

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1098699M 03

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

Secretary

Date of issue: Tuesday, 20 October 2020

To be valid, this certificate must be lodged within 3 months of the date of issue.



Project summary	
Project name	113a Patterson Street BYRON BAY_03
Street address	113a Patterson Street BYRON BAY 2481
Local Government Area	Byron Shire Council
Plan type and plan number	deposited 717719
Lot no.	1
Section no.	-
No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	7
No. of single dwelling houses	0
Project score	
Water	✓ 45 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 58 Target 50

Certificate	Prepared	by

Name / Company Name: Senica Consultancy Group Pty Ltd

ABN (if applicable): 48612864249

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Description of project

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Project address	
Project name	113a Patterson Street BYRON BAY_03
Street address	113a Patterson Street BYRON BAY 2481
Local Government Area	Byron Shire Council
Plan type and plan number	deposited 717719
Lot no.	1
Section no.	-
Project type	
No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	7
No. of single dwelling houses	0
Site details	
Site area (m²)	1752
Roof area (m²)	729
Non-residential floor area (m²)	0.0
Residential car spaces	0
Non-residential car spaces	0

Common area landscape		
Common area lawn (m²)	0.0	
Common area garden (m²)	0.0	
Area of indigenous or low water use species (m²)	0.0	
Assessor details		
Assessor number	BDAV/14/1658	
Certificate number	YG7HLN5G5S	
Climate zone	10	
Project score		
Water	✓ 45	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 58	Target 50

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Description of project

The tables below describe the dwellings and common areas within the project

Multi-dwelling houses

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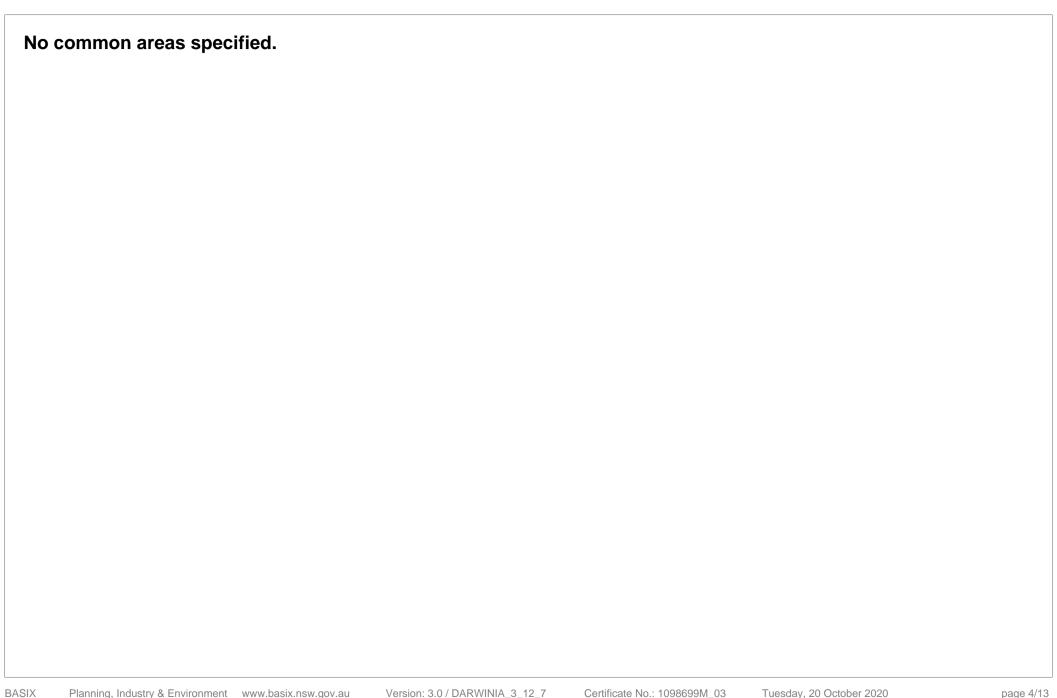
Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
1	3	143.3	4.6	50.0	0.0
5	3	115.7	1.6	50.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & lawn (m²)	Indigenous species (min area m²)
2	2	92.6	1.6	50.0	0.0
6	3	115.7	1.6	50.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
3	3	115.7	1.6	50.0	0.0
7	3	115.7	1.6	50.0	0.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m²)	Unconditioned floor area (m²)	Area of garden & Iawn (m²)	Indigenous species (min area m²)
4	2	92.6	1.6	50.0	0.0

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Schedule of BASIX commitments

- 1. Commitments for multi-dwelling houses
 - (a) Dwellings
 - (i) Water
 - (ii) Energy
 - (iii) Thermal Comfort
- 2. Commitments for single dwelling houses
- 3. Commitments for common areas and central systems/facilities for the development (non-building specific)
 - (i) Water
 - (ii) Energy

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Schedule of BASIX commitments

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

1. Commitments for multi-dwelling houses

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	~	~	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		•	•
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		•	~
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		•	•
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	V
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	~	y	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		y	
(g) The pool or spa must be located as specified in the table.	~	•	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	~	~	~

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	Fixtures			Appliances Indiv		lividual pool		Individual spa						
Dwelling no.	All shower- heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish- washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 7.5 but <= 9 L/min)	3 star	4 star	4 star	no	-	-	-	-	-	-	-	-	-

		Alternative water source								
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up		
All dwellings	individual water tank (no. 1)	Tank size (min) 1500.0 litres	To collect run-off from at least: 80.0 square metres of roof area; 0.0 square metres of impervious area; 0.0 square metres of garden and lawn area; and 0.0 square metres of planter box area.	yes	yes	yes	no	no		
None	-	-	-	-	-	-	-	-		

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	~	~	~
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		V	•
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		~	~

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(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		~	~
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	~	~	~
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must:			
(aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and		•	
(bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		~	
(h) The applicant must install in the dwelling:			
(aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below;		✓	
(bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and		~	-
(cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓	
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		~	
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	V	~	V

	Hot water	Bathroom ven	tilation system	Kitchen venti	lation system	Laundry vent	ilation system
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	electric storage	individual fan, ducted to façade or roof	interlocked to light	no mechanical ventilation (ie. natural)	-	natural ventilation only, or no laundry	-

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	Coo	ling	Hea	ting	Artificial lighting			Natural lighting		ghting		
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitcher
2, 4	ceiling fans + 1-phase airconditioning 4 Star (old label)	ceiling fans + 1-phase airconditioning 4 Star (old label)	1-phase airconditioning 4 Star (old label)	1-phase airconditioning 4 Star (old label)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	2	no
All other dwellings	ceiling fans + 1-phase airconditioning 4 Star (old label)	ceiling fans + 1-phase airconditioning 4 Star (old label)	1-phase airconditioning 4 Star (old label)	1-phase airconditioning 4 Star (old label)	3 (dedicated)	2 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	2	yes

	Individual po	ool	Individual s	ра	Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	yes	-	-	-	no	yes

	Alternative energy
Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)
All dwellings	2.0

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(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	~		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		~	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		~	~
(g) Where there is an in-slab heating or cooling system, the applicant must:	•	~	V
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or			
(bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	V	~	V

		Thermal loads				
Dwelling no.	no. Area adjusted heating load (in mJ/m²/yr) Area adjusted cooling load (in mJ/m²/yr)					
1	16.9	39.7				
6	14.7	39.6				
7	16.0	40.1				
2, 4	10.6	36.8				
All other dwellings	16.1	40.2				

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	Construction of floors and walls									
Dwelling no.	Concrete slab on ground(m²)	Suspended floor with open subfloor (m²)	Suspended floor with endclosed subfloor (m²)	Suspended floor above garage (m²)	Primarily rammed earth or mudbrick walls					
1	64	5	-	36	No					
All other dwellings	44	3	-	19	No					

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3. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		~	V
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	~	~	~
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	V	~	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		~	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		~	V
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		V	V

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		~	~
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		~	~
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	V	~	V

