

BASIX REPORT NUMBER	1098782S
ISSUE DATE	12/05/20
APPLICANT	KITOME PTY LTD
POSTAL ADDRESS	PO BOX 7196 PENRITH SOUTH LPO NSW 2750
EMAIL ADDRESS	mkealy@kithome.com.au
PHONE NUMBER	0247241900
FAX NUMBER	0247355655
JOB NO	N20809
CLIENT	M & L TOZER
SITE ADDRESS	15 CREIGHTON PDE NORTH NAROOMA NSW 2546
COUNCIL	EUROBODALLA
LOT NO/DP	97/1072514
DRWG JOB NO	4015-467 ISSUE 'A' WD 01-22 DATED 24/04/20
BLDG CLASS	1A
BASIX SCORE/TARGET	
WATER	40 / TARGET 40
ENERGY	50 / TARGET 50
THERMAL COMFORT	PASS/PASS
CONSTRUCTION-THERMAL	
FLOOR	FRAMED. INSULATION R1.5. FLOOR FINISHES: CARPET, TILES, LAMINATE
WALLS	FRAMED-WEATHERBOARDS, FOIL+BATTS R2.5, COLOUR LIGHT
CEILING	INSULATION BATTS R4.5
ROOF	COLORBOND STEEL, FOIL INSULATION, COLOUR LIGHT
GLAZING WINDOWS	SINGLE GLAZED CLEAR , ALUMINIUM FRAMES, FOR U AND SHGC INDICES SEE NATHERS REPORT TOP OF PAGE 2, ALSO SEE ARCH SCHEDULE
CEILING FANS	N/A
ROOFLIGHTS	N/A
ROOF VENT	N/A
DOWNLIGHTS LED RECESSED	MUST BE TESTED TO AS/NZS60598.2.2.2016, RATED 'IC-4', NOT VENTED, MUST BE SAFE INSTALLED UNDER INSULATION
ASSESSOR	A PEART VIC/BDAV/13/1511
ASSESSOR JOB	20054 KITOME L97
NATHERS CERT No	4803425-01
SIGNED	
ASSESSOR COMPANY	APEART BUILDING DESIGN
NOTE: 'N/A' DENOTES NOT APPLICABLE	

Single Dwelling

Certificate number: 1098782S

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 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

Secretary

Date of issue: Tuesday, 12 May 2020

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



Planning,
Industry &
Environment

Project summary	
Project name	20054 TOZER L97 N20809
Street address	15 CREIGHTON Parade NORTH NAROOMA 2546
Local Government Area	Eurobodalla Shire Council
Plan type and plan number	deposited 1072514
Lot no.	97
Section no.	-
Project type	separate dwelling house
No. of bedrooms	3
Project score	
Water	✓ 40 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 50 Target 50

Certificate Prepared by

Name / Company Name: APearl Building Design

ABN (if applicable): 78481548188

Description of project

Project address	
Project name	20054 TOZER L97 N20809
Street address	15 CREIGHTON Parade NORTH NAROOMA 2546
Local Government Area	Eurobodalla Shire Council
Plan type and plan number	Deposited Plan 1072514
Lot no.	97
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	3
Site details	
Site area (m ²)	1269
Roof area (m ²)	151
Conditioned floor area (m ²)	91.8
Unconditioned floor area (m ²)	11.9
Total area of garden and lawn (m ²)	30

Assessor details and thermal loads	
Assessor number	BDAV/13/1511
Certificate number	15110608
Climate zone	18
Area adjusted cooling load (MJ/m ² .year)	33
Area adjusted heating load (MJ/m ² .year)	73
Project score	
Water	✓ 40 Target 40
Thermal Comfort	✓ Pass Target Pass
Energy	✓ 50 Target 50

Thermal Comfort Commitments

Simulation Method

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

Floor and wall construction

Area
floor - suspended floor/open subfloor

All or part of floor area square metres

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 4 stars.	✔	✔	✔
Cooling system			
The living areas must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
The bedrooms must not incorporate any cooling system, or any ducting which is designed to accommodate a cooling system.		✔	✔
Heating system			
The living areas must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✔	✔
The bedrooms must not incorporate any heating system, or any ducting which is designed to accommodate a heating system.		✔	✔
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, not ducted; Operation control: manual switch on/off		✔	✔
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✔	✔
Laundry: natural ventilation only, or no laundry; Operation control: n/a		✔	✔
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
• at least 3 of the bedrooms / study; dedicated		✔	✔
• at least 2 of the living / dining rooms; dedicated		✔	✔
• the kitchen; dedicated		✔	✔

