed	R0.0	Tiles
Unconditioned 21	FR5 - 200mm concrete slab Lined	3.5	Enclosed	R0.0	Tiles
Day 22	FR5 - 200mm concrete slab Lined	6.1	Enclosed	R0.0	Tiles
Day 23	FR5 - 200mm concrete slab Lined	6.9	Enclosed	R0.0	Tiles
Bedroom 24	FR5 - 200mm concrete slab Lined	9.6	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material	Added insulation Roof space	above		
Ceiling penetrations					
Location	Number Type	Width (mm) Length (mm) Seal/ unse	aled		
Ceiling fans					
Location	Number Diameter (mm)				

Roof type				
Material	Added insulation	Roof colour		
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium		

Certificate Number: ERR4AGFK0T Date of Certificate: 20 Jan 2020

**★**Star rating: **5** 



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: GCWF6KI0GB Date of Certificate: 20 Jan 2020 ★Star rating: 5.4



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 6.06, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

68.8

73.4

4.6

# Annual thermal performance loads (MJ/m²)

Heating: **36.9** Cooling: **21.3** TOTAL: **58.2** 

#### Plan documents

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# 5.4 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 58.2 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

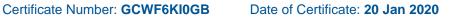
If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=GCWF6KI0GB

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



★Star rating: **5.4** 



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
		2700	2800	NNE	Kitchen/Living		No
ALM-002-01 A	Opening 261	2700	2000				
ALM-002-01 A ALM-002-01 A	Opening 261 Opening 262	2700	2700	NW	Kitchen/Living		No

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8	SSW	Study	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	8	ESE	Study	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	12.2	NW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5	ESE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	7.3	SSW	Entry	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	6	ESE	Entry	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.7	NNE	Entry	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Bath	No	No







# **Building Features**

Certificate Number: GCWF6KI0GB

1 : AFS - AFS 200mm (75mm Glasswool)	10.5	NNE NNE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom	Yes	Yes
Internal wall type			Bediooni		163
	Area			100	163

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Study	FR5 - 200mm concrete slab Lined	8.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 200mm concrete slab Lined	35.1	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	13.5	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles
Bedroom	FR5 - 200mm concrete slab Lined	11.4	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material	A	Added insulation	Roof space above	
Study	Plasterboard	F	R3.0	No	
Kitchen/Living	Plasterboard	R3.0	No		
Entry	Plasterboard	F	R3.0	No	
Bath	Plasterboard	F	R3.0	No	
Bedroom	Plasterboard		R3.0	No	
Ceiling penetra	tions				
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed	
Ceiling fans					
Location	Number Diameter (mm)				

Added insulation	Roof colour
0.0	medium
	Added insulation 0.0

Certificate Number: GCWF6KI0GB Date of Certificate: 20 Jan 2020 ★Star rating: 5.4



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: HP090BMC15 Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.11, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Net floor area (m<sup>2</sup>)

Conditioned: 53.7 5.8 Unconditioned: Garage: TOTAL: 59.5

### **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

13.4 Heating: Cooling: 22.2 TOTAL: 35.6

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=HP09OBMC15

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



★Star rating: **7.2** 



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
			0054	WNW	Kitchen/Living		No
ALM-002-01 A	Opening 219	2700	3954	VVINVV	reteriori, Erving		
ALM-002-01 A ALM-002-01 A	Opening 219 Opening 230	2700 2100	823	ESE	Bedroom		No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation 2	Outdoor Indoor shade/ Zone name shade diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.033	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No







# **Building Features**

Certificate Number: **HP090BMC15** 

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	46.6	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **HP090BMC15** Date of Certificate: **20 Jan 2020** ★Star rating: **7.2** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: **HWLBTBDAIS** Date of Certificate: **20 Jan 2020** ★Star rating: **5.7** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 3.02, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS

number: - climate zone: 56

Exposure: suburban

# 5.7 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 55.4 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Aluminium

Aluminum

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Glazing:

Conditioned: 45.5 Unconditioned: 6.9 Garage: -TOTAL: 52.4

# Annual thermal performance loads (MJ/m²)

MJ/m²)

Heating: **27.6** Cooling: **27.8** TOTAL: **55.4** 

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

#### Plan documents

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=HWLBTBDAIS

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



★Star rating: 5.7



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
Window ID ALM-002-01 A	Window no. Opening 144	Height (mm) 2700	Width (mm) 2850	Orientation ESE	Zone name Bedroom		Outdoor shac
Window ID  ALM-002-01 A  ALM-002-01 A			· /				Outdoor shad No No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation 2	Outdoor Indoor shade/ Zone name shade diffuser

Туре	Insulation	Insulation					
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		Wall wrap		
2 : AFS - AFS 162mm (75mm Glasswool)		Rockwool batt (k = 0.033) (R2.3)					
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 200mm (75mm Glasswool)	8	NNE	Bedroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	10.6	ESE	Bedroom	Yes	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	10.2	NNE	Bath	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	3.8	WNW	Bath	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	5.2	SSW	Bath	Yes	No		
2 : AFS - AFS 162mm (75mm Glasswool)	2.2	WNW	Bath	Yes	Yes		
2 : AFS - AFS 162mm (75mm Glasswool)	12.4	WNW	Kitchen/Living	Yes	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	WNW	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	16.2	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No		







# **Building Features**

Certificate Number: HWLBTBDAIS

2 : AFS - AFS 162mm (75mm Glasswool) 1.2 ESE Kitchen/Living Yes
2 : AFS - AFS 162mm (75mm Glasswool) 1.2 ESE Kitchen/Living Yes

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Bedroom	FR5 - 300mm concrete slab	11.7	Enclosed	R0.0	Carpet		
Bath	FR5 - 300mm concrete slab	6.9	Enclosed	R0.0	Tiles		
Kitchen/Living	FR5 - 300mm concrete slab	33.8	Enclosed	R0.0	Tiles		

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling penetration	ns	
Location	Number Type W	/idth (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **HWLBTBDAIS** Date of Certificate: **20 Jan 2020** ★Star rating: **5.7** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: I5HN3M0J2A Date of Certificate: 20 Jan 2020 ★ Star rating: 5.5



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 6.01, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

Insulation:

# Key construction and insulation materials (see following pages for details)

Construction: Wall: As indicated

Roof: As indicated
Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Single Clear

# Annual thermal performance loads (MJ/m²)

Heating: 41.7 Cooling: 15.9 TOTAL: 57.6

# Net floor area (m²)

Conditioned: 102.1 Unconditioned: 3.9 Garage: -TOTAL: 106

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# 5.5 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 57.6 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=I5HN3M0J2A

Certificate Number: I5HN3M0J2A Date of Certificate: 20 Jan 2020

★Star rating: **5.5** 



Window ID	Window type					U-value	SHGC
GJA-070-04 A	Type 245 Alumir	nium Sliding Door	SG 4Clr			6.27	0.73
Window ID	Window no.	Lloight (mm)	Midth (mm)	Orientation	Zone name		Outdoor shade
VVIIIdow ID	vviridow no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor snade
GJA-070-04 A	Opening 279	2700	1800	SSW	Bedroom 1		No
GJA-070-04 A	Opening 280	2700	2400	ESE	Bedroom 3		No
GJA-070-04 A	Opening 281	2700	2400	ESE	Bedroom 2		No
GJA-070-04 A	Opening 282	2700	1600	ESE	Study		No

Roof window	vs and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof window	v and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap	
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No	
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	7.7	NNE	Bedroom 1	Yes	Yes	
2 : AFS - AFS 200mm (75mm Glasswool)	1.7	NNE	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8	SSW	Bedroom 1	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Bedroom 1	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	4.5	NNE	Ensuite	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	4.5	NNE	Bath	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	WNW	Bath	Yes	No	
1 : AFS - AFS 162mm (75mm Glasswool)	30.2	WNW	Entry	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.4	NNE	Entry	Yes	No	



★Star rating: **5.5** 



# **Building Features**

1 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 3	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5	ESE	Study	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	22.8	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes

#### Internal wall type

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	97.5	

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 1	FR5 - 200mm concrete slab Lined	13.3	Enclosed	R0.0	Carpet	
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles	
Bath	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles	
WIR	FR5 - 200mm concrete slab Lined	3	Enclosed	R0.0	Carpet	
Entry	FR5 - 200mm concrete slab Lined	20.9	Enclosed	R0.0	Tiles	
Bedroom 3	FR5 - 200mm concrete slab Lined	10.5	Enclosed	R0.0	Carpet	
Bedroom 2	FR5 - 200mm concrete slab Lined	10.5	Enclosed	R0.0	Carpet	
Study	FR5 - 200mm concrete slab Lined	6.5	Enclosed	R0.0	Carpet	
Kitchen/Living	FR5 - 200mm concrete slab Lined	33.4	Enclosed	R0.0	Tiles	

Location	Material	Added insulation	Roof space above
Bedroom 1	Plasterboard	R3.0	No
Ensuite	Plasterboard	R3.0	No
Bath	Plasterboard	R3.0	No
WIR	Plasterboard	R3.0	No
Entry	Plasterboard	R3.0	No
Bedroom 3	Plasterboard	R3.0	No
Bedroom 2	Plasterboard	R3.0	No
Study	Plasterboard	R3.0	No

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





Certificate Number: I5HN3M0J2A

Kitchen/Living	Plasterboard		R3.0	No
Ceiling penetrat	ions			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	dark

Certificate Number: **I5HN3M0J2A** Date of Certificate: **20 Jan 2020** ★Star rating: **5.5** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: IB7D5KY8SD Date of Certificate: 20 Jan 2020 ★ Star rating: 6.6



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 3.01, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 6.6 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 43.4 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: **68.7**Unconditioned: **4.4**Garage: TOTAL: **73.1** 

# Annual thermal performance loads (MJ/m²)

Heating: 19.1 Cooling: 24.3 TOTAL: 43.4

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=IB7D5KY8SD

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



★Star rating: **6.6** 



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 134	2400	2800	ESE	Bedroom 18		No	
ALM-002-01 A	Opening 135	2400	2800	ESE	Bedroom 19		No	
					12:4		N.I.	
ALM-002-01 A	Opening 137	2400	1600	ESE	Kitchen/Living		No	

Roof window	s and skylight type and perf	ormance v	alue		
ID	Window type			U-value	SHGC
Roof window	and skylight schedule				
				Outdoor	Indoor shade/