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Notes

- 1. In these commitments, "applicant" means the person carrying out the development.
- 2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
- 3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
- 4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
- 5. If a star or other rating is specified in a commitment, this is a minimum rating.
- 6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

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- 1. Commitments identified with a " in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
- 2. Commitments identified with a " in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
- 3. Commitments identified with a " in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

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Nationwide House Energy Rating Scheme* — Class 2 summary

Date of Certificate: 1 May 2020 ★ Average star rating: 5.1



Assessor details

Accreditation

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

Certificate Number: YG7HLN5G5S

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

Phone: 61280067784

of interest: the building
Software: FirstRate5 v5.2.11

AAO: BDAV

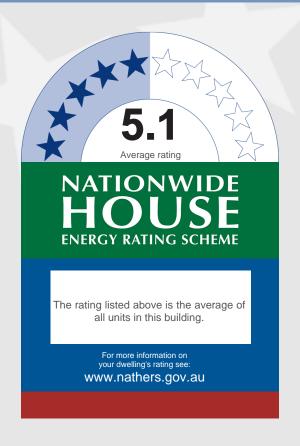
Dwelling details

Address: 113a Patterson Street

Suburb: BYRON BAY

State: NSW Postcode: 2481

Summary of all dwellings



Certification details

42YWMK7O11

Annual thermal performance loads (MJ/m2) **Unit number Heating load Cooling load Total load Certificate number** Star rating Y7LLFYVA2U 16.9 39.7 56.6 4.9 02 10.6 36.8 47.4 E3LU3ZB47K 5.6 INIVX57VVT 03 16.1 40.2 56.3 4.9 ZS4Z7XRC2G 04 10.6 36.8 47.4 5.6 FU2I3D0DKA 05 16.1 40.2 4.9 56.3 Z9RA1X9KFU 06 14.7 39.6 54.3 5.1

16

This building achieves an average star rating of: 5.1

56.1

40.1

07

4.9

^{*} 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: 42YWMK7O11 Date of Certificate: 1 May 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**

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

Overview

Dwelling details

Address: 07, 113a Patterson Street

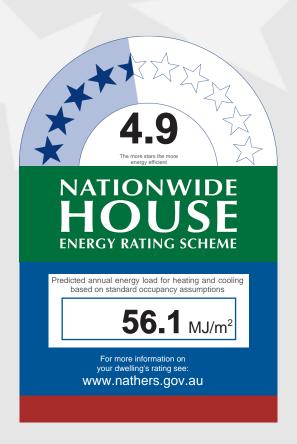
Suburb: BYRON BAY

State: NSW Postcode: 2481
Type: New Home NCC Class: Class 1a

Lot/DP NatHERS

number: 1//717719 climate zone: 10

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: As indicated

As indicated

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 (m²)

Insulation:

Conditioned: 115.7 Unconditioned: 1.6 Garage: 37.5 TOTAL: 154.8

Annual thermal performance loads (M.I/m²)

(MJ/m²)

Heating: 16
Cooling: 40.1
TOTAL: 56.1

Plan documents

Plan ref/date: Job No. 1950
Prepared by: Logan Architecture

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=42YWMK7O11

^{*} 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



Windows type a	and performance	value					
Window ID	Window type					U-value	SHGC
A&L-012-04 A	Al Sliding Door	SG 4Clr				6.09	0.72
A&L-003-01 A	Al Sliding Windo	ow SG 3Clr				6.15	0.78
TND-021-01 A	Trend Al Hinged	Door SG 4Clr T				6.03	0.61
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
A&L-012-04 A	21.24sd	2100	2400	NNE	Garage		No
A&L-003-01 A	06.08s	600	800	SSW	WC		No
A&L-003-01 A	24.08s	2400	800	WNW	Entry		No
A&L-003-01 A	52.09	2700	900	SSW	Entry		No
A&L-003-01 A	14.06	1400	600	ESE	Kitchen/Living		No
A&L-003-01 A	11.12s	1100	1200	ESE	Kitchen/Living		No
A&L-003-01 A	06.18s	600	1800	ESE	Kitchen/Living		No
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No
A&L-003-01 A	24.09s	2400	900	NNE	Kitchen/Living		No
A&L-003-01 A	24.11a	2400	1100	WNW	Kitchen/Living		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No
A&L-003-01 A	12.06s	1200	600	ESE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.09s	1200	900	SSW	Bathroom Upstair	S	No
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase)	No
A&L-003-01 A	12.08s	1200	800	ESE	Upstairs staircase	•	No
A&L-003-01 A	12.21s	1200	2100	SSW	Bedroom 3		No
TND-021-01 A	21.26fd	2100	2600	NNE	Family		No

Roof windows and	d skylight type and perf	ormance v	alue		
ID	Window type			U-value	SHGC
Roof window and	skylight schedule				
				Outdoor	Indoor shade/



★Star rating: 4.9



External wall type					
Туре	Insulation				Wall wrap
1 : Dividing - Dividing Wall RFL 60/60/60	Rockwool I	oatt: R2.0 (R2	2.0);Rockwool batt: R2.0 (F	R2.0)	No
2 : Weatherboard - 90mm Weatherboard with	Ologo fibro	h-#- D2 0 (D	2.0)		Ne
R2.0 3 : FC Sheet - 90mm FC Sheet with R2.0		batt: R2.0 (R	•		No No
3 . FC Sheet - 90mm FC Sheet with K2.0	Glass libre	Dall. KZ.U (K	2.0)		INU
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : Dividing - Dividing Wall RFL 60/60/60	18.2	WNW	Garage	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	16.2	SSW	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	11.4	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	1.9	ESE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	WC	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.8	WNW	Entry	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.3	WNW	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	5.1	ESE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.4	ESE	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.7	SSW	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	9.2	ESE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	15.6	NNE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	3	WNW	Kitchen/Living	Yes	No
1 : Dividing - Dividing Wall RFL 60/60/60	6.8	WNW	Bedroom 2	No	No
2 : Weatherboard - 90mm Weatherboard with	8.4	NNE	Bedroom 2	No	Yes

^{*} 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



3 : FC Sheet - 90mm FC Sheet with R2.0	8.3	ESE	Bedroom 1	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 1	No	Yes
3 : FC Sheet - 90mm FC Sheet with R2.0	6.9	ESE	Ensuite	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Bathroom Upstairs	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	6.1	SSW	Bathroom Upstairs	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Upstairs staircase	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	SSW	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	ESE	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Little room	Yes	Yes
1 : Dividing - Dividing Wall RFL 60/60/60	8.9	WNW	Bedroom 3	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	8.8	SSW	Bedroom 3	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with	9.2	NNE	Family	No	Yes

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	17.3	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	19	Enclosed	R0.0	none
WC	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	8.7	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - Timber Lined	13	Enclosed	R0.0	Carpet







Ensuite	FR5 - Timber Lined	3.9	Enclosed	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	2.2	Elevated	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	4	Enclosed	R0.0	Tiles
Upstairs staircase	FR5 - Timber Lined	0.1	Elevated	R0.0	Carpet
Upstairs staircase	FR5 - Timber Lined	7.3	Enclosed	R0.0	Carpet
WIR	FR5 - Timber Lined	3.8	Enclosed	R0.0	Carpet
Little room	FR5 - Timber Lined	0.9	Elevated	R0.0	Carpet
Little room	FR5 - Timber Lined	1.5	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Family	FR5 - Timber Lined	17.4	Enclosed	R0.0	Carpet

Ceiling type			
Location	Material	Added insulation	Roof space above
Garage	Plasterboard	R3.0	Yes
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
WC	FR5 - Timber Lined	R0.0	No
WC	FR5 - Timber Lined	R0.0	No
Entry	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	Plasterboard	R3.0	Yes
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Bedroom 2	Plasterboard	R3.0	Yes
Bedroom 1	Plasterboard	R3.0	Yes
Ensuite	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes

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Building Features

Certificate Number: 42YWMK7O11

Upstairs staircase	Plasterboard	R	3.0	Yes
WIR	Plasterboard	F	3.0	Yes
Little room	Plasterboard	3.0	Yes	
Little room	Plasterboard	F	3.0	Yes
Bedroom 3	Plasterboard	F	3.0	Yes
Family	Plasterboard	F	3.0	Yes
Ceiling penetrati	ons			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

Certificate Number: **42YWMK7O11** Date of Certificate: **1 May 2020** ★S

★Star rating: 4.9



Additional information

Due to limitations with the window library, windows have been used in a generic manner. Please ignore the brand/make and refer to the U-Value and SHGC requirements.