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> all bathrooms/toilets; dedicated the laundry; dedicated all hallways; dedicated 		<p>➤</p> <p>➤</p> <p>➤</p>	<p>➤</p> <p>➤</p> <p>➤</p>
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.	➤	➤	➤
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.	➤	➤	➤
Other			
The applicant must install an induction cooktop & electric oven in the kitchen of the dwelling.		➤	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		➤	
The applicant must install a fixed outdoor clothes drying line as part of the development.		➤	
The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.		➤	

Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a  in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a  in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

Nationwide House Energy Rating Scheme* Certificate



Certificate number: 0004803425-01

Certificate Date: 05 May 2020

êStar rating: 4.9

BERS Pro v4.3.0.0 (3.13) cannot be used to model 'roof windows'. Roof windows are 'openable or fixed windows in a roof' and do not have a shaft, as distinct from skylights which incorporate a built-in shaft and are not ventilated. BERS Pro v4.3 can only model skylights. If a roof window is present on the floor plan then this certificate is not valid.

Assessor details

Accreditation

number: VIC/BDAV/13/1511
Name: A PEART
Organisation: APEART BUILDING DESIGN
Email: mail@peart.com.au
Phone: 0423005026
Declaration of interest: None
Software: BERS Pro v4.3.0.2f (3.13)
AAO: BDAV

Dwelling details

Street: 15 CREIGHTON PDE
Suburb: NORTH NAROOMA
State: NSW Postcode: 2546
Type: New Dwelling NCC Class: 1A
NatHERS climate zone: 18
Lot/DP number: 97/DP 1072514 Exposure: Suburban

Key construction and insulation materials

(see following pages for details)

Construction: Cavity Panel Direct Fix
Corrugated Steel
Suspended Timber Floor
Insulation: R2.5 wall insulation
R4.5 ceiling insulation
R1.5 floor insulation
Glazing: Aluminium SG Clear

Net floor area (m²)

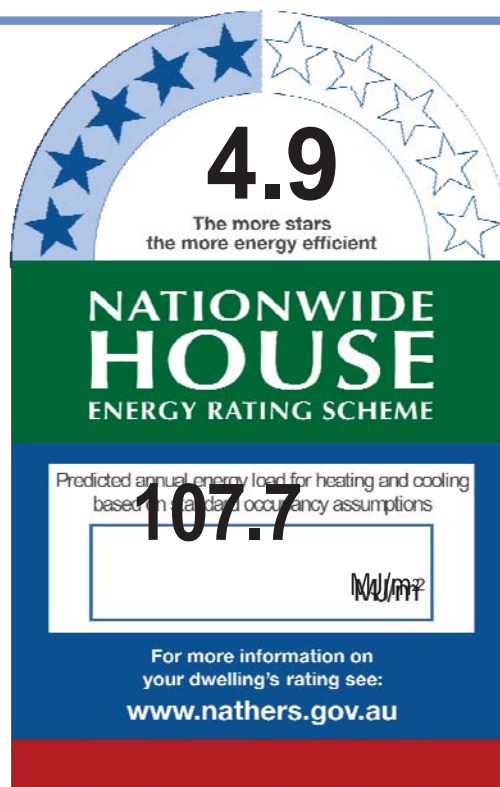
Conditioned: 90.0
Unconditioned: 11.0
Garage: 0.0
TOTAL: 101.0

Annual thermal performance loads (MJ/m²)

Heating: 73.9
Cooling: 33.8
TOTAL: 107.7

Plan documents

Plan ref/date: 4015-467
Prepared by: KITOME PTY LTD



Ceiling penetrations

(see following pages for details)

Sealed: 14
Unsealed: 0
TOTAL:** 14

NOTE: This total is the maximum number of ceiling penetrations allowed to a ceiling (under a roof) for this certificate. **If this number is exceeded 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.

Principle downlight type: LED

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 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.



Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004803425-01

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4.9



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	Aluminium SG Clear	6.7	0.70
ALM-001-01 A	Aluminium SG Clear	6.7	0.57

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bedroom 1	ALM-002-01 A	n/a	1200	1200	SE	No Shading
Ensuite	ALM-002-01 A	n/a	1000	900	SE	No Shading
Ldry, Bath	ALM-002-01 A	n/a	1000	1200	SE	No Shading
Ldry, Bath	ALM-002-01 A	n/a	1000	600	SE	No Shading
Bedroom 2	ALM-002-01 A	n/a	1200	1200	SE	No Shading
Bedroom 3	ALM-002-01 A	n/a	1200	1200	SE	No Shading
Kitchen/Living	ALM-001-01 A	n/a	2100	2700	NW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	1000	1200	NW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2100	3600	NW	No Shading
Kitchen/Living	ALM-002-01 A	n/a	2000	1800	NE	No Shading

Roof window and skylight type and performance value

ID	Window type	U-value	SHGC
None Present			

Roof window and skylight schedule

Location	ID	Roof window/skylight no.	Area (m ²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Cavity Panel Direct Fix	Foil, Anti-glare one side + Bulk Insulation R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bedroom 1	EW-1	3595	2740	SE	No	0
Bedroom 1	EW-1	3595	2740	SW	No	0
Ensuite	EW-1	1390	2740	SE	No	0
Ldry, Bath	EW-1	3790	2740	SE	No	0
Bedroom 2	EW-1	2790	2740	SE	No	0
Bedroom 3	EW-1	3595	2740	NE	No	0
Bedroom 3	EW-1	2795	2740	SE	No	0
Kitchen/Living	EW-1	3595	2740	SW	No	0
Kitchen/Living	EW-1	14400	2740	NW	No	1800
Kitchen/Living	EW-1	3595	2740	NE	No	0

Nationwide House Energy Rating Scheme* Certificate

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Certificate Date:

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4.9



Building features continued

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	82.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Bedroom 1	Suspended Timber Floor 19mm	12.6	Open	Bulk Insulation in Contact with Floor R1.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.9	Open	Bulk Insulation in Contact with Floor R1.5	Tiles
Ldry, Bath	Suspended Timber Floor 19mm	11.4	Open	Bulk Insulation in Contact with Floor R1.5	Tiles
Bedroom 2	Suspended Timber Floor 19mm	9.6	Open	Bulk Insulation in Contact with Floor R1.5	Carpet 10mm
Bedroom 3	Suspended Timber Floor 19mm	9.8	Open	Bulk Insulation in Contact with Floor R1.5	Carpet 10mm
Kitchen/Living	Suspended Timber Floor 19mm	53.7	Open	Bulk Insulation in Contact with Floor R1.5	Laminate

Ceiling type

Location	Construction	Added insulation	Roof space above
Bedroom 1	Plasterboard	Bulk Insulation R4.5	Yes
Ensuite	Plasterboard	Bulk Insulation R4.5	Yes
Ldry, Bath	Plasterboard	Bulk Insulation R4.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R4.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R4.5	Yes
Kitchen/Living	Plasterboard	Bulk Insulation R4.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bedroom 1	1	Downlights - LED	70	Sealed
Ensuite	1	Exhaust Fans	300	Sealed
Ldry, Bath	1	Downlights - LED	70	Sealed
Ldry, Bath	1	Exhaust Fans	300	Sealed

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004803425-01

Certificate Date:

05 May 2020

★ Star rating:

4.9



Building features continued

Bedroom 2	1	Downlights - LED	70	Sealed
Bedroom 3	1	Downlights - LED	70	Sealed
Kitchen/Living	8	Downlights - LED	70	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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None Present		
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Roof type

Construction	Added insulation	Roof colour
Corrugated Iron	Foil, Gap Above, Reflective Side Down, Anti-glare Up	Light

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0004803425-01

Certificate Date: 05 May 2020

●Star rating: 4.9



Additional information

Explanatory notes

About this report

Residential energy ratings address the quality of the building fabric i.e. walls, windows, floors and roof/ceilings. Ratings do not cover the energy or water efficiency of appliances including heating and cooling, hot water, dishwashers, ovens, fridges, TVs etc. or solar panel or watertank 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 the 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 the underlying engine developed by the Australian Commonwealth Scientific and Industrial Research Organisation (CSIRO).

All information relating to energy loads presented in this report is based on a range of standard assumptions in order to allow for comparisons with reports prepared for other homes and to demonstrate minimum regulatory compliance.

The standard assumptions include figures for occupancy, indoor air temperature and are based on a unique climate file for your region.

Accredited Assessors

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

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

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

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

Disclaimer

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

Contact

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