External wall type						
Type	Insulation				Wall wrap	
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No	
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Bedroom 18	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 18	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 19	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	1.6	ESE	Entry Hallway	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	2.7	NNE	Entry Hallway	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	21	WNW	Entry Hallway	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	7.7	WNW	Bath	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Bath	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No	





★Star rating: **6.6** 

# **Building Features**

Certificate Number: IB7D5KY8SD

2 : AFS - AFS 162mm (75mm Glasswool)	4.5	NNE	Kitchen/Living	Yes	Yes
Internal wall type					
Туре	Area (n	n²) Insula	tion		
1 : FR5 - Internal Plasterboard Stud Wall	70.6				

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Bedroom 18	FR5 - 300mm concrete slab	13.6	Enclosed	R0.0	Carpet		
Bedroom 19	FR5 - 300mm concrete slab	14.1	Enclosed	R0.0	Carpet		
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles		
Entry Hallway	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Tiles		
Bath	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles		
Kitchen/Living	FR5 - 300mm concrete slab	26	Enclosed	R0.0	Tiles		

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **IB7D5KY8SD** Date of Certificate: **20 Jan 2020** ★Star rating: **6.6** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: IBR9HDX15T Date of Certificate: 20 Jan 2020 ★Star rating: 7.3



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

4.06, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

### **Key construction and insulation materials** (see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

69.5

3.7

73.2

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

16.9 Heating: Cooling: 18.3 TOTAL: 35.2

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.2 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=IBR9HDX15T

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

Certificate Number: IBR9HDX15T Date of Certificate: 20 Jan 2020

★Star rating: 7.3



Window ID	Window type					U-value	SHGC
GJA-013-01 A	Type 131 Alumir	nium Sliding Wind	low SG 3Clr			6.35	0.77
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
GJA-013-01 A	Opening 224	2700	1833	NNE	Bedroom 1		No
GJA-013-01 A	Opening 225	2700	2643	NW	Bedroom 1		No
GJA-013-01 A	Opening 223	2700	2548	NNE	Bedroom 2		No
GJA-013-01 A	Opening 221	2700	2526	NNE	Kitchen/Living		No
GJA-013-01 A	Opening 222	2700	2724	NNE	Kitchen/Living		No

Roof windo	ows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof windo	ow and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	7.9	NNE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	9.8	NW	Bedroom 1	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	12.1	SSW	Bedroom 1	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Ensuite	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	0.5	WNW	WIR	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.6	NNE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 2	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.8	SSW	Kitchen/Living	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	5.7	SSW	Kitchen/Living	Yes	No



★Star rating: 7.3



2 : AFS - AFS 200mm (75mm Glasswool)	17.8	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Bath	No	No
Internal wall type					
Internal wall type Type	Area	(m²) Insula	tion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	12.1	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
WIR	FR5 - 200mm concrete slab Lined	4.1	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 200mm concrete slab Lined	39.1	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: IBR9HDX15T Date of Certificate: 20 Jan 2020 ★ Star rating: 7.3



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: IVX1DGO21Z Date of Certificate: 20 Jan 2020 ★Star rating: 5.5



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

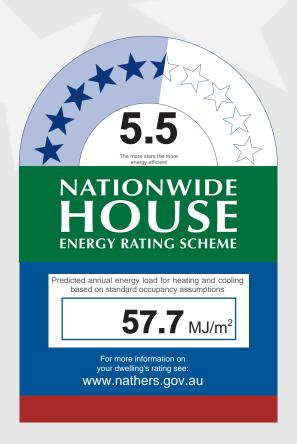
Address: 4.03, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open



#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 80.6
Unconditioned: 3.7
Garage: TOTAL: 84.3

# Annual thermal performance loads (MJ/m²)

Heating: **37.3**Cooling: **20.4**TOTAL: **57.7** 

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=IVX1DGO21Z

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



★Star rating: **5.5** 



Window ID	Window type					U-value	SHGC
GJA-070-04 A	Type 245 Alumin	ium Sliding Door	SG 4Clr			6.27	0.73
GJA-017-01 A	Type 136 Aluminium Double Hung Window SG 3CIr					6.45	0.73
GJA-013-01 A	Type 131 Aluminium Sliding Window SG 3CIr					6.35	0.77
Windows schee			\A/: -   (       )	0-1	7		0.44
	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
Windows Scheo Window ID GJA-070-04 A		Height (mm) 2700	Width (mm) 2700	Orientation ESE	Zone name Bedroom 1		Outdoor shac
Window ID	Window no.		. ,				Outdoor shad
Window ID GJA-070-04 A	Window no. Opening 191	2700	2700	ESE	Bedroom 1		No
Window ID GJA-070-04 A GJA-070-04 A	Window no. Opening 191 Opening 190	2700 2700	2700	ESE ESE	Bedroom 1 Bedroom 2		No No

ID	Vindow type U-value SHGC
	o value of the
Poof windo	adiabt schodulo
Roof windo	cylight schedule
Roof windo	rylight schedule
Roof windo	cylight schedule  Outdoor Indoor sh

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	9.6	NNE	Bedroom 1	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	NNE	WIR	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.6	NNE	Ensuite	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.3	WNW	Ensuite	Yes	Yes



★Star rating: 5.5



# **Building Features**

1 : FR5 - Internal Plasterboard Stud Wall

2 : AFS - AFS 162mm (75mm Glasswool)	3.6	SSW	Study	Yes	No No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Entry	Yes	No
2 : AFS - AFS 162mm (75mm Glasswool)	0.5	ESE	Entry	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	3.3	WNW	Entry	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	11.6	WNW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	24.5	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes

Insulation

Area (m<sup>2</sup>)

77.9

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	11.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	10.7	Enclosed	R0.0	Carpet
WIR	FR5 - 200mm concrete slab Lined	4.2	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
Study	FR5 - 200mm concrete slab Lined	6.7	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	6.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	36.8	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	Į.	Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

#### **Roof type**

Type

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



★Star rating: **5.5** 



Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: IVX1DGO21Z Date of Certificate: 20 Jan 2020 ★Star rating: 5.5



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: JVYHYXS3ZX Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 2.12, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 7.2 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 36.9 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 Unconditioned: 5.8 Garage: -TOTAL: 59.5

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

Heating: 14.4
Cooling: 22.5
TOTAL: 36.9

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=JVYHYXS3ZX

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



★Star rating: **7.2** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
			0054	WNW	Kitchen/Living		No
ALM-002-01 A	Opening 219	2700	3954	VVINVV	reteriori, Erving		
ALM-002-01 A ALM-002-01 A	Opening 219 Opening 230	2700 2100	823	ESE	Bedroom		No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No



★Star rating: **7.2** 



# **Building Features**

Certificate Number: JVYHYXS3ZX

Internal wall type				
Туре	Area (m²)	Insulation		
1 : FR5 - Internal Plasterboard Stud Wall	46.6			

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: JVYHYXS3ZX Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: L1AJHCW5RC Date of Certificate: 20 Jan 2020 ★Star rating: 6.1



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 2.08, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 6.1 NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 49.2 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Single Clear

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44
Unconditioned: 4.1
Garage: TOTAL: 48.1

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 27.5

 Cooling:
 21.7

 TOTAL:
 49.2

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=L1AJHCW5RC

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



★Star rating: 6.1



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
	0 : 010	2100	3897	WNW	Kitchen/Living		No
ALM-002-01 A	Opening 212	2100					
ALM-002-01 A ALM-002-01 A	Opening 212 Opening 210	2100	2909	NNE	Bedroom 1		No

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation 2	Outdoor Indoor shade/ Zone name shade diffuser

External wall type						
Туре	Insulation			Wall wrap		
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)			No		
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	10.1	WNW	Kitchen/Living	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.4	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	ESE	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	9.1	ESE	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	WNW	Bedroom 1	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Entrance	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	ESE	Entrance	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	4.1	ESE	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No	



★Star rating: 6.1



# **Building Features**

Certificate Number: L1AJHCW5RC

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	21.4	

Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
FR5 - 300mm concrete slab	28	Enclosed	R0.0	Tiles
FR5 - 300mm concrete slab	11.6	Enclosed	R0.0	Carpet
FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
FR5 - 300mm concrete slab	4.1	Enclosed	R0.0	Tiles
	FR5 - 300mm concrete slab FR5 - 300mm concrete slab FR5 - 300mm concrete slab	FR5 - 300mm concrete slab 28 FR5 - 300mm concrete slab 11.6 FR5 - 300mm concrete slab 4.4	FR5 - 300mm concrete slab  FR5 - 300mm concrete slab  11.6  Enclosed  FR5 - 300mm concrete slab  4.4  Enclosed	FR5 - 300mm concrete slab         28         Enclosed         R0.0           FR5 - 300mm concrete slab         11.6         Enclosed         R0.0           FR5 - 300mm concrete slab         4.4         Enclosed         R0.0

Ceiling type						
Location	Material	Material				
Ceiling penetrations						
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed		
Ceiling fans						
Location	Number Diameter (mm)					

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: L1AJHCW5RC Date of Certificate: 20 Jan 2020

★Star rating: 6.1



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: LBCMU4UE7K Date of Certificate: 20 Jan 2020 ★Star rating: 5.4



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 6.07, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

70.4

3.7

74.1

# Annual thermal performance loads (MJ/m²)

(MJ/m<sup>2</sup>)

Heating: **34.1** Cooling: **24.7** TOTAL: **58.8** 

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# 5.4 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 58.8 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=LBCMU4UE7K





★Star rating: **5.4** 



Window ID	Window type	Window type Aluminium B SG Clear						
ALM-002-01 A	Aluminium B SG							
Window ID	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 268	2700	2400	WNW	Bedroom 1		No	
ALM-002-01 A	Opening 269	2700	3000	NNE	Kitchen/Living 2		No	
ALM-002-01 A	Opening 270	2700	2650	NW	Kitchen/Living 2		No	

Roof windows ar	nd skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	d skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type						
Туре	Insulation		Wall wrap			
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	8	NNE	Bedroom 1	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 1	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	NNE	WIR	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Ensuite	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	6.4	ESE	Bath	No	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	NNE	Bath	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	3.8	ESE	Entry	No	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	11.7	NNE	Kitchen/Living 2	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	11.9	NW	Kitchen/Living 2	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Kitchen/Living 2	No	No	