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.

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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.

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Contact

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Certificate Number: E3LU3ZB47K Date of Certificate: 1 May 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

02, 113a Patterson Street Address:

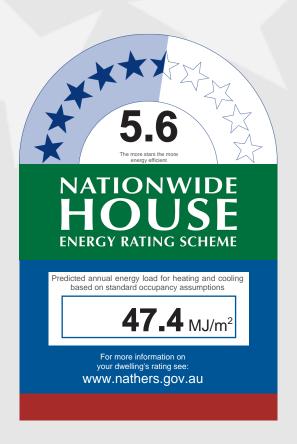
BYRON BAY Suburb:

State: **NSW** Postcode: 2481 Type: **New Home** NCC Class: Class 1a

Lot/DP **NatHERS**

1//717719 number: climate zone: 10

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: As indicated

As indicated

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 (m²)

Insulation:

92.6 Conditioned: Unconditioned: 1.6 19.9 Garage: TOTAL: 114.1

Annual thermal performance loads (MJ/m²)

10.6 Heating: Cooling: 36.8 TOTAL: 47.4

Plan documents

Plan ref/date: Job No. 1950 Prepared by: **Logan Architecture**

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=E3LU3ZB47K

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★Star rating: 5.6



windows type a	and performance	value						
Window ID	Window type	Window type						
A&L-003-01 A	Al Sliding Windo	ow SG 3CIr				6.15	0.78	
A&L-012-04 A	Al Sliding Door SG 4Clr						0.72	
Windows sched	dule							
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade	
A&L-003-01 A	06.18s	600	1800	WNW	Garage		No	
A&L-003-01 A	06.08s	600	800	SSW	Unconditioned 9		No	
A&L-003-01 A	24.08s	2400	800	WNW	Entry		No	
A&L-003-01 A	52.09	2700	900	SSW	Entry		No	
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No	
A&L-003-01 A	24.04a	2400	400	WNW	Kitchen/Living		No	
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No	
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No	
A&L-003-01 A	12.11s	1200	1100	SSW	Ensuite		No	
A&L-003-01 A	12.06	1200	600	SSW	WIR		No	
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase		No	

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

Type	Insulation	Insulation					
1 : Weatherboard - 90mm Weatherboard with R2.0	Glass fibre batt: R2.0 (R2.0)						
2 : Dividing - Dividing Wall RFL 60/60/60	Rockwool batt: R2.0 (R2.0);Rockwool batt: R2.0 (R2.0)						
External wall schedule							
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves		

Certificate Number: E3LU3ZB47K Date of Certificate: 1 May 2020

★Star rating: **5.6**



1: Weatherboard - 90mm Weatherboard with R2.0	8.3	SSW	Garage	Yes	No
1: Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	1.9	WNW	Garage	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	3.5	NNE	Garage	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Unconditioned 9	Yes	Yes
1: Weatherboard - 90mm Weatherboard with R2.0	2.8	WNW	Entry	Yes	Yes
1: Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.3	WNW	Entry	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	5.1	ESE	Entry	No	No
2 : Dividing - Dividing Wall RFL 60/60/60	18.4	ESE	Kitchen/Living	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	1.2	ESE	Kitchen/Living	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	13	NNE	Kitchen/Living	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	1.3	WNW	Kitchen/Living	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	8.6	WNW	Bedroom 1	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	10	NNE	Bedroom 1	No	Yes
2 : Dividing - Dividing Wall RFL 60/60/60	8.6	ESE	Bedroom 2	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 2	No	Yes
2 : Dividing - Dividing Wall RFL 60/60/60	6.5	ESE	Upstairs Bathroom	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	6.6	WNW	Ensuite	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	4.5	SSW	Ensuite	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	5.2	SSW	WIR	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with	4.8	WNW	Upstairs staircase	Yes	Yes

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★Star rating: **5.6**



10.1	SSW	Upstairs staircase	No	Yes
4.8	ESE	Upstairs staircase	Yes	Yes
Area (n	n²) Insula	ition		
94.9				
	4.8 Area (n	4.8 ESE Area (m²) Insula	4.8 ESE Upstairs staircase Area (m²) Insulation	4.8 ESE Upstairs staircase Yes Area (m²) Insulation

Floors						
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering	
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none	
Garage	FR5 - CSOG: Slab on Ground	18.8	Enclosed	R0.0	none	
Unconditioned 9	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles	
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - CSOG: Slab on Ground	5.3	Enclosed	R0.0	Tiles	
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles	
Bedroom 1	FR5 - Timber Lined	13.2	Enclosed	R0.0	Carpet	
Bedroom 2	FR5 - Timber Lined	12.3	Enclosed	R0.0	Carpet	
Upstairs Bathroom	FR5 - Timber Lined	6.1	Enclosed	R0.0	Tiles	
Ensuite	FR5 - Timber Lined	4.6	Enclosed	R0.0	Tiles	
WIR	FR5 - Timber Lined	5.2	Enclosed	R0.0	Carpet	
Upstairs staircase	FR5 - Timber Lined	0.1	Elevated	R0.0	Carpet	
Upstairs staircase	FR5 - Timber Lined	7.3	Enclosed	R0.0	Carpet	
Upstairs Hallway	FR5 - Timber Lined	4.8	Enclosed	R0.0	Carpet	

Ceiling type					
Location	Material	Added insulation	Roof space above		
Garage	Plasterboard	R3.0	Yes		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Unconditioned 9	FR5 - Timber Lined	R0.0	No		

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Building Features

Certificate Number: E3LU3ZB47K

Unconditioned 9	FR5 - Timber Lined		R0.0	No
Entry	FR5 - Timber Lined		R0.0	No
Kitchen/Living	Plasterboard	R3.0	Yes	
Kitchen/Living	FR5 - Timber Lined		R0.0	No
Kitchen/Living	FR5 - Timber Lined		R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No	
Kitchen/Living	FR5 - Timber Lined	R0.0	No	
Kitchen/Living	FR5 - Timber Lined	R0.0	No	
Bedroom 1	Plasterboard	R3.0	Yes	
Bedroom 2	Plasterboard	R3.0	Yes	
Upstairs Bathroom	Plasterboard	R3.0	Yes	
Ensuite	Plasterboard	R3.0	Yes	
WIR	Plasterboard		R3.0	Yes
Upstairs staircase	Plasterboard		R3.0	Yes
Upstairs Hallway	Plasterboard		R3.0	Yes
Ceiling penetration	ons			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

Certificate Number: E3LU3ZB47K Date of Certificate: 1 May 2020



Additional information

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Certificate Number: FU2I3D0DKA Date of Certificate: 1 May 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**

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

Overview

Dwelling details

Address: 05, 113a Patterson Street

Suburb: BYRON BAY

State: NSW Postcode: 2481
Type: New Home NCC Class: Class 1a

Lot/DP NatHERS

number: 1//717719 climate zone: 10

Exposure: suburban

4.9 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 56.3 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

Roof: As indicated

Floor: As indicated

Glazing: As indicated

As indicated

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 (m²)

Insulation:

Conditioned: 115.7 Unconditioned: 1.6 Garage: 37.5 TOTAL: 154.8

Annual thermal performance loads (MJ/m²)

Heating: 16.1 Cooling: 40.2

56.3

TOTAL:

Plan documents

Plan ref/date: Job No. 1950
Prepared by: Logan Architecture

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.