# **Building Features**

Certificate Number: LBCMU4UE7K

1 : AFS - AFS 200mm (75mm Glasswool)	22.4	SSW	Kitchen/Living 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	9.9	SSW	Bedroom 2	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	1.7	SSW	Bedroom 2	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	No	Yes
Internal wall type					
		, 2,	4:		
Туре	Area	(m²) Insula	tion		

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	8.8	Enclosed	R0.0	Carpet
WIR	FR5 - 200mm concrete slab Lined	3.6	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	8	Enclosed	R0.0	Tiles
Kitchen/Living 2	FR5 - 200mm concrete slab Lined	34.6	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 200mm concrete slab Lined	11.7	Enclosed	R0.0	Carpet

Location	Material		Added insulation	Roof space above	
Bedroom 1	Plasterboard	R3.0	No		
WIR	Plasterboard	R3.0	No		
Ensuite	Plasterboard		R3.0	No	
Bath	Plasterboard	R3.0	No		
Entry	Plasterboard		R3.0	No	
Kitchen/Living 2	Plasterboard		R3.0	No	
Bedroom 2	Plasterboard		R3.0	No	
Ceiling penetrat	Number Type	Width (mm)	Length (mm)	Seal/ unsealed	
Ceiling fans					
Location	Number Diameter (mm)				

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





# **Building Features**

Certificate Number: LBCMU4UE7K

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: LBCMU4UE7K Date of Certificate: 20 Jan 2020 ★Star rating: 5.4



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: LQZAL4JI65 Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

2.11, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# **Key construction and insulation materials**

(see following pages for details)

Insulation:

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

53.7

5.8

59.5

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

13.4 Heating: Cooling: 22.2 TOTAL: 35.6

# **Plan documents**

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=LQZAL4JI65

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







Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows sched	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm)	Width (mm)	Orientation WNW	Zone name Kitchen/Living		Outdoor shade	

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation	Rockwool batt (k = 0.033) (R2.3)				
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I					
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)				No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes	
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No	
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No	
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No	
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No	





# **Building Features**

Certificate Number: LQZAL4JI65

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	46.6	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **LQZAL4JI65** Date of Certificate: **20 Jan 2020** 

★Star rating: 7.2



#### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

## **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: LZ5ICE6211 Date of Certificate: 20 Jan 2020 ★Star rating: 6.1



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 3.08, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 6.1 NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 49.2 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44 Unconditioned: 4.1 Garage: -TOTAL: 48.1

# Annual thermal performance loads (MJ/m²)

Heating: 27.5 Cooling: 21.7

49.2

TOTAL:

# Plan documents

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=LZ5ICE6211

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







# **Building Features**

Certificate Number: LZ5ICE6211

Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
Window ID ALM-002-01 A	Window no. Opening 212	Height (mm) 2100	Width (mm) 3897	Orientation WNW	Zone name Kitchen/Living		Outdoor shade No

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type							
Туре	Insulation				Wall wrap		
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	10.1	WNW	Kitchen/Living	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	16.6	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.4	NNE	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	ESE	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.1	NNE	Kitchen/Living	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	9.1	ESE	Bedroom 1	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	10.3	WNW	Bedroom 1	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	6	SSW	Entrance	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	ESE	Entrance	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.1	ESE	Bathroom	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No		



Certificate Number: LZ5ICE6211

Date of Certificate: 20 Jan 2020

★Star rating: **6.1** 

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	21.4	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	28	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	11.6	Enclosed	R0.0	Carpet
Entrance	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	4.1	Enclosed	R0.0	Tiles

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **LZ5ICE6211** Date of Certificate: **20 Jan 2020** 

★Star rating: 6.1



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

## **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

# **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: M9HT3I05EQ Date of Certificate: 20 Jan 2020 ★Star rating: 9



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 2.06, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 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

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated
Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 76.6
Unconditioned: 3.8
Garage: TOTAL: 80.4

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 2

 Cooling:
 11.6

 TOTAL:
 13.6

# **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=M9HT3I05EQ

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







Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
Window ID ALM-002-01 A	Window no. Opening 198	Height (mm) 2100	Width (mm) 3512	Orientation NNE	Zone name Kitchen/Living		Outdoor shade No

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	20.8	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	SSW	Pantry/Cupboard	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	ESE	Pantry/Cupboard	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 2	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	W.I.R	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	SSW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Ensuite	No	No





Certificate Number: M9HT3I05EQ

★Star rating: 9

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	73.1	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	34.8	Enclosed	R0.0	Tiles
Pantry/Cupboard	FR5 - 300mm concrete slab	7.2	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 300mm concrete slab	10.3	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	6.1	Enclosed	R0.0	Tiles

Ceiling type			
Location	Material	Added insulation	Roof space above
Ceiling penetratio	ns		
Location	Number Type Width (mi	Length (mm)	Seal/ unsealed
Ceiling fans			
Location	Number Diameter (mm)		

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: M9HT3I05EQ Date of Certificate: 20 Jan 2020 ★Star rating: 9



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

## **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: MMLFX0ZVEI Date of Certificate: 20 Jan 2020 **★**Star rating: **7.2** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

3.12, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 36.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 5.8 Unconditioned: Garage: TOTAL: 59.5

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

14.4 Heating: 22.5 Cooling: TOTAL: 36.9

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=MMLFX0ZVEI

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







Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows sched	aule							
		Hoight (mm)	Width (mm)	Orientation	Zono nomo		Outdoor shad	
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
		Height (mm) 2700	Width (mm)	WNW	Zone name Kitchen/Living		Outdoor shad	
Window ID	Window no.		. ,					

Roof wind	ows and skylight type and performance value		
ID	Window type	U-value	SHGC
Roof wind	ow and skylight schedule		

External wall type							
Туре	Insulation				Wall wrap		
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No		
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes		
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No		
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No		







# **Building Features**

Certificate Number: MMLFX0ZVEI

Area (m²)	Insulation
46.6	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: MMLFX0ZVEI Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

## **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: NJ6KEKCG9G Date of Certificate: 20 Jan 2020 ★Star rating: 6.8



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

3.10, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions 41.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 47.7 Unconditioned: 6 Garage: TOTAL: 53.7

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

19.2 Heating: Cooling: 22.7 TOTAL: 41.9

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=NJ6KEKCG9G

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



★Star rating: 6.8



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows schee	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
	Opening 218	2700	3933	WNW	Kitchen/Living		No	
ALM-002-01 A	-11- 3 -							
ALM-002-01 A ALM-002-01 A	Opening 220	2400	800	SSW	Bedroom 1		No	

Roof windows an	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap	
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No	
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	20.5	SSW	Kitchen/Living	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Kitchen/Living	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	Yes	
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	11.5	SSW	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	SSW	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.7	ESE	Hallway	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	SSW	Bedroom 1	Yes	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	9.8	NNE	Bedroom 1	No	No	







# **Building Features**

Certificate Number: NJ6KEKCG9G

Internal wall type					
Area (m²)	Insulation				
34.2					

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	31.1	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.4	Enclosed	R0.0	Carpet

Ceiling type				
Location	Material	A	dded insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: NJ6KEKCG9G Date of Certificate: 20 Jan 2020

★Star rating: 6.8



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

## **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: NP4MXUY19H Date of Certificate: 20 Jan 2020 ★Star rating: 8.1



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 2.04, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: **suburban** 

# 8.1 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 25.3 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Conditioned: 68.6
Unconditioned: 3.6
Garage: TOTAL: 72.2

# Annual thermal performance loads (MJ/m²)

Heating: 9.4 Cooling: 15.9 TOTAL: 25.3

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=NP4MXUY19H

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







Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows schee	dule							
Window ID	Window no	Hoight (mm)	Width (mm)	Orientation	Zono namo		Outdoor shade	
Window ID	Window no.	Height (mm)	Width (mm)	Orientation				
Window ID ALM-002-01 A	Window no. Opening 166	Height (mm)	Width (mm) 1926	Orientation NNE	Zone name Kitchen/Living		Outdoor shade	
							Outdoor shade No No	

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type	U-value	SHGC			
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	18.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.5	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.9	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	WNW	Storage	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3	NNE	W.I.R	No	No





★Star rating: 8.1

# **Building Features**

Certificate Number: NP4MXUY19H

4 450 450 400 (75 0)	7.0	F0F	D 1 4		
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No
Internal wall type					
Internal wall type					
Internal wall type Type	Area	(m²) Insula	tion		

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	32.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	3.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	11.3	Enclosed	R0.0	Carpet
Hallway	FR5 - 300mm concrete slab	5.2	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
W.I.R	FR5 - 300mm concrete slab	2.6	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.5	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling pene	trations				
Location	Number Type		Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number Diamete	r (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: NP4MXUY19H Date of Certificate: 20 Jan 2020 ★Star rating: 8.1



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: NVQ2XE59UY Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

5.05, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.8 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 71.7 Unconditioned: 4.5 Garage: TOTAL: 76.2

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

20.5 Heating: Cooling: 15.3 TOTAL: 35.8

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=NVQ2XE59UY



★Star rating: 7.2



Windows type a	and performance	value						
Window ID	Window type	Window type						
GJA-013-01 A	Type 131 Alumir	Type 131 Aluminium Sliding Window SG 3CIr						
Windows sched	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
GJA-013-01 A	Opening 218	2700	2400	NNE	Bedroom 1		No	
GJA-013-01 A	Opening 217	2700	2400	NNE	Bedroom 2		No	
GJA-013-01 A	Opening 219	2700	2500	NNE	Kitchen/Living		No	
GJA-013-01 A	Opening 220	2700	2500	NNE	Kitchen/Living		No	

Roof wind	ows and skylight type and pe	rformance v	alue alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation		Wall wrap			
1 : AFS - AFS 162mm (75mm Glasswool)	m (75mm Glasswool) Rockwool batt (k = 0.033) (R2.3)					
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 1	Yes	Yes	
2 : AFS - AFS 200mm (75mm Glasswool)	9.7	WNW	Bedroom 2	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 2	Yes	Yes	
2 : AFS - AFS 200mm (75mm Glasswool)	7.8	WNW	Bath	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Bath	Yes	No	
2 : AFS - AFS 200mm (75mm Glasswool)	3.4	SSW	Entry	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	9.8	SSW	Entry	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	17.7	ESE	Kitchen/Living	No	No	