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



https://www.fr5.com.au/QRCodeLanding?PublicId=FU2I3D0DKA

^{*} 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: FU2I3D0DKA

Windows type a	and performance	value					
Window ID	Window type	Window type					
A&L-012-04 A	Al Sliding Door	SG 4Clr				6.09	0.72
A&L-003-01 A	Al Sliding Windo	ow SG 3Clr				6.15	0.78
TND-021-01 A	Trend Al Hinged	Door SG 4Clr T				6.03	0.61
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
A&L-012-04 A	21.24sd	2100	2400	NNE	Garage		No
A&L-003-01 A	06.08s	600	800	SSW	WC		No
A&L-003-01 A	24.08s	2400	800	WNW	Entry		No
A&L-003-01 A	52.09	2700	900	SSW	Entry		No
A&L-003-01 A	14.06	1400	600	ESE	Kitchen/Living		No
A&L-003-01 A	11.12s	1100	1200	ESE	Kitchen/Living		No
A&L-003-01 A	06.18s	600	1800	ESE	Kitchen/Living		No
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No
A&L-003-01 A	24.09s	2400	900	NNE	Kitchen/Living		No
A&L-003-01 A	24.11a	2400	1100	WNW	Kitchen/Living		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No
A&L-003-01 A	12.06s	1200	600	ESE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.09s	1200	900	SSW	Bathroom Upstair	S	No
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase)	No
A&L-003-01 A	12.08s	1200	800	ESE	Upstairs staircase	•	No
A&L-003-01 A	12.21s	1200	2100	SSW	Bedroom 3		No
TND-021-01 A	21.26fd	2100	2600	NNE	Family		No

ID	Mindow typo				
	Window type			U-value	SHGC
Roof window	and skylight schedule				
ID	Roof window/ skylight n	o. Area (m²)	Zone name	Outdoor shade	Indoor shade/ diffuser







External wall type					
Туре	Insulation				Wall wrap
1 : Dividing - Dividing Wall RFL 60/60/60	Rockwool b	oatt: R2.0 (R2	2.0);Rockwool batt: R2.0 (R2	.0)	No
2 : Weatherboard - 90mm Weatherboard with R2.0	nerboard with Glass fibre batt: R2.0 (R2.0)				
3 : FC Sheet - 90mm FC Sheet with R2.0	Glass fibre	batt: R2.0 (R	2.0)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : Dividing - Dividing Wall RFL 60/60/60	18.2	WNW	Garage	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	16.2	SSW	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	11.4	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	1.9	ESE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	WC	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.8	WNW	Entry	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.3	WNW	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	5.1	ESE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.4	ESE	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.7	SSW	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	9.2	ESE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	15.6	NNE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	3	WNW	Kitchen/Living	Yes	No
1 : Dividing - Dividing Wall RFL 60/60/60	6.8	WNW	Bedroom 2	No	No
2 : Weatherboard - 90mm Weatherboard with	8.4	NNE	Bedroom 2	No	Yes

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Building Features

3 : FC Sheet - 90mm FC Sheet with R2.0	8.3	ESE	Bedroom 1	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 1	No	Yes
3 : FC Sheet - 90mm FC Sheet with R2.0	6.9	ESE	Ensuite	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Bathroom Upstairs	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	6.1	SSW	Bathroom Upstairs	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Upstairs staircase	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	SSW	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	ESE	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Little room	Yes	Yes
1 : Dividing - Dividing Wall RFL 60/60/60	8.9	WNW	Bedroom 3	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	8.8	SSW	Bedroom 3	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	9.2	NNE	Family	No	Yes

Type	rea (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	24.6	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	17.3	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	19	Enclosed	R0.0	none
WC	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	8.7	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - Timber Lined	13	Enclosed	R0.0	Carpet

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★Star rating: 4.9



Ensuite	FR5 - Timber Lined	3.9	Enclosed	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	2.2	Elevated	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	4	Enclosed	R0.0	Tiles
Upstairs staircase	FR5 - Timber Lined	0.1	Elevated	R0.0	Carpet
Upstairs staircase	FR5 - Timber Lined	7.3	Enclosed	R0.0	Carpet
WIR	FR5 - Timber Lined	3.8	Enclosed	R0.0	Carpet
Little room	FR5 - Timber Lined	0.9	Elevated	R0.0	Carpet
Little room	FR5 - Timber Lined	1.5	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Family	FR5 - Timber Lined	17.4	Enclosed	R0.0	Carpet

Ceiling type	Material	Added inculation	Poof apoor chave
Location		Added insulation	Roof space above
Garage	Plasterboard	R3.0	Yes
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
WC	FR5 - Timber Lined	R0.0	No
WC	FR5 - Timber Lined	R0.0	No
Entry	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	Plasterboard	R3.0	Yes
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Bedroom 2	Plasterboard	R3.0	Yes
Bedroom 1	Plasterboard	R3.0	Yes
Ensuite	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes

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Certificate Number: FU2I3D0DKA

Date of Certificate: 1 May 2020

★Star rating: 4.9

Upstairs staircase	Plasterboard	F	23.0	Yes	
WIR	Plasterboard	F	R3.0	Yes	
Little room	Plasterboard	F	R3.0	Yes	
Little room	Plasterboard	F	R3.0	Yes	
Bedroom 3	Plasterboard	F	R3.0	Yes	
Family	Plasterboard	<u>F</u>	R3.0	Yes	
Ceiling penetrati	ons				
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed	
Ceiling fans					
Location	Number Diameter (mm)				

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

Certificate Number: FU2I3D0DKA Date of Certificate: 1 May 2020



Additional information

Due to limitations with the window library, windows have been used in a generic manner. Please ignore the brand/make and refer to the U-Value and SHGC requirements.

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: 4.9

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

For more information on the Nationwide House Energy Rating Scheme (NatHERS), visit www.nathers.gov.au For more information on energy efficient design and insulation visit www.yourhome.gov.au

Certificate Number: INIVX57VVT Date of Certificate: 1 May 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

03, 113a Patterson Street Address:

BYRON BAY Suburb:

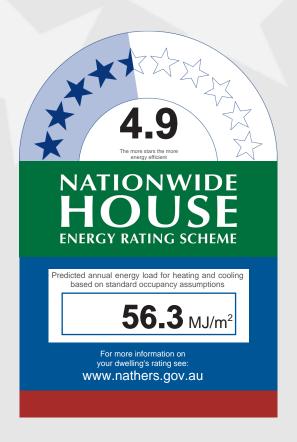
NSW State: Postcode: 2481 Type: **New Home** NCC Class: Class 1a

NatHFRS

Lot/DP

1//717719 number: climate zone: 10

Exposure: suburban



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: As indicated

As indicated

Net floor area (m²)

Insulation:

Conditioned: 115.7 Unconditioned: 1.6 37.5 Garage: TOTAL: 154.8

Annual thermal performance loads

(MJ/m²)

16.1 Heating: Cooling: 40.2 TOTAL: 56.3

Plan documents

Plan ref/date: Job No. 1950 Prepared by: **Logan Architecture**

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.