★Star rating: **7.2** 



# **Building Features**

Certificate Number: NVQ2XE59UY

1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
Internal wall type					
Туре	Area (	m²) Insula	ation		
1 : FR5 - Internal Plasterboard Stud Wall	63.4				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	11.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Bath	FR5 - 200mm concrete slab Lined	4.5	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	37.2	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling peneti	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: NVQ2XE59UY Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



#### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: OD5VSEOD3O Date of Certificate: 20 Jan 2020 **★Star rating: 9** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

3.06, 2 Delmar Parade Address:

**DEE WHY** Suburb:

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# NATIONWII ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 13.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Net floor area (m<sup>2</sup>)

Conditioned: 76.6 Unconditioned: 3.8 Garage: TOTAL: 80.4

# **Annual thermal** performance loads (MJ/m<sup>2</sup>)

Heating:

2 Cooling: 11.6 TOTAL: 13.6

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=OD5VSEOD3O

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



★Star rating: 9



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
	On a min m 400	2100	3512	NNE	Kitchen/Living		No
ALM-002-01 A	Opening 198						
ALM-002-01 A ALM-002-01 A	Opening 198 Opening 197	2100	2905	NNE	Bedroom 2		No

Roof windows and	l skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)					
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	NNE	Kitchen/Living	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	20.8	WNW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	SSW	Pantry/Cupboard	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	ESE	Pantry/Cupboard	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 2	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Bedroom 1	No	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	W.I.R	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	SSW	Ensuite	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Ensuite	No	No		



★Star rating: 9



# **Building Features**

Certificate Number: OD5VSEOD3O

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	73.1	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	34.8	Enclosed	R0.0	Tiles
Pantry/Cupboard	FR5 - 300mm concrete slab	7.2	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 300mm concrete slab	10.3	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	6.1	Enclosed	R0.0	Tiles

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penetration	ons				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **OD5VSEOD3O** Date of Certificate: **20 Jan 2020** 

**★**Star rating: 9



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: QDEUP508S7 Date of Certificate: 20 Jan 2020





#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

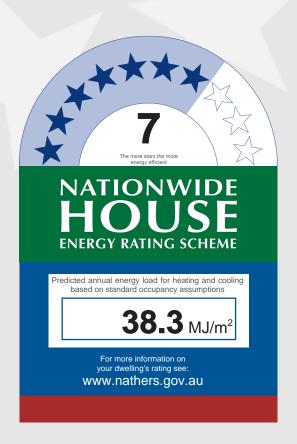
Address: 6.04, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open



#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 88.8
Unconditioned: 4.7
Garage: TOTAL: 93.5

# Annual thermal performance loads (MJ/m²)

Heating:

 Heating:
 21.5

 Cooling:
 16.8

 TOTAL:
 38.3

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=QDEUP508S7

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



★Star rating: **7** 



Window ID	Window type					U-value	SHGC
GJA-013-01 A	Type 131 Alumir	nium Sliding Wind	low SG 3Clr			6.35	0.77
GJA-070-04 A	Type 245 Alumir	nium Sliding Door	SG 4Clr			6.27	0.73
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
GJA-013-01 A	Opening 218	2700	2400	NNE	Bedroom 3		No
GJA-013-01 A GJA-013-01 A	Opening 218 Opening 217	2700 2700	2400	NNE	Bedroom 3 Bedroom 2		No No
GJA-013-01 A	Opening 217	2700	2400	NNE	Bedroom 2		No

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 3	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	10.3	WNW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 2	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	7.3	WNW	Bath	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	4.7	SSW	Bath	Yes	No
2 : AFS - AFS 200mm (75mm Glasswool)	2.8	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	SSW	Kitchen/Living	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	17.7	ESE	Kitchen/Living	No	No

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







1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	9.6	SSW	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	Yes	No
2 : AFS - AFS 200mm (75mm Glasswool)	3.2	WNW	Night 24	Yes	Yes
2 : AFS - AFS 200mm (75mm Glasswool)	4.5	WNW	Night 25	No No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	SSW	Night 25	No	No
Internal wall type					
Туре	Area (	(m²) Insulat	ion		
1 : FR5 - Internal Plasterboard Stud Wall	83.9				

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 3	FR5 - 200mm concrete slab Lined	11.3	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	11.2	Enclosed	R0.0	Carpet
Bath	FR5 - 200mm concrete slab Lined	4.7	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	7.2	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	39	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 200mm concrete slab Lined	11.2	Enclosed	R0.0	Carpet
Night 24	FR5 - 200mm concrete slab Lined	4.9	Enclosed	R0.0	Carpet
Night 25	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles

Location	Material		Added insulation	Roof space abov
Bedroom 1	Plasterboard		R3.0	No
Night 24	Plasterboard		R3.0	No
Night 25	Plasterboard		R3.0	No
Ceiling pene	trations			Seal/ unsealed
Location	Number Type	Width (mm)	Length (mm)	Seal/ ullscaleu
Location  Ceiling fans	Number Type	Width (mm)	Length (mm)	Seall ulls





Certificate Number: QDEUP508S7

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	dark

Certificate Number: **QDEUP508S7** Date of Certificate: **20 Jan 2020** 

**★**Star rating: **7** 



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: R2KNNNLHSQ Date of Certificate: 20 Jan 2020 **★**Star rating: **7** 



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

5.10, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

72.2

3.7

75.9

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

17.8 Heating: Cooling: 20.7 TOTAL: 38.5

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# NATIONWII ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 38.5 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=R2KNNNLHSQ

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



★Star rating: **7** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	dule						
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
		Height (mm) 2700	Width (mm) 2500	Orientation WNW	Zone name Bedroom 1		Outdoor shad

Roof wind	lows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof wind	low and skylight schedule	

External wall type						
Туре	Insulation				Wall wrap	
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)				
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	No				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Bedroom 1	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	9.3	SSW	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	SSW	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	SSW	Study	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	SSW	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	SSW	Bedroom 2	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.3	SE	Bedroom 2	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	11.3	NNE	Entry	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3	SE	Entry	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.3	NE	Entry	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	3.6	NNE	Kitchen/Living 24	No	No	
2 : AFS - AFS 200mm (75mm Glasswool)	8.1	ESE	Kitchen/Living 24	No	No	

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





★Star rating: **7** 

# **Building Features**

Certificate Number: R2KNNNLHSQ

2 : AFS - AFS 200mm (75mm Glasswool)	12	NNE	Kitchen/Living 24	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	9	NNE	Kitchen/Living 24	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living 24	No	Yes
					-
Internal wall type					
Internal wall type  Type	Area	(m²) Insulat	ion		

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 1	FR5 - 200mm concrete slab Lined	10.3	Enclosed	R0.0	Carpet	
Ensuite	FR5 - 200mm concrete slab Lined	4.6	Enclosed	R0.0	Tiles	
Study	FR5 - 200mm concrete slab Lined	4.9	Enclosed	R0.0	Carpet	
Bathroom	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles	
Bedroom 2	FR5 - 200mm concrete slab Lined	12.4	Enclosed	R0.0	Carpet	
Entry	FR5 - 200mm concrete slab Lined	5.2	Enclosed	R0.0	Tiles	
Kitchen/Living 24	FR5 - 200mm concrete slab Lined	34.9	Enclosed	R0.0	Tiles	

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penet	trations				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **R2KNNNLHSQ** Date of Certificate: **20 Jan 2020** 

**★**Star rating: **7** 



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: S0IDT1707L Date of Certificate: 20 Jan 2020 ★Star rating: 6.9



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.02, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions **40.6** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 44.6 3.6 Unconditioned: Garage: TOTAL: 48.2

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

13.1 Heating: Cooling: 27.5 TOTAL: 40.6

#### **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=S0IDT17O7L

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







# **Building Features**

Certificate Number: S0IDT1707L

Windows type a	and performance	value						
Window ID	Window type					U-value	SHGC	
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
M/Indiana								
Windows scheo	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
		Height (mm)	Width (mm) 2739	Orientation ESE	Zone name Bedroom		Outdoor shade	

Roof wind	lows and skylight type and performance value	
ID	Window type	U-value SHGC
Roof wind	low and skylight schedule	

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)			No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	NNE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.5	ESE	Bedroom	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	2.4	WNW	Hallway	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	4.2	NNE	Hallway	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	13.4	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.6	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9	ESE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.4	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	WNW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	NNE	Bathroom	No	Yes
Internal wall type					
Туре	Area (m²	2) Insulation	1		
1 : FR5 - Internal Plasterboard Stud Wall	34.9				



Certificate Number: S0IDT1707L

Date of Certificate: 20 Jan 2020

★Star rating: **6.9** 

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom	FR5 - 300mm concrete slab	11.8	Enclosed	R0.0	Tiles	
Hallway	FR5 - 300mm concrete slab	6.9	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - 300mm concrete slab	25.9	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles	

Ceiling type				
Location	Material	P	Added insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: S0IDT1707L Date of Certificate: 20 Jan 2020

★Star rating: 6.9



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: TB630RDLS0 Date of Certificate: 20 Jan 2020 ★Star rating: 6.3



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.14, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 47.1 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 5.8 Unconditioned: Garage: TOTAL: 59.5

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

25.4 Heating: Cooling: 21.7 TOTAL: 47 1

#### **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=TB630RDLS0

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

Certificate Number: **TB630RDLS0** Date of Certificate: **20 Jan 2020** 

★Star rating: **6.3** 



Window ID	Window type	Window type Aluminium B SG Clear						
ALM-002-01 A	Aluminium B SG							
Windows schee	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
			0054	WNW	Kitchen/Living		No	
ALM-002-01 A	Opening 219	2700	3954	VVINVV	rate incline Living			
ALM-002-01 A ALM-002-01 A	Opening 219 Opening 230	2700 2100	823	ESE	Bedroom		No	

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	B) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No





★Star rating: **6.3** 

# **Building Features**

Certificate Number: TB630RDLS0

Area (m²)	Insulation
46.6	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet

Ceiling type		
Location	Material	Added insulation Roof space above
Ceiling pene	trations	
Location	Number Type	Width (mm) Length (mm) Seal/ unsealed
Ceiling fans		
Location	Number Diameter (mm)	

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **TB630RDLS0** Date of Certificate: **20 Jan 2020** ★Star rating: **6.3** 