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Building Features

Certificate Number: INIVX57VVT

Windows type a	and performance	value					
Window ID	Window type						SHGC
A&L-012-04 A	Al Sliding Door S	G 4Clr				6.09	0.72
A&L-003-01 A	Al Sliding Windo	Al Sliding Window SG 3Clr					0.78
TND-021-01 A	Trend Al Hinged	Trend Al Hinged Door SG 4Clr T					0.61
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
A&L-012-04 A	21.24sd	2100	2400	NNE	Garage		No
A&L-003-01 A	06.08s	600	800	SSW	WC		No
A&L-003-01 A	24.08s	2400	800	WNW	Entry		No
A&L-003-01 A	52.09	2700	900	SSW	Entry		No
A&L-003-01 A	14.06	1400	600	ESE	Kitchen/Living		No
A&L-003-01 A	11.12s	1100	1200	ESE	Kitchen/Living		No
A&L-003-01 A	06.18s	600	1800	ESE	Kitchen/Living		No
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No
A&L-003-01 A	24.09s	2400	900	NNE	Kitchen/Living		No
A&L-003-01 A	24.11a	2400	1100	WNW	Kitchen/Living		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No
A&L-003-01 A	12.06s	1200	600	ESE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.08s	1200	800	ESE	Ensuite		No
A&L-003-01 A	12.09s	1200	900	SSW	Bathroom Upstairs		No
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase		No
A&L-003-01 A	12.08s	1200	800	ESE	Upstairs staircase		No
A&L-003-01 A	12.21s	1200	2100	SSW	Bedroom 3		No
TND-021-01 A	21.26fd	2100	2600	NNE	Family No		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	







External wall type					
Туре	Insulation				Wall wrap
1 : Dividing - Dividing Wall RFL 60/60/60	Rockwool I	Rockwool batt: R2.0 (R2.0);Rockwool batt: R2.0 (R2.0)			
2 : Weatherboard - 90mm Weatherboard with	Ologo fibro	h-#- D2 0 (D	2.0)		Ne
R2.0 3 : FC Sheet - 90mm FC Sheet with R2.0		batt: R2.0 (R	•		No No
3 . FC Sheet - 90mm FC Sheet with K2.0	Glass libre	Dall. KZ.U (K	2.0)		INU
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : Dividing - Dividing Wall RFL 60/60/60	18.2	WNW	Garage	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	16.2	SSW	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	11.4	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	1.9	ESE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	WC	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.8	WNW	Entry	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.3	WNW	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	5.1	ESE	Entry	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.4	ESE	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	2.7	SSW	Kitchen/Living	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	9.2	ESE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	15.6	NNE	Kitchen/Living	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	3	WNW	Kitchen/Living	Yes	No
1 : Dividing - Dividing Wall RFL 60/60/60	6.8	WNW	Bedroom 2	No	No
2 : Weatherboard - 90mm Weatherboard with	8.4	NNE	Bedroom 2	No	Yes

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★Star rating: 4.9



3 : FC Sheet - 90mm FC Sheet with R2.0	8.3	ESE	Bedroom 1	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 1	No	Yes
3 : FC Sheet - 90mm FC Sheet with R2.0	6.9	ESE	Ensuite	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Bathroom Upstairs	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	6.1	SSW	Bathroom Upstairs	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.5	WNW	Upstairs staircase	Yes	No
2 : Weatherboard - 90mm Weatherboard with R2.0	10.1	SSW	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	4.8	ESE	Upstairs staircase	No	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Little room	Yes	Yes
1 : Dividing - Dividing Wall RFL 60/60/60	8.9	WNW	Bedroom 3	No	No
2 : Weatherboard - 90mm Weatherboard with R2.0	8.8	SSW	Bedroom 3	Yes	Yes
2 : Weatherboard - 90mm Weatherboard with R2.0	9.2	NNE	Family	No	Yes
Internal wall type					
Туре	Area	(m²) Insulat	ion		
1 : FR5 - Internal Plasterboard Stud Wall	 124.6				

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	17.3	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	19	Enclosed	R0.0	none
WC	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	8.7	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles
Bedroom 2	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Bedroom 1	FR5 - Timber Lined	13	Enclosed	R0.0	Carpet

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Ensuite	FR5 - Timber Lined	3.9	Enclosed	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	2.2	Elevated	R0.0	Tiles
Bathroom Upstairs	FR5 - Timber Lined	4	Enclosed	R0.0	Tiles
Upstairs staircase	FR5 - Timber Lined	0.1	Elevated	R0.0	Carpet
Upstairs staircase	FR5 - Timber Lined	7.3	Enclosed	R0.0	Carpet
WIR	FR5 - Timber Lined	3.8	Enclosed	R0.0	Carpet
Little room	FR5 - Timber Lined	0.9	Elevated	R0.0	Carpet
Little room	FR5 - Timber Lined	1.5	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - Timber Lined	9.7	Enclosed	R0.0	Carpet
Family	FR5 - Timber Lined	17.4	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material	Added insulation	Roof space above		
Garage	Plasterboard	R3.0	Yes		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
WC	FR5 - Timber Lined	R0.0	No		
WC	FR5 - Timber Lined	R0.0	No		
Entry	FR5 - Timber Lined	R0.0	No		
Kitchen/Living	FR5 - Timber Lined	R0.0	No		
Kitchen/Living	Plasterboard	R3.0	Yes		
Kitchen/Living	FR5 - Timber Lined	R0.0	No		
Kitchen/Living	FR5 - Timber Lined	R0.0	No		
Kitchen/Living	FR5 - Timber Lined	R0.0	No		
Kitchen/Living	FR5 - Timber Lined	R0.0	No		
Bedroom 2	Plasterboard	R3.0	Yes		
Bedroom 1	Plasterboard	R3.0	Yes		
Ensuite	Plasterboard	R3.0	Yes		
Bathroom Upstairs	Plasterboard	R3.0	Yes		
Bathroom Upstairs	Plasterboard	R3.0	Yes		

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Building Features

Certificate Number: INIVX57VVT

Upstairs staircase	Plasterboard	F	R3.0	Yes
WIR	Plasterboard	F	R3.0	Yes
Little room	Plasterboard	F	R3.0	Yes
Little room	Plasterboard	F	R3.0	Yes
Bedroom 3	Plasterboard	F	R3.0	Yes
Family	Plasterboard	<u>F</u>	R3.0	Yes
Ceiling penetrati	ons			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

Certificate Number: INIVX57VVT Date of Certificate: 1 May 2020

★Star rating: 4.9



Additional information

Due to limitations with the window library, windows have been used in a generic manner. Please ignore the brand/make and refer to the U-Value and SHGC requirements.

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.

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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.

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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.

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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

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Certificate Number: Y7LLFYVA2U Date of Certificate: 1 May 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

01, 113a Patterson Street Address:

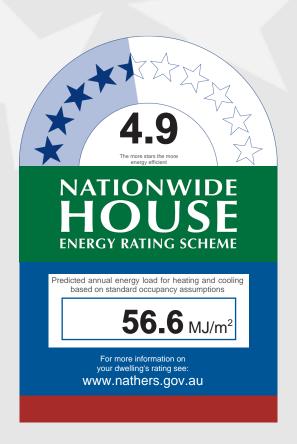
Suburb: **BYRON BAY**

State: **NSW** Postcode: 2481 Type: **New Home** NCC Class: Class 1a

Lot/DP **NatHFRS**

1//717719 number: climate zone: 10

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

Insulation: Roof: As indicated

Floor: As indicated

Glazing: As indicated

As indicated

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 (m²)

Conditioned: 143.3 Unconditioned: 4.6 37.8 Garage: TOTAL: 185.7

Annual thermal performance loads

(MJ/m²)

16.9 Heating: Cooling: 39.7 TOTAL: 56.6

Plan documents

Plan ref/date: Job No. 1950 Prepared by: **Logan Architecture**

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=Y7LLFYVA2U

^{*} 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: Y7LLFYVA2U Date of Certificate: 1 May 2020

★Star rating: 4.9



Window ID	Window type					U-value	SHGC
A&L-003-01 A	Al Sliding Window SG 3Clr						0.78
A&L-012-04 A	Al Sliding Door	SG 4Clr				6.09	0.72
Windows schee	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shad
A&L-003-01 A	52.09f	2700	900	SSW	Entry		No
A&L-003-01 A	12.15s	1200	1500	SSW	Study		No
A&L-003-01 A	12.09s	1200	900	ESE	Study		No
A&L-012-04 A	21.24sd	2100	2400	NNE	Garage		No
A&L-003-01 A	24.11s	2400	1100	WNW	Kitchen/Living		No
A&L-003-01 A	24.11s	2400	1100	WNW	Kitchen/Living		No
A&L-003-01 A	15.12s	1500	1200	WNW	Kitchen/Living		No
A&L-003-01 A	24.06	2400	600	NNE	Kitchen/Living		No
A&L-012-04 A	24.30sd	2400	3000	NNE	Kitchen/Living		No
A&L-003-01 A	24.09s	2400	900	NNE	Kitchen/Living		No
A&L-003-01 A	12.06s	1200	600	ESE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No
A&L-003-01 A	12.21s	1200	2100	SSW	Bedroom 3		No
A&L-003-01 A	12.15s	1200	1500	SSW	Ensuite		No
A&L-003-01 A	12.09s	1200	900	ESE	Ensuite		No
A&L-003-01 A	12.07s	1200	700	NNE	Bath		No
A&L-003-01 A	12.21s	1200	2100	NNE	Family		No
A&L-003-01 A	12.11s	1200	1100	WNW	Family		No
A&L-012-04 A	21.24b	2100	2400	WNW	Family		No
A&L-003-01 A	12.09s	1200	900	WNW	Family		No
A&L-003-01 A	52.09f	2500	900	SSW	Family		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

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Certificate Number: Y7LLFYVA2U Date of Certificate: 1 May 2020

★Star rating: 4.9



Туре	Insulation				Wall wrap	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	Rockwool I	Rockwool batt: R2.5 (R2.5)				
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	4.4	WNW	Entry	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	3.7	WNW	Entry	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	9.7	SSW	Entry	No	No	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	8	SSW	Study	No No	No	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	5.4	ESE	Study	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	16.4	SSW	Garage	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	16.4	ESE	Garage	No	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	11.6	NNE	Garage	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	1.6	ESE	Garage	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	4.8	NNE	Garage	Yes	No	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	9.2	WNW	Kitchen/Living	No	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	2.3	SSW	Kitchen/Living	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	7.3	WNW	Kitchen/Living	Yes	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	1.6	ESE	Kitchen/Living	Yes	No	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	20.5	NNE	Kitchen/Living	No	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	1	SSW	Bedroom 1	Yes	No	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	10.1	ESE	Bedroom 1	No	Yes	
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	9.1	NNE	Bedroom 1	No	Yes	

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Certificate Number: Y7LLFYVA2U Date of Certificate: 1 May 2020

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Building Features

1 : FC Sheet - 90mm FC Sheet with R2.5					.,
(Advanced)	10.6	NNE	Bedroom 2	No	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	10.6	SSW	Bedroom 3	Yes	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	5.3	SSW	Walk in Robe	Yes	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	6.8	SSW	Ensuite	Yes	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	7.6	ESE	Ensuite	No	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	4	NNE	Bath	No	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	9.2	NNE	Family	No	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	20.5	WNW	Family	No	Yes
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	9.2	SSW	Family	No	No
1 : FC Sheet - 90mm FC Sheet with R2.5 (Advanced)	2.5	ESE	Family	Yes	No No

Internal wall type

Туре	Area (m²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	111.4	
2 : Internal - Plasterboard Stud Wall (w/ R2.0)	35.3	Glass fibre batt: R2.0 (R2.0)

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Entry	FR5 - CSOG: Slab on Ground	11	Enclosed	R0.0	Tiles
Study	FR5 - CSOG: Slab on Ground	2.8	Enclosed	R0.0	Carpet
Study	FR5 - CSOG: Slab on Ground	6.2	Enclosed	R0.0	Carpet
Garage	FR5 - CSOG: Slab on Ground	36.9	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	0.9	Enclosed	R0.0	none
WC	FR5 - CSOG: Slab on Ground	1.9	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	29.1	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	10.4	Enclosed	R0.0	Tiles
Small Hallway	FR5 - CSOG: Slab on Ground	2	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - Timber Lined	1.4	Elevated	R0.0	Carpet

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★Star rating: 4.9

Bedroom 1	FR5 - Timber Lined	13.2	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - Timber Lined	12	Enclosed	R0.0	Carpet
Bedroom 3	FR5 - Timber Lined	1	Elevated	R0.0	Carpet
Bedroom 3	FR5 - Timber Lined	11.4	Enclosed	R0.0	Carpet
Walk in Robe	FR5 - Timber Lined	4.7	Enclosed	R0.0	Carpet
Walk in Robe	FR5 - Timber Lined	1.9	Elevated	R0.0	Carpet
Ensuite	FR5 - Timber Lined	2.5	Elevated	R0.0	Tiles
Ensuite	FR5 - Timber Lined	5	Enclosed	R0.0	Tiles
Bath	FR5 - Timber Lined	4.6	Enclosed	R0.0	Tiles
Day 7	FR5 - Timber Lined	5.3	Enclosed	R0.0	Carpet
Family	FR5 - Timber Lined	29.2	Enclosed	R0.0	Carpet

Ceiling	type
---------	------

Location	Material	Added insulation	Roof space above
Entry	FR5 - Timber Lined	R0.0	No
Study	Plasterboard	R3.0	Yes
Study	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	FR5 - Timber Lined	R0.0	No
Garage	Plasterboard	R3.0	Yes
WC	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	FR5 - Timber Lined	R0.0	No
Kitchen/Living	Plasterboard	R3.0	Yes
Small Hallway	FR5 - Timber Lined	R0.0	No
Bedroom 1	Plasterboard	R3.0	Yes
Bedroom 1	Plasterboard	R3.0	Yes
Bedroom 2	Plasterboard	R3.0	Yes

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Certificate Number: Y7LLFYVA2U Date of Certificate: 1 May 2020

★Star rating: 4.9

0.0

Building Features

Framed:Flat - Flat Framed (Metal Deck)

Bedroom 3	Plasterboard	F	R3.0	Yes
Bedroom 3	Plasterboard		R3.0	Yes
Walk in Robe	Plasterboard		R3.0	Yes
Walk in Robe	Plasterboard	R3.0	Yes	
Ensuite	Plasterboard	F	R3.0	Yes
Ensuite	Plasterboard	F	R3.0	Yes
Bath	Plasterboard		R3.0	Yes
Day 7	Plasterboard		R3.0	Yes
Family	Plasterboard		R3.0	No
Ceiling penetrat	tions			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

medium

Certificate Number: Y7LLFYVA2U Date of Certificate: 1 May 2020 ★Star rating: 4.9



Additional information

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Contact

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Certificate Number: **Z9RA1X9KFU** Date of Certificate: **1 May 2020** ★Star rating: **5.1**



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: 06, 113a Patterson Street

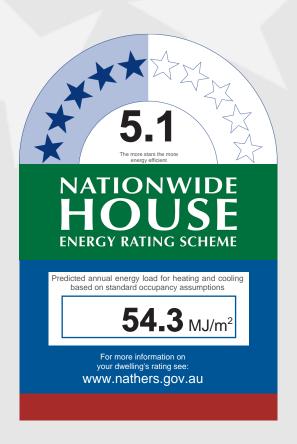
Suburb: BYRON BAY

State: NSW Postcode: 2481
Type: New Home NCC Class: Class 1a

Lot/DP NatHERS

number: 1//717719 climate zone: 10

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: As indicated

As indicated

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 (m²)

Insulation:

Conditioned: 115.7 Unconditioned: 1.6 Garage: 37.5 TOTAL: 154.8

Annual thermal performance loads (M.I/m²)

(MJ/m²)