#### **Additional information**

#### **Explanatory notes**

#### About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: UST4RAI2F9 Date of Certificate: 20 Jan 2020 **★**Star rating: 9



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

1.06, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

76.6

80.4

3.8

#### **Annual thermal** performance loads (MJ/m<sup>2</sup>)

1.7 Heating: Cooling: 12.2 TOTAL: 13.9

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# NATIONWII Predicted annual energy load for heating and cooling based on standard occupancy assumptions 13.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

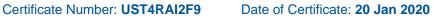
NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=UST4RAI2F9



★Star rating: 9



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear						
Windows schee	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
Window ID ALM-002-01 A	Window no. Opening 198	Height (mm) 2100	Width (mm) 3512	Orientation NNE	Zone name Kitchen/Living		Outdoor shade No	

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

Туре	Insulation				Wall wrap	
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.033	3) (R2.3)		No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	10.4	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.4	NNE	Kitchen/Living	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	20.8	WNW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	SSW	Pantry/Cupboard	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	4.4	ESE	Pantry/Cupboard	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 2	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	NNE	Bedroom 1	No	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	ESE	W.I.R	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	SSW	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	Ensuite	No	No	







# **Building Features**

Certificate Number: UST4RAI2F9

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	73.1	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	34.8	Enclosed	R0.0	Tiles
Pantry/Cupboard	FR5 - 300mm concrete slab	7.2	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	10.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 300mm concrete slab	10.3	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	3.8	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles
Hallway	FR5 - 300mm concrete slab	6.1	Enclosed	R0.0	Tiles

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penetration	ons				
Location	Number	Туре	Width (mm	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: **UST4RAI2F9** Date of Certificate: **20 Jan 2020** 

★Star rating: 9



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: V40BSG4JFK Date of Certificate: 20 Jan 2020 ★Star rating: 5.7



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

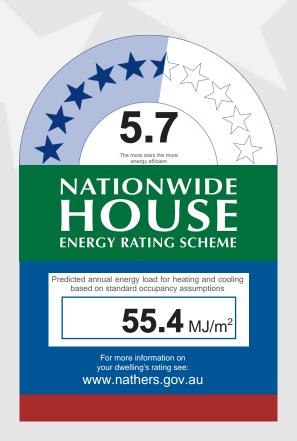
2.02, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban



#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

**Aluminium** 

**Single Clear** 

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Glazing:

Conditioned: 45.5 Unconditioned: 6.9 Garage: TOTAL: 52.4

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

27.6 Heating: Cooling: 27.8 TOTAL: 55.4

#### **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=V4OBSG4JFK

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



★Star rating: **5.7** 



Window ID	Window type	Window type Aluminium B SG Clear					SHGC
ALM-002-01 A	Aluminium B SG						0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
	Opening 144	2700	2850	ESE	Bedroom		No
ALM-002-01 A	Opening 144						
ALM-002-01 A ALM-002-01 A	Opening 144 Opening 146	2400	3200	ESE	Kitchen/Living		No

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	oatt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8	NNE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.6	ESE	Bedroom	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	10.2	NNE	Bath	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	3.8	WNW	Bath	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	5.2	SSW	Bath	Yes	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.2	WNW	Bath	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	12.4	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.1	WNW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	16.2	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	3	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No



★Star rating: **5.7** 



# **Building Features**

Certificate Number: V40BSG4JFK

2 : AFS - AFS 162mm (75mm Glasswool)	5.8	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	1.2	ESE	Kitchen/Living	Yes	Yes
Internal wall type					
	A	(2)	tte n		
Internal wall type  Type	Area	(m²) Insula	tion		

Floors						
Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
FR5 - 300mm concrete slab	11.7	Enclosed	R0.0	Carpet		
FR5 - 300mm concrete slab	6.9	Enclosed	R0.0	Tiles		
FR5 - 300mm concrete slab	33.8	Enclosed	R0.0	Tiles		
	FR5 - 300mm concrete slab FR5 - 300mm concrete slab	FR5 - 300mm concrete slab  11.7  FR5 - 300mm concrete slab  6.9	FR5 - 300mm concrete slab  11.7 Enclosed FR5 - 300mm concrete slab  6.9 Enclosed	FR5 - 300mm concrete slab  11.7 Enclosed  R0.0  FR5 - 300mm concrete slab  6.9 Enclosed  R0.0		

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Added insulation	Roof colour
0.0	medium
	Added insulation 0.0

Certificate Number: V40BSG4JFK Date of Certificate: 20 Jan 2020 ★Star rating: 5.7



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### Contact

Certificate Number: V46VSEZ9BB Date of Certificate: 20 Jan 2020 ★Star rating: 8.1



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 1.04, 2 Delmar Parade

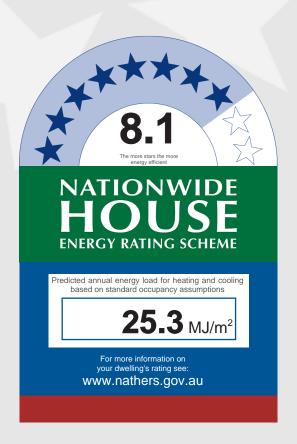
Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS

number: - climate zone: **56** 

Exposure: suburban



#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Conditioned: 68.6
Unconditioned: 3.6
Garage: TOTAL: 72.2

# Annual thermal performance loads (M.I/m²)

(MJ/m<sup>2</sup>)

 Heating:
 9.4

 Cooling:
 15.9

 TOTAL:
 25.3

#### **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLand ing?PublicId=V46VSEZ9BB

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



★Star rating: 8.1



Window ID	Window type	Window type Aluminium B SG Clear					SHGC
ALM-002-01 A	Aluminium B SG						0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
	Opening 166	2100	1926	NNE	Kitchen/Living		No
ALM-002-01 A	Opening 100						
ALM-002-01 A ALM-002-01 A	Opening 165	2100	2753	ESE	Bedroom 2		No

Roof windows	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type						
Туре	Insulation	Insulation				
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)					
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : AFS - AFS 162mm (75mm Glasswool)	18.7	SSW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	9.5	ESE	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	WNW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	SSW	Kitchen/Living	Yes	No	
1 : AFS - AFS 162mm (75mm Glasswool)	6.9	WNW	Kitchen/Living	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	WNW	Storage	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	ESE	Bedroom 2	Yes	Yes	
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No	
1 : AFS - AFS 162mm (75mm Glasswool)	3	NNE	W.I.R	No	No	





★Star rating: 8.1

1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No
Internal wall type					
Internal wall type					
Internal wall type  Type	Area	(m²) Insula	tion		

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Kitchen/Living	FR5 - 300mm concrete slab	32.1	Enclosed	R0.0	Tiles	
Storage	FR5 - 300mm concrete slab	3.2	Enclosed	R0.0	Tiles	
Bedroom 2	FR5 - 300mm concrete slab	11.3	Enclosed	R0.0	Carpet	
Hallway	FR5 - 300mm concrete slab	5.2	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles	
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles	
W.I.R	FR5 - 300mm concrete slab	2.6	Enclosed	R0.0	Tiles	
Bedroom 1	FR5 - 300mm concrete slab	10.5	Enclosed	R0.0	Carpet	

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling pene	trations				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: V46VSEZ9BB Date of Certificate: 20 Jan 2020 ★ Star rating: 8.1



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: WBXMXTFM38 Date of Certificate: 20 Jan 2020 ★ Star rating: 6.2



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

#### **Overview**

#### **Dwelling details**

Address: 3.14, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# 6.2 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 48.8 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

#### Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: Aluminium

**Single Clear** 

#### **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

#### Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 53.7 Unconditioned: 5.8 Garage: -TOTAL: 59.5

# Annual thermal performance loads (MJ/m²)

 Heating:
 27.5

 Cooling:
 21.3

 TOTAL:
 48.8

#### **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=WBXMXTFM38



Date of Certificate: 20 Jan 2020

★Star rating: **6.2** 



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					0.7
Windows sche	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
VVIIIdow ID	TTITION TIO.		(				
ALM-002-01 A	Opening 219	2700	3954	WNW	Kitchen/Living		No
			. ,				No No

Roof wind	ows and skylight type and	performance v	/alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skyligh	t no. Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type							
Туре	Insulation				Wall wrap		
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)					
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)					
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes		
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes		
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No		
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No		
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No		
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No		







# **Building Features**

Certificate Number: WBXMXTFM38

Internal wall type
Type Area (m²) Insulation
1 : FR5 - Internal Plasterboard Stud Wall 46.6

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles	
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles	
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles	
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles	
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet	

Ceiling type						
Location	Material		Added insulation	Roof space above		
Ceiling pene	trations					
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed		
Ceiling fans						
Location	Number Diameter (mm)					

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: WBXMXTFM38 Date of Certificate: 20 Jan 2020

★Star rating: 6.2



#### **Additional information**

#### **Explanatory notes**

#### **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

#### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

#### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

#### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

#### **Contact**

Certificate Number: WX2G2TVQYP Date of Certificate: 20 Jan 2020 ★Star rating: 5.5



#### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

#### **Overview**

#### **Dwelling details**

5.03, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

#### **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

80.6

3.7

84.3

## **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

38 Heating: Cooling: 19.7 TOTAL: 57.7

#### **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# Predicted annual energy load for heating and cooling based on standard occupancy assumptions **57.7** MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

#### Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

#### Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=WX2G2TVQYP

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



★Star rating: **5.5** 



Window ID	Window type					U-value	SHGC
GJA-070-04 A	Type 245 Alumin	ium Sliding Door	SG 4Clr			6.27	0.73
GJA-017-01 A	Type 136 Alumin	ium Double Hung	g Window SG 3	BCIr		6.45	0.73
GJA-013-01 A	Type 131 Alumin	ium Sliding Wind	low SG 3Clr			6.35	0.77
Windows sched		11:17/	NAC III (	0:	7		0.11
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
		Height (mm)	Width (mm) 2700	Orientation ESE	Zone name Bedroom 1		Outdoor shad
Window ID	Window no.		. ,				Outdoor shad No
Window ID GJA-070-04 A	Window no. Opening 191	2700	2700	ESE	Bedroom 1		No
Window ID GJA-070-04 A GJA-070-04 A	Window no. Opening 191 Opening 190	2700 2700	2700	ESE ESE	Bedroom 1 Bedroom 2		No No