Heating: 14.7 Cooling: 39.6 TOTAL: 54.3

Plan documents

Plan ref/date: Job No. 1950
Prepared by: Logan Architecture

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=Z9RA1X9KFU

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Windows type a	and performance	value							
Window ID	Window type					U-value	SHGC		
A&L-012-04 A	Al Sliding Door	Al Sliding Door SG 4Clr							
A&L-003-01 A	Al Sliding Windo	Al Sliding Window SG 3Clr							
TND-021-01 A	Trend Al Hinged	d Door SG 4Clr T				6.03	0.61		
Windows sched	dule								
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade		
A&L-012-04 A	21.24sd	2100	2400	NNE	Garage		No		
A&L-003-01 A	06.08s	600	780	SSW	WC		No		
A&L-003-01 A	52.09	2700	900	SSW	Entry		No		
A&L-003-01 A	24.08s	2400	782	ESE	Entry		No		
A&L-003-01 A	24.11a	2400	1094	ESE	Kitchen/Living		No		
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No		
A&L-003-01 A	24.09s	2400	900	NNE	Kitchen/Living		No		
A&L-003-01 A	24.08	2400	800	SSW	Kitchen/Living		No		
A&L-003-01 A	11.12s	1100	1200	WNW	Kitchen/Living		No		
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No		
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No		
A&L-003-01 A	12.06s	1200	600	WNW	Bedroom 1		No		
A&L-003-01 A	12.08s	1200	800	WNW	Ensuite		No		
A&L-003-01 A	12.08s	1200	800	WNW	Ensuite		No		
A&L-003-01 A	12.09s	1200	900	SSW	Bathroom Upstair	s	No		
A&L-003-01 A	12.08s	1200	800	WNW	Upstairs staircase	9	No		
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase	9	No		
A&L-003-01 A	12.21s	1200	2100	SSW	Bedroom 3		No		
TND-021-01 A	21.26fd	2100	2600	NNE	Family		No		

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

Certificate Number: **Z9RA1X9KFU** Date of Certificate: **1 May 2020**

★Star rating: **5.1**



External wall type					
Туре	Insulation				Wall wrap
1 : Weatherboard - 90mm Weatherboard with R2.0	Glass fibre	batt: R2.0 (R	2.0)		No
2 : Dividing - Brick Cavity Dividing wall	Glass fibre	batt: R1.0 (R	1.0)		No
3 : FC Sheet - 90mm FC Sheet with R2.0	Glass fibre	batt: R2.0 (R	2.0)		No
External wall schedule					
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves
1 : Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	1.9	WNW	Garage	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	11.4	NNE	Garage	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	16.2	SSW	Garage	No	No
2 : Dividing - Brick Cavity Dividing wall	18.2	ESE	Garage	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	WC	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	5.1	WNW	Entry	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.3	ESE	Entry	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.8	ESE	Entry	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	3	ESE	Kitchen/Living	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	15.6	NNE	Kitchen/Living	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	9.2	WNW	Kitchen/Living	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	2.7	SSW	Kitchen/Living	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	10.4	WNW	Kitchen/Living	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	8.4	NNE	Bedroom 2	No	Yes

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★Star rating: 5.1



Building Features

2 : Dividing - Brick Cavity Dividing wall	6.8	ESE	Bedroom 2	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 1	No	Yes
3 : FC Sheet - 90mm FC Sheet with R2.0	8.3	WNW	Bedroom 1	No	Yes
3 : FC Sheet - 90mm FC Sheet with R2.0	6.9	WNW	Ensuite	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	6.1	SSW	Bathroom Upstairs	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	2.5	ESE	Bathroom Upstairs	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	4.8	WNW	Upstairs staircase	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	10.1	SSW	Upstairs staircase	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	2.5	ESE	Upstairs staircase	Yes	No
1 : Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Little room	Yes	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	8.8	SSW	Bedroom 3	Yes	Yes
2 : Dividing - Brick Cavity Dividing wall	8.9	ESE	Bedroom 3	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	9.2	NNE	Family	No	Yes

Туре	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	124.6	

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	17.3	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	19	Enclosed	R0.0	none
WC	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	8.7	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles
Bedroom 2	TIMB - DS - Timber Lined (DS Wrap)	9.7	Enclosed	R0.0	Carpet
Bedroom 1	TIMB - DS - Timber Lined (DS Wrap)	13	Enclosed	R0.0	Carpet

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Certificate Number: **Z9RA1X9KFU** Date of Certificate: **1 May 2020**

★Star rating: **5.1**



Ensuite	TIMB - DS - Timber Lined (DS Wrap)	3.9	Enclosed	R0.0	Tiles
Bathroom Upstairs	TIMB - DS - Timber Lined (DS Wrap)	2.2	Elevated	R0.0	Tiles
Bathroom Upstairs	TIMB - DS - Timber Lined (DS Wrap)	4	Enclosed	R0.0	Tiles
Upstairs staircase	TIMB - DS - Timber Lined (DS Wrap)	0.1	Elevated	R0.0	Carpet
Upstairs staircase	TIMB - DS - Timber Lined (DS Wrap)	7.3	Enclosed	R0.0	Carpet
WIR	TIMB - DS - Timber Lined (DS Wrap)	3.8	Enclosed	R0.0	Carpet
Little room	TIMB - DS - Timber Lined (DS Wrap)	0.9	Elevated	R0.0	Carpet
Little room	TIMB - DS - Timber Lined (DS Wrap)	1.5	Enclosed	R0.0	Carpet
Bedroom 3	TIMB - DS - Timber Lined (DS Wrap)	9.7	Enclosed	R0.0	Carpet
Family	TIMB - DS - Timber Lined (DS Wrap)	17.4	Enclosed	R0.0	Carpet

Location	Material	Added insulation	Roof space above
Garage	Plasterboard	R3.0	Yes
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Garage	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
WC	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
WC	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Entry	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Kitchen/Living	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Kitchen/Living	Plasterboard	R3.0	Yes
Kitchen/Living	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Kitchen/Living	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Kitchen/Living	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Kitchen/Living	TIMB - DS - Timber Lined (DS Wrap)	R0.0	No
Bedroom 2	Plasterboard	R3.0	Yes
Bedroom 1	Plasterboard	R3.0	Yes
Ensuite	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes
Bathroom Upstairs	Plasterboard	R3.0	Yes

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Building Features

Certificate Number: Z9RA1X9KFU

Upstairs staircase	Plasterboard	1	R3.0	Yes
WIR	Plasterboard	-	R3.0	Yes
Little room	Plasterboard		R3.0	Yes
Little room	Plasterboard	1	R3.0	Yes
Bedroom 3	Plasterboard	1	R3.0	Yes
Family	Plasterboard		R3.0	Yes
Ceiling penetration	ons			
Location	Number Type	Width (mm)	Length (mm)	Seal/ unsealed
Ceiling fans				
Location	Number Diameter (mm)			

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium
Cont:Attic-Continuous	0.0	light

Certificate Number: **Z9RA1X9KFU** Date of Certificate: **1 May 2020** ★Star rating: **5.1**



Additional information

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Explanatory notes

About this report

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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).