ID	Vindow type U-value SHGC
	o value of the
Poof windo	adiabt schodulo
Roof windo	cylight schedule
Roof windo	rylight schedule
Roof windo	cylight schedule  Outdoor Indoor sh

Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	9.6	NNE	Bedroom 1	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	NNE	WIR	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.6	NNE	Ensuite	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.3	WNW	Ensuite	Yes	Yes

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



★Star rating: **5.5** 



# **Building Features**

2 : AFS - AFS 162mm (75mm Glasswool)	3.6	SSW	Study	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	3.5	SSW	Entry	Yes	No
2 : AFS - AFS 162mm (75mm Glasswool)	0.5	ESE	Entry	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	3.3	WNW	Entry	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	11.6	WNW	Kitchen/Living	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	24.5	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.8	ESE	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	77.9	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	FR5 - 200mm concrete slab Lined	11.9	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - 200mm concrete slab Lined	10.7	Enclosed	R0.0	Carpet
WIR	FR5 - 200mm concrete slab Lined	4.2	Enclosed	R0.0	Carpet
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
Study	FR5 - 200mm concrete slab Lined	6.7	Enclosed	R0.0	Tiles
Bath	FR5 - 200mm concrete slab Lined	3.7	Enclosed	R0.0	Tiles
Entry	FR5 - 200mm concrete slab Lined	6.4	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	36.8	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material	A	Added insulation	Roof space above
Ceiling penet	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

# **Roof type**

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





# **Building Features**

Certificate Number: WX2G2TVQYP

Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: WX2G2TVQYP Date of Certificate: 20 Jan 2020 ★

★Star rating: **5.5** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

# **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: X7ZQEXZ45Z Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

3.05, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

80.2

83.8

3.6

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

2.6 Heating: Cooling: 26.3 TOTAL: 28.9

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 28.9 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=X7ZQEXZ45Z



★Star rating: **7.8** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
ALM-002-01 A	Opening 187	2100	2935	ESE	Bedroom 2		No
ALM-002-01 A	Opening 184	2100	3759	NNE	Kitchen/Living		No
				NINIE	Dades and 4		No
ALM-002-01 A	Opening 185	2100	2935	NNE	Bedroom 1		INO

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

Туре	Insulation				Wall wra
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	8.5	ESE	Bedroom 2	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	9.9	NNE	Kitchen/Living	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	17.3	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.2	WNW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	6.8	SSW	Entry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	SSW	Pantry	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	7.1	NNE	Bedroom 1	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	ESE	W.I.R	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	ESE	Ensuite	No	No







1 : AFS - AFS 162mm (75mm Glasswool)	1.6	SSW	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Bathroom	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Bathroom	No	No
Internal wall type					
Internal wall type  Type	Area	(m²) Insulat	ion		

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	FR5 - 300mm concrete slab	11.8	Enclosed	R0.0	Carpet
Kitchen/Living	FR5 - 300mm concrete slab	37.7	Enclosed	R0.0	Tiles
Entry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Pantry	FR5 - 300mm concrete slab	6.2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	9.4	Enclosed	R0.0	Carpet
W.I.R	FR5 - 300mm concrete slab	4.6	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: X7ZQEXZ45Z Date of Certificate: 20 Jan 2020 ★Star rating: 7.8



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: XA1RV2SIKQ Date of Certificate: 20 Jan 2020 ★Star rating: 4.9



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

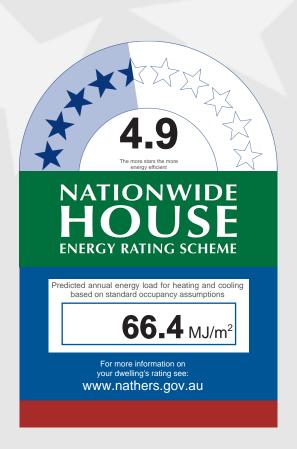
5.02, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open



# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

**Single Clear** 

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 64.3 3.5 Unconditioned: Garage: TOTAL: 67.8

# **Annual thermal** performance loads (MJ/m<sup>2</sup>)

41.8 Heating:

# **Plan documents**

Plan ref/date: **Project No. 219132** Prepared by: **Rothe Lowman Architects** 

### Cooling: 24.6 TOTAL: 66.4

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=XA1RV2SIKQ

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



★Star rating: 4.9



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear 6.				6.7	0.7
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
ALM-002-01 A	Opening 189	2700	1800	NNE	Kitchen/Living 18		No
ALM-002-01 A	Opening 190	2700	3100	ESE	Kitchen/Living 18		No
ALM-002-01 A	Opening 187	2700	2700	ESE	Bedroom 19		No

Roof window	s and skylight type and perf	ormance v	alue		
ID	Window type			U-value	SHGC
Roof window	and skylight schedule				
				Outdoor	Indoor shade/

External wall type							
Type Insulation							
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.033	3) (R2.3)		No		
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living 18	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	5.6	WNW	Kitchen/Living 18	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	17.4	SSW	Kitchen/Living 18	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	1.9	SSW	Kitchen/Living 18	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living 18	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	9.7	NNE	Bedroom 19	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 19	Yes	Yes		
1 : AFS - AFS 162mm (75mm Glasswool)	6.4	NNE	Night 20	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.5	WNW	Night 20	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	1.3	NNE	Unconditioned 21	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	NNE	Day 22	No	No		





★Star rating: 4.9

1 : AFS - AFS 162mm (75mm Glasswool)	8	WNW	Day 22	No	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	5.5	SSW	Day 22	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	6.6	SSW	Day 23	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.6	WNW	Day 23	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 24	Yes	Yes
Internal wall type		(2)			
Туре	Area	(m <sup>2</sup> ) Insulat	ion		
1 : FR5 - Internal Plasterboard Stud Wall	64.4				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living 18	FR5 - 200mm concrete slab Lined	25.9	Enclosed	R0.0	Tiles
Bedroom 19	FR5 - 200mm concrete slab Lined	11.7	Enclosed	R0.0	Carpet
Night 20	FR5 - 200mm concrete slab Lined	4.1	Enclosed	R0.0	Tiles
Unconditioned 21	FR5 - 200mm concrete slab Lined	3.5	Enclosed	R0.0	Tiles
Day 22	FR5 - 200mm concrete slab Lined	6.1	Enclosed	R0.0	Tiles
Day 23	FR5 - 200mm concrete slab Lined	6.9	Enclosed	R0.0	Tiles
Bedroom 24	FR5 - 200mm concrete slab Lined	9.6	Enclosed	R0.0	Carpet

Ceiling type				
Location	Material	A	added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

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

Certificate Number: XA1RV2SIKQ Date of Certificate: 20 Jan 2020 ★ Star rating: 4.9



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

# **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: XOVS5SCJ5S Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



# **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

2.13, 2 Delmar Parade Address:

**DEE WHY** Suburb:

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: suburban

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

53.7

5.8

59.5

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

Heating: 13.4 Cooling: 22.2 TOTAL: 35.6

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



ing?PublicId=XOVS5SCJ5S

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



★Star rating: **7.2** 



Window ID	Window type	Window type					
ALM-002-01 A	Aluminium B SG Clear					6.7	0.7
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
Window ID ALM-002-01 A	Window no. Opening 219	Height (mm) 2700	Width (mm) 3954	Orientation WNW	Zone name Kitchen/Living		Outdoor shade No
			· /				

Roof window	ws and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	w and skylight schedule	
ID	Roof window/ skylight no.  Area (m²)  Orientation  Zone name	Outdoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	12.8	NNE	Kitchen/Living	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	5.5	NNE	Kitchen/Living	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	10.9	WNW	Kitchen/Living	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.3	SSW	Bathroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.6	ESE	Hallway	Yes	No
1 : AFS - AFS 200mm (75mm Glasswool)	19.5	NNE	Hallway	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Storage	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	9.6	SSW	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	4.1	NNE	Bedroom	Yes	No







# **Building Features**

Certificate Number: XOVS5SCJ5S

Internal wall type
Type Area (m²) Insulation
1 : FR5 - Internal Plasterboard Stud Wall 46.6

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Kitchen/Living	FR5 - 300mm concrete slab	27.5	Enclosed	R0.0	Tiles		
Bathroom	FR5 - 300mm concrete slab	5.8	Enclosed	R0.0	Tiles		
Hallway	FR5 - 300mm concrete slab	8.1	Enclosed	R0.0	Tiles		
Storage	FR5 - 300mm concrete slab	7.5	Enclosed	R0.0	Tiles		
Bedroom	FR5 - 300mm concrete slab	10.6	Enclosed	R0.0	Carpet		

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	trations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 150mm: 150mm Suspended Slab	0.0	medium

Certificate Number: XOVS5SCJ5S Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: YLS8ZHAMXL Date of Certificate: 20 Jan 2020 ★Star rating: 5.5



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

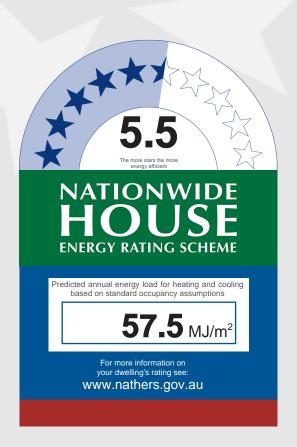
Address: 5.01, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: open



# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Insulation: Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# **Ceiling penetrations**

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

Compact fluorescent

# Net floor area (m<sup>2</sup>)

Conditioned: 76
Unconditioned: 3.8
Garage: TOTAL: 79.8

# Annual thermal performance loads (MJ/m²)

(1013/111 )

Heating: **38.2**Cooling: **19.3**TOTAL: **57.5** 

# **Plan documents**

Plan ref/date: Project No. 219132
Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

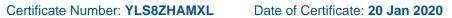
If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=YLS8ZHAMXL

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



★Star rating: **5.5** 



Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Aluminium B SG Clear					
Window ID	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shace
ALM-002-01 A	Opening 179	2700	1800	NNE	Kitchen/Living		No
	Opening 180	2700	3200	ESE	Kitchen/Living		No
ALM-002-01 A				SSW	Bedroom 1		No
ALM-002-01 A ALM-002-01 A	Opening 177	2700	1800	55VV	Dedition 1		140

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone name	Outdoor shade/ diffuser

External wall type					
Туре	Insulation				Wall wrap
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	batt (k = 0.03	3) (R2.3)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	WNW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	22.7	SSW	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	2.6	NNE	Hallway	Yes	No
1 : AFS - AFS 162mm (75mm Glasswool)	21.2	WNW	Hallway	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	6.5	NNE	Ensuite	No	No
2 : AFS - AFS 200mm (75mm Glasswool)	10.5	NNE	Bedroom 1	No	No
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	SSW	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 1	Yes	No





# **Building Features**

Certificate Number: YLS8ZHAMXL

1 : AFS - AFS 162mm (75mm Glasswool) 8.2 ESE Bedroom 2 Yes	Yes

Floors							
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering		
Kitchen/Living	FR5 - 200mm concrete slab Lined	33.5	Enclosed	R0.0	Tiles		
Hallway	FR5 - 200mm concrete slab Lined	13.2	Enclosed	R0.0	Tiles		
Ensuite	FR5 - 200mm concrete slab Lined	4.3	Enclosed	R0.0	Tiles		
Bedroom 1	FR5 - 200mm concrete slab Lined	13.4	Enclosed	R0.0	Carpet		
Bathroom	FR5 - 200mm concrete slab Lined	3.8	Enclosed	R0.0	Tiles		
Bedroom 2	FR5 - 200mm concrete slab Lined	11.6	Enclosed	R0.0	Carpet		

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling penet	rations				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: YLS8ZHAMXL Date of Certificate: 20 Jan 2020 ★Star rating: 5.5



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: YW5ASZ845Z Date of Certificate: 20 Jan 2020 ★Star rating: 7.2



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

5.09, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

54.2

59.5

5.3

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

20.6 Heating: Cooling: 15 TOTAL: 35.6

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 35.6 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=YW5ASZ845Z

Certificate Number: YW5ASZ845Z Date of Certificate: 20 Jan 2020

★Star rating: **7.2** 



Windows type	and performance	value					
Window ID	Window type					U-value	SHGC
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
		Height (mm)	Width (mm)	Orientation ESE	Zone name Bedroom 2		Outdoor shade

ID	Window type		U-value	SHGC
Root windo	w and skylight schedule			
			Outdoor	Indoor sha

External wall type							
Туре	Insulation	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)					
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool batt (k = 0.033) (R2.3)						
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 2	No	Yes		
2 : AFS - AFS 200mm (75mm Glasswool)	9.6	NNE	Bedroom 2	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	SSW	Bedroom 2	Yes	No		
1 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 1	Yes	Yes		
2 : AFS - AFS 200mm (75mm Glasswool)	9.6	SSW	Bedroom 1	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	6.4	NNE	Bath	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	15.2	NNE	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	11	WNW	Kitchen/Living	Yes	Yes		
2 : AFS - AFS 200mm (75mm Glasswool)	12.6	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	2.3	ESE	Day 22	Yes	No		
2 : AFS - AFS 200mm (75mm Glasswool)	7.8	WNW	Ensuite	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	4.4	SSW	Ensuite	No	No		





★Star rating: **7.2** 

Internal wall type		
Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	52.4	

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet
Bath	FR5 - 200mm concrete slab Lined	5.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - 200mm concrete slab Lined	22.9	Enclosed	R0.0	Tiles
Day 22	FR5 - 200mm concrete slab Lined	5.4	Enclosed	R0.0	Tiles
Ensuite	FR5 - 200mm concrete slab Lined	4.7	Enclosed	R0.0	Tiles

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penetration	ns			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: YW5ASZ845Z Date of Certificate: 20 Jan 2020 ★ Star rating: 7.2



### **Additional information**

# **Explanatory notes**

# About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: **Z5QC90EQCN** Date of Certificate: **20 Jan 2020** ★Star rating: **8.1** 



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 3.04, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: suburban

# RATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 25.2 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

**Single Clear** 

# Net floor area (m<sup>2</sup>)

Insulation:

Conditioned: 68.6
Unconditioned: 3.6
Garage: TOTAL: 72.2

# Annual thermal performance loads (MJ/m²)

Heating: 10.6 Cooling: 14.6 TOTAL: 25.2

# **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=Z5QC90EQCN

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



★Star rating: 8.1



Window ID	Window type	Window type							
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7		
Windows schee	dule								
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade		
	Opening 166	2100	1926	NNE	Kitchen/Living		No		
ALM-002-01 A	Opening 100								
ALM-002-01 A ALM-002-01 A	Opening 165	2100	2753	ESE	Bedroom 2		No		

Roof windows and	d skylight type and perf	ormance v	alue			
ID	Window type				U-value	SHGC
Roof window and	skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type									
Туре	Insulation	Insulation							
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool I	Rockwool batt (k = 0.033) (R2.3)							
External wall schedule									
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves				
1 : AFS - AFS 162mm (75mm Glasswool)	18.7	SSW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	9.5	ESE	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	5.1	NNE	Kitchen/Living	Yes	No				
1 : AFS - AFS 162mm (75mm Glasswool)	2.5	WNW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	2.9	SSW	Kitchen/Living	Yes	No				
1 : AFS - AFS 162mm (75mm Glasswool)	6.9	WNW	Kitchen/Living	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	4.9	WNW	Storage	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	ESE	Bedroom 2	Yes	Yes				
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	WNW	Bathroom	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	5.7	NNE	Ensuite	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	3.7	WNW	Ensuite	No	No				
1 : AFS - AFS 162mm (75mm Glasswool)	3	NNE	W.I.R	No	No				



★Star rating: 8.1



# **Building Features**

Certificate Number: **Z5QC90EQCN** 

1 : AFS - AFS 162mm (75mm Glasswool)	7.6	ESE	Bedroom 1	Yes	Yes
1 : AFS - AFS 162mm (75mm Glasswool)	7.2	NNE	Bedroom 1	No	No
Internal wall type					
Туре	Area	(m²) Insula	tion		
1 : FR5 - Internal Plasterboard Stud Wall	67.5				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	FR5 - 300mm concrete slab	32.1	Enclosed	R0.0	Tiles
Storage	FR5 - 300mm concrete slab	3.2	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - 300mm concrete slab	11.3	Enclosed	R0.0	Carpet
Hallway	FR5 - 300mm concrete slab	5.2	Enclosed	R0.0	Tiles
Bathroom	FR5 - 300mm concrete slab	3.6	Enclosed	R0.0	Tiles
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles
W.I.R	FR5 - 300mm concrete slab	2.6	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - 300mm concrete slab	10.5	Enclosed	R0.0	Carpet

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling pene	etrations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **Z5QC90EQCN** Date of Certificate: **20 Jan 2020** ★Star rating: **8.1** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: Z9RD8ND6KK Date of Certificate: 20 Jan 2020 ★Star rating: 5.7



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658 Name: **Duncan Hope** 

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: 61280067784

Declaration **Employed by organisation constructing** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

**BDAV** AAO:

# **Overview**

# **Dwelling details**

4.04, 2 Delmar Parade Address:

Suburb: **DEE WHY** 

State: **NSW** Postcode: 2099 NCC Class: Class 2 Type: **New Home** 

Lot/DP **NatHFRS** climate zone: 56 number:

Exposure: open

Insulation:

# **Key construction and insulation materials**

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated Roof: As indicated

Floor: As indicated

66

4.3

70.3

Glazing: **Aluminium** 

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

# **Annual thermal** performance loads

(MJ/m<sup>2</sup>)

33.4 Heating: Cooling: 22 TOTAL: 55.4

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: **Rothe Lowman Architects** 

# ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 55.4 MJ/m<sup>2</sup> For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0 Unsealed: 0 TOTAL:

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=Z9RD8ND6KK



★Star rating: **5.7** 



Window ID	Window type	Window type						
GJA-013-01 A	Type 131 Alumir	nium Sliding Wind	low SG 3Clr			6.35	0.77	
Windows schee	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
GJA-013-01 A	Opening 207	2700	2700	ESE	Bedroom 18		No	
GJA-013-01 A	Opening 208	2700	2700	ESE	Bedroom 21		No	
GJA-013-01 A	Opening 210	2700	3100	ESE	Kitchen/Living 24		No	
	Opening 209		1800	NNE	Kitchen/Living 24		No	

Roof windo	ows and skylight type and per	formance v	alue			
ID	Window type				U-value	SHGC
Roof windo	ow and skylight schedule					
ID	Roof window/ skylight no.	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type					
Туре	Insulation	Wall wrap			
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	No			
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	No			
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	8.5	NNE	Bedroom 18	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 18	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	4.5	NNE	Night 19	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 21	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	6.2	WNW	Day 22	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	14.5	WNW	Day 22	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	2.6	NNE	Day 22	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	6.5	WNW	Unconditioned 23	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.8	SSW	Unconditioned 23	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	11.5	SSW	Kitchen/Living 24	No	No





★Star rating: 5.7

2 : AFS - AFS 162mm (75mm Glasswool)	7.8	SSW	Kitchen/Living 24	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living 24	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	NNE	Kitchen/Living 24	Yes	Yes
			Michel/Living 24		
Internal wall type				165	165
	Area			165	165

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bedroom 18	FR5 - 200mm concrete slab Lined	9.4	Enclosed	R0.0	Carpet
Night 19	FR5 - 200mm concrete slab Lined	2.6	Enclosed	R0.0	Carpet
Night 20	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles
Bedroom 21	FR5 - 200mm concrete slab Lined	11.3	Enclosed	R0.0	Carpet
Day 22	FR5 - 200mm concrete slab Lined	10.3	Enclosed	R0.0	Tiles
Unconditioned 23	FR5 - 200mm concrete slab Lined	4.3	Enclosed	R0.0	Tiles
Kitchen/Living 24	FR5 - 200mm concrete slab Lined	28.4	Enclosed	R0.0	Tiles

Ceiling type					
Location	Material			Added insulation	Roof space above
Ceiling pene	trations				
Location	Number	Туре	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number	Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **Z9RD8ND6KK** Date of Certificate: **20 Jan 2020** 

★Star rating: **5.7** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact

Certificate Number: ZHN83DA20L Date of Certificate: 20 Jan 2020 ★ Star rating: 6.6



### **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 2.01, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

number: Exposure: suburban

Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: As indicated Floor: As indicated

Wall: As indicated

Roof: As indicated Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

Insulation:

**Single Clear** 

68.7

4.4

# Annual thermal performance loads (MJ/m²)

- Heating: 18.4 73.1 Cooling: 25.7 TOTAL: 44.1

# **Plan documents**

Plan ref/date: Project No. 219132

Prepared by: Rothe Lowman Architects

# 6.6 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 44.1 MJ/m² For more information on your dwelling's rating see: www.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

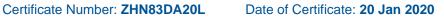
NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=ZHN83DA20L



★Star rating: **6.6** 



Window ID	Window type	Window type						
ALM-002-01 A	Aluminium B SG	Clear				6.7	0.7	
Window ID	dule Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad	
ALM-002-01 A	Opening 134	2400	2800	ESE	Bedroom 18		No	
ALM-002-01 A	Opening 135	2400	2800	ESE	Bedroom 19		No	
A.I. A.A. 0000 04 A	Opening 137	2400	1600	ESE	Kitchen/Living		No	
ALM-002-01 A	Oponing 101				•			

Roof wind	ows and skylight type and pe	rformance v	alue			
ID	Window type				U-value	SHGC
Roof wind	ow and skylight schedule					
ID	Roof window/ skylight no	Area (m²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser

External wall type					
Type	Insulation		Wall wra		
1 : AFS - AFS 200mm (75mm Glasswool)	Rockwool I	No			
2 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	No			
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : AFS - AFS 200mm (75mm Glasswool)	15.4	NNE	Bedroom 18	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	8	ESE	Bedroom 18	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	8.1	ESE	Bedroom 19	Yes	Yes
1 : AFS - AFS 200mm (75mm Glasswool)	1.6	ESE	Entry Hallway	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	2.7	NNE	Entry Hallway	Yes	Yes
2 : AFS - AFS 162mm (75mm Glasswool)	21	WNW	Entry Hallway	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	7.7	WNW	Bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Bath	No	No
1 : AFS - AFS 200mm (75mm Glasswool)	18.3	SSW	Kitchen/Living	No	No
2 : AFS - AFS 162mm (75mm Glasswool)	10.7	ESE	Kitchen/Living	No	No



★Star rating: **6.6** 



# **Building Features**

Certificate Number: ZHN83DA20L

2 : AFS - AFS 162mm (75mm Glasswool)	4.5	NNE	Kitchen/Living	Yes	Yes
Internal wall type					
Туре	Area (n	n²) Insula	tion		
1 : FR5 - Internal Plasterboard Stud Wall	70.6				

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 18	FR5 - 300mm concrete slab	13.6	Enclosed	R0.0	Carpet	
Bedroom 19	FR5 - 300mm concrete slab	14.1	Enclosed	R0.0	Carpet	
Ensuite	FR5 - 300mm concrete slab	3.7	Enclosed	R0.0	Tiles	
Entry Hallway	FR5 - 300mm concrete slab	11.2	Enclosed	R0.0	Tiles	
Bath	FR5 - 300mm concrete slab	4.4	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - 300mm concrete slab	26	Enclosed	R0.0	Tiles	

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **ZHN83DA20L** Date of Certificate: **20 Jan 2020** ★ Star rating: **6.6** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

# **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

### **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### **Contact**

Certificate Number: **ZVHUUALQMG** Date of Certificate: **20 Jan 2020** ★Star rating: **7.3** 



# **Assessor details**

Accreditation

number: VIC/BDAV/14/1658
Name: Duncan Hope

Organisation: Senica Consultancy Group Email: duncan@senica.com.au

Phone: **61280067784** 

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

# **Overview**

# **Dwelling details**

Address: 4.05, 2 Delmar Parade

Suburb: **DEE WHY** 

State: NSW Postcode: 2099
Type: New Home NCC Class: Class 2

Lot/DP NatHERS number: - climate zone: 56

Exposure: **open** 

Insulation:

# Key construction and insulation materials

(see following pages for details)

Construction: Wall: As indicated

Roof: **As indicated** Floor: **As indicated** 

Wall: As indicated Roof: As indicated

Floor: As indicated

Glazing: Aluminium

Net floor area (m<sup>2</sup>)

Conditioned:

Garage:

TOTAL:

Unconditioned:

**Single Clear** 

71.7

76.2

4.5

# Annual thermal performance loads (MJ/m²)

(MJ/m²

Heating: 19.8
Cooling: 15
TOTAL: 34.8

# **Plan documents**

Plan ref/date: **Project No. 219132** 

Prepared by: Rothe Lowman Architects

# 7.3 The more stars the more energy efficient NATIONWIDE HOUSE ENERGY RATING SCHEME Predicted annual energy load for heating and cooling based on standard occupancy assumptions 34.8 MJ/m² For more information on your dwelling's rating see: WWW.nathers.gov.au

# Ceiling penetrations

(see following pages for details)

Sealed: 0
Unsealed: 0
TOTAL: 0

Principal downlight type:

\*\*NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. If this number is exceded in construction then this certificate IS NOT VALID and a new certificate is required. Loss of ceiling insulation for the penetrations listed has been taken into account with the rating.

**Compact fluorescent** 

# Window selection - default windows only

Note on allowable window values: Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

Note: Only a +/-5% SHGC tolerance is allowed with this rating.

NB: This tolerance ONLY applies to SHGC, the U-value can always be lower but not higher than the values stated on page 2.

If any of the windows selected are outside the 5% tolerance then this certificate is no longer valid and the dwelling will need to be rerated to confirm compliance.

Scan to access this certificate online and confirm this is valid.



https://www.fr5.com.au/QRCodeLanding?PublicId=ZVHUUALQMG

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



Date of Certificate: 20 Jan 2020

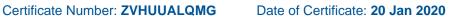
★Star rating: **7.3** 



Window ID	Window type					U-value	SHGC
GJA-013-01 A	Type 131 Alumir	nium Sliding Wind	low SG 3Clr			6.35	0.77
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
GJA-013-01 A	Opening 218	2700	2400	NNE	Bedroom 1		No
GJA-013-01 A	Opening 217	2700	2400	NNE	Bedroom 2		No
			0=00	NINIE	IZitalia and It in the an		NI-
GJA-013-01 A	Opening 219	2700	2500	NNE	Kitchen/Living		No

Roof window	s and skylight type and performance value	
ID	Window type	U-value SHGC
Roof window	and skylight schedule	
ID	Roof window/ skylight no. Area (m²) Orientation Zone	Outdoor Indoor shade/ diffuser

Туре	Insulation	Insulation					
1 : AFS - AFS 162mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)					
2 : AFS - AFS 200mm (75mm Glasswool)	Rockwool	Rockwool batt (k = 0.033) (R2.3)					
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 1	Yes	Yes		
2 : AFS - AFS 200mm (75mm Glasswool)	9.7	WNW	Bedroom 2	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	8	NNE	Bedroom 2	Yes	Yes		
2 : AFS - AFS 200mm (75mm Glasswool)	7.8	WNW	Bath	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	4.2	SSW	Bath	Yes	No		
2 : AFS - AFS 200mm (75mm Glasswool)	3.4	SSW	Entry	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	9.8	SSW	Entry	No	No		
2 : AFS - AFS 200mm (75mm Glasswool)	6.9	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	7.6	SSW	Kitchen/Living	No	No		
1 : AFS - AFS 162mm (75mm Glasswool)	17.7	ESE	Kitchen/Living	No	No		







1 : AFS - AFS 162mm (75mm Glasswool)	15.9	NNE	Kitchen/Living	Yes	Yes
Internal wall type					
Туре	Area (	(m²) Insula	ition		
1 : FR5 - Internal Plasterboard Stud Wall	63.4				

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Bedroom 1	FR5 - 200mm concrete slab Lined	11.9	Enclosed	R0.0	Carpet	
Bedroom 2	FR5 - 200mm concrete slab Lined	10.6	Enclosed	R0.0	Carpet	
Bath	FR5 - 200mm concrete slab Lined	4.5	Enclosed	R0.0	Tiles	
Entry	FR5 - 200mm concrete slab Lined	8	Enclosed	R0.0	Tiles	
Ensuite	FR5 - 200mm concrete slab Lined	3.9	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - 200mm concrete slab Lined	37.2	Enclosed	R0.0	Tiles	

Ceiling type				
Location	Material		Added insulation	Roof space above
Ceiling penet	rations			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Slab:Slab - Suspended Slab : 200mm: 200mm Suspended Slab	0.0	medium

Certificate Number: **ZVHUUALQMG** Date of Certificate: **20 Jan 2020** ★Star rating: **7.3** 



### **Additional information**

# **Explanatory notes**

# **About this report**

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

### **General Information**

A NatHERS House Energy Rating is a comprehensive, dynamic computer modelling evaluation of the floorplans, elevations and specifications to predict an energy load of a home. Not all of us use our homes in the same way, so ratings are generated using standard assumptions. This means homes can be compared across the country.

The actual energy consumption of your home may vary significantly from the predicted energy load figures in this report depending on issues such as the size of your household and your personal preferences, e.g. in terms of heating or cooling.

While the figures are an indicative guide to energy use, they can be used as a reliable guide for comparative purposes between different house designs and for demonstrating that the design meets the required regulatory compliance.

Homes that are energy efficient use less energy, are warmer in winter, cooler in summer and cost less to run. The higher the star rating the more energy efficient.

This NatHERS House Energy Rating report was carefully prepared by your assessor on the basis of comprehensive modelling using standard procedures to rate your home using an underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance. The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

# **Accredited Assessors**

To ensure you get a high-quality, professional NatHERS House Energy Rating report, you should always use an accredited assessor, accredited assessors are members of a professional body called an Assessor Accrediting Organisation (AAO).

AAOs have specific quality assurance processes in place and continuing professional development requirements to maintain a high and consistent standard of assessments across the country. Non-accredited assessors do not have this level of quality assurance or any on-going training requirements.

If you have any questions or concerns about this report, please direct them to your assessor in the first instance.

If your assessor is unable to address your questions or concerns, please contact their AAO listed under 'assessor details'. You can also find a range of information about accredited assessors on the AAO websites.

### **Disclaimer**

The energy values quoted are for comparison purposes only; they are not a prediction of actual energy use. This rating only applies to the floor plan, construction details, orientation and climate as submitted and included in the attached drawing set that bears a stamp with the same number as this certificate. Changes to any of these details could affect the rating.

### Contact