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Contact

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Certificate Number: **ZS4Z7XRC2G** Date of Certificate: **1 May 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**

of interest: the building

Software: FirstRate5: 5.2.11 (3.13)

AAO: BDAV

Overview

Dwelling details

Address: 04, 113a Patterson Street

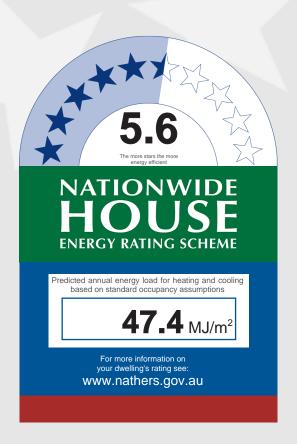
Suburb: BYRON BAY

State: NSW Postcode: 2481
Type: New Home NCC Class: Class 1a

Lot/DP NatHERS

number: 1//717719 climate zone: 10

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: As indicated

As indicated

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 (m²)

Insulation:

Conditioned: 92.6
Unconditioned: 1.6
Garage: 19.9
TOTAL: 114.1

Annual thermal performance loads (M.I/m²)

(MJ/m²)

Heating: 10.6 Cooling: 36.8 TOTAL: 47.4

Plan documents

Plan ref/date: Job No. 1950
Prepared by: Logan Architecture

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=ZS4Z7XRC2G

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★Star rating: 5.6



Window ID	Window type					U-value	SHGC
A&L-003-01 A	Al Sliding Windo	Al Sliding Window SG 3Clr					
A&L-012-04 A	Al Sliding Door	6.09	0.72				
Windows sched	dule						
Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name		Outdoor shade
A&L-003-01 A	06.18s	600	1800	WNW	Garage		No
A&L-003-01 A	06.08s	600	800	SSW	Unconditioned 9		No
A&L-003-01 A	24.08s	2400	800	WNW	Entry		No
A&L-003-01 A	52.09	2700	900	SSW	Entry		No
A&L-012-04 A	24.38sd	2400	3800	NNE	Kitchen/Living		No
A&L-003-01 A	24.04a	2400	400	WNW	Kitchen/Living		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 1		No
A&L-003-01 A	12.21s	1200	2100	NNE	Bedroom 2		No
A&L-003-01 A	12.11s	1200	1100	SSW	Ensuite		No
A&L-003-01 A	12.06	1200	600	SSW	WIR		No
A&L-003-01 A	52.09	2500	900	SSW	Upstairs staircase		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	Insulation				
1 : Weatherboard - 90mm Weatherboard with R2.0	Glass fibre batt: R2.0 (R2.0) Rockwool batt: R2.0 (R2.0);Rockwool batt: R2.0 (R2.0)				No	
2 : Dividing - Dividing Wall RFL 60/60/60					No	
External wall schedule						
Wall type	Area (m²)	Orientation	Zone name	Fixed shade	Eaves	
1 : Weatherboard - 90mm Weatherboard with		WNW	Garage	No	No	

Certificate Number: **ZS4Z7XRC2G** Date of Certificate: **1 May 2020**

★Star rating: 5.6



I: Weatherboard - 90mm Weatherboard with R2.0	8.3	SSW	Garage	Yes	No
I: Weatherboard - 90mm Weatherboard with R2.0	4.8	NNE	Garage	No	No
1: Weatherboard - 90mm Weatherboard with R2.0	1.9	WNW	Garage	Yes	No
1: Weatherboard - 90mm Weatherboard with R2.0	3.5	NNE	Garage	Yes	No No
: Weatherboard - 90mm Weatherboard with R2.0	2.4	SSW	Unconditioned 9	Yes	Yes
I: Weatherboard - 90mm Weatherboard with R2.0	2.8	WNW	Entry	Yes	Yes
: Weatherboard - 90mm Weatherboard with R2.0	0.4	NNE	Entry	Yes	No
: Weatherboard - 90mm Weatherboard with R2.0	2.3	WNW	Entry	Yes	No
: Weatherboard - 90mm Weatherboard with R2.0	10.7	SSW	Entry	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	5.1	ESE	Entry	No	No
2 : Dividing - Dividing Wall RFL 60/60/60	18.4	ESE	Kitchen/Living	No	No
: Weatherboard - 90mm Weatherboard with R2.0	1.2	ESE	Kitchen/Living	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	13	NNE	Kitchen/Living	No	No
1 : Weatherboard - 90mm Weatherboard with R2.0	1.3	WNW	Kitchen/Living	Yes	No
1: Weatherboard - 90mm Weatherboard with R2.0	8.6	WNW	Bedroom 1	No	Yes
I: Weatherboard - 90mm Weatherboard with R2.0	10	NNE	Bedroom 1	No	Yes
2 : Dividing - Dividing Wall RFL 60/60/60	8.6	ESE	Bedroom 2	No	No
I : Weatherboard - 90mm Weatherboard with R2.0	10.1	NNE	Bedroom 2	No	Yes
2 : Dividing - Dividing Wall RFL 60/60/60	6.5	ESE	Upstairs Bathroom	No No	No No
I : Weatherboard - 90mm Weatherboard with R2.0	6.6	WNW	Ensuite	No	Yes
I : Weatherboard - 90mm Weatherboard with R2.0	4.5	SSW	Ensuite	Yes	Yes
I : Weatherboard - 90mm Weatherboard with R2.0	5.2	SSW	WIR	Yes	Yes
I : Weatherboard - 90mm Weatherboard with	4.8	WNW	Upstairs staircase	Yes	Yes

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★Star rating: 5.6



R2.0					
1 : Weatherboard - 90mm Weatherboard with					
R2.0	10.1	SSW	Upstairs staircase	No	Yes
1 : Weatherboard - 90mm Weatherboard with R2.0	4.8	ESE	Upstairs staircase	Yes	Yes
Internal wall type					
Туре	Area (r	m²) Insula	tion		
1 : FR5 - Internal Plasterboard Stud Wall	94.9				

Floors					
Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Garage	FR5 - CSOG: Slab on Ground	1.1	Enclosed	R0.0	none
Garage	FR5 - CSOG: Slab on Ground	18.8	Enclosed	R0.0	none
Unconditioned 9	FR5 - CSOG: Slab on Ground	1.6	Enclosed	R0.0	Tiles
Entry	FR5 - CSOG: Slab on Ground	7.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	5.3	Enclosed	R0.0	Tiles
Kitchen/Living	FR5 - CSOG: Slab on Ground	27.7	Enclosed	R0.0	Tiles
Bedroom 1	FR5 - Timber Lined	13.2	Enclosed	R0.0	Carpet
Bedroom 2	FR5 - Timber Lined	12.3	Enclosed	R0.0	Carpet
Upstairs Bathroom	FR5 - Timber Lined	6.1	Enclosed	R0.0	Tiles
Ensuite	FR5 - Timber Lined	4.6	Enclosed	R0.0	Tiles
WIR	FR5 - Timber Lined	5.2	Enclosed	R0.0	Carpet
Upstairs staircase	FR5 - Timber Lined	0.1	Elevated	R0.0	Carpet
Upstairs staircase	FR5 - Timber Lined	7.3	Enclosed	R0.0	Carpet
Upstairs Hallway	FR5 - Timber Lined	4.8	Enclosed	R0.0	Carpet

Ceiling type					
Location	Material	Added insulation	Roof space above		
Garage	Plasterboard	R3.0	Yes		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Garage	FR5 - Timber Lined	R0.0	No		
Unconditioned 9	FR5 - Timber Lined	R0.0	No		

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Certificate Number: ZS4Z7XRC2G

★Star rating: 5.6

Unconditioned 9	FR5 - Timber Lined		R	RO.0	No
Entry	FR5 - Timber Lined		R	R0.0	No
Kitchen/Living	Plasterboard		R	R3.0	Yes
Kitchen/Living	FR5 - Timber Lined		R	R0.0	No
Kitchen/Living	FR5 - Timber Lined		R	R0.0	No
Kitchen/Living	FR5 - Timber Lined		R	R0.0	No
Kitchen/Living	FR5 - Timber Lined		R	R0.0	No
Kitchen/Living	FR5 - Timber Lined			RO.0	No
Bedroom 1	Plasterboard		R	R3.0	Yes
Bedroom 2	Plasterboard		R	R3.0	Yes
Upstairs Bathroom	Plasterboard		R	R3.0	Yes
Ensuite	Plasterboard		R	R3.0	Yes
WIR	Plasterboard	Plasterboard		R3.0	Yes
Upstairs staircase	Plasterboard		R	R3.0	Yes
Upstairs Hallway	Plasterboard		R	R3.0	Yes
Ceiling penetration	ons				
Location	Number Type	W	idth (mm)	Length (mm)	Seal/ unsealed
Ceiling fans					
Location	Number Diameter (mm)				

Roof type		
Material	Added insulation	Roof colour
Cont:Attic-Continuous	0.0	medium

Certificate Number: **ZS4Z7XRC2G** Date of Certificate: **1 May 2020** ★Star rating: **5.6**



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