

BUILDING  
SUSTAINABILITY  
CONSULTANTS



■ FRIENDLY ■ INFORMATIVE ■ EFFICIENT ■ KNOWLEDGEABLE

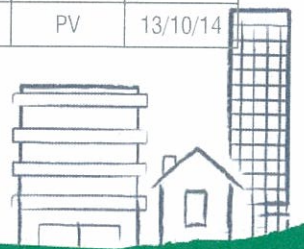
Development application for:

J & C Mantilla

Lot 6 Paddock Close

Elermore Vale, NSW, 2287

Issue	File Ref	Description	Author	Date
A	8283	Original Thermal & BASIX Assessment	KH	05/09/14
B	8441	Thermal & BASIX Assessment – LGA amended	PV	13/10/14





# Thermal Comfort Assessment

This home has been assessed under the thermal simulation method of the BASIX Protocol

**Assessor** Tracey Cools

**Accreditation Number** VIC/BDAV/12/1473

**BASIX Details**

Certificate Number: 14731991

BASIX adjusted conditioned area: 335

BASIX adjusted un-conditioned area: 26

Area adjusted cooling load: 39 MJ/m<sup>2</sup>/pa

Area adjusted heating load: 63 MJ/m<sup>2</sup>/pa

**Specification**

The following specification was used to achieve the thermal performance values. Modelling proxies are used at times and if the buildings element details vary the thermal performance specifications below shall take precedence.

If there is a change to this specification during design or construction phases please contact Efficient Living for advice and if required an updated certificate will be issued.

Thermal Performance Specifications	
Floors	Concrete slab on ground with waffle pods (R1.0 equivalent) Timber first floor, no insulation required between levels internally Timber first floor, R2.0 insulation to the enclosed sub floor
Walls	<u>External walls:</u> Brick veneer with an R2.0 bulk insulation Weatherboard with an R2.0 bulk insulation Single skin brick, no insulation – garage only <u>Colour:</u> light colour (SA< 0.475) <u>Internal walls:</u> Plasterboard on studs, no insulation
Windows	Aluminium frames with Low-E glazing – To all windows/glazed doors U-Value (equal to or lower than): 4.64 SHGC (+ or - 10%): 0.48 Given values are NFRC, total window values
Skylights	None
Ceilings	Plasterboard with R3.0 bulk insulation It has been assumed at DA stage that the area of all ceiling penetrations is less than 0.5% of the total ceiling area. If down lights are proposed at a later stage, BCA loss of insulation calculations will be required.
Roof	Tiled roof with sarking medium colour (SA 0.475-0.7)
Floor coverings	Tiles to wet areas and living areas. Carpet to bedroom, halls, media, study and office.
External shade	Eaves as per plans
Ventilation	All external doors have weather seals, all exhaust fans and chimneys have dampers, any down lights proposed will have capped fittings.

**BCA requirements**

In addition to the BASIX requirements; all new residential dwellings (class 1 buildings)  
Must comply with; NSW PART 3.12.1 Building sealing & 3.12.5.0 - 3.12.5.3





# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

Software Name BERS Pro 4.2  
Software Version Release 110811/A  
Engine Version CHENATH V2.13

#### Simulation Details

Project Name Mantilla\_1  
Date 8/28/2014  
Location ELERMORE VALE PC 2287  
Climate file climat15.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 334.47 m<sup>2</sup>  
Unconditioned Area 95.77 m<sup>2</sup>  
Adjusted Cooling 38.8 MJ/m<sup>2</sup>  
Adjusted Heating 63.3 MJ/m<sup>2</sup>  
Adjusted Total 102.1 MJ/m<sup>2</sup>

#### Dwelling Address

DP Number -  
Unit Number -  
Lot Number 6

		<b>Energy Rating</b>	Certificate Number <u>14731991</u>
<input checked="" type="checkbox"/>	single-dwelling rating		<u>4.0</u> stars
<input type="checkbox"/>	multi-unit development (attach listing of ratings) <small>If selected, data specified is the average across the entire development</small>	heating <u>63</u> MJ/m <sup>2</sup> cooling <u>39</u> MJ/m <sup>2</sup>	
Recessed downlights confirmation: <input type="checkbox"/> Rated with			<input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Tracey Cools VIC/BDAV/12/1473</u>			
Assessor Signature <u></u>		Date <u>05/09/14</u>	

House Number -  
Street Name Paddock Close  
Development Name -  
Suburb Elernmore Vale NSW 2287

#### Client Details

Name Tullipan Homes  
Phone 4353 8644 Fax -  
Email -  
Postal Address PO Box 5148 Chitaway Bay, NSW  
Street Details Suite 18, 1 Reliance Drive, Tuggerah Business Park, Tuggerah

#### Assessor Details

Name Tracey Cools  
Phone 9970 6181 Fax 9970 6181  
Email info@efficientliving.com.au  
Postal Address 13/13 Lagoon Street, Narrabeen  
Street Details 13/13 Lagoon Street, Narrabeen

Signed by the Assessor  Date 05./09./2014

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.  
All windows are modelled with Holland Blinds for regulatory purposes.*



# Building Element Details

Project Mantilla Run 1

ELERMORE VALE PC 2287 Lat -32.90 Long 151.70 Climate File climat15.TXT

## Summary

Conditioned Area	334.5 m <sup>2</sup>
Unconditioned Area	95.8 m <sup>2</sup>
Total Floor Area	430.2 m <sup>2</sup>
Total Glazed Area	86.5 m <sup>2</sup>
Total External Solid door Area	23.6 m <sup>2</sup>
Glass to Floor Area	20.1 %
Gross External Wall Area	394.8 m <sup>2</sup>
Net External Wall Area	284.8 m <sup>2</sup>

## Window

86.5 m<sup>2</sup> CAS-04-013a Crane Aluminium Systems Uval 4.64 SHGC 0.48  
Glass 6.38mm ComfortPlus Neutral  
Frame Crane: Mk7 Aluminium Sliding Window - Single/Double Glazed

## External Wall

48.5 m<sup>2</sup> Single Skin Brick No Insulation  
210.2 m<sup>2</sup> Brick Veneer Bulk Insulation R 2.0  
26.1 m<sup>2</sup> Brick Veneer to earth Bulk Insulation R 2.0

## Internal Wall

256.2 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

## External Floor

70.0 m<sup>2</sup> Concrete Slab on Ground Bare Bulk Insulation in Contact with Floor R 1.0  
25.3 m<sup>2</sup> Concrete Slab on Ground Carpet 10mm Bulk Insulation in Contact with Floor R 1.0  
54.6 m<sup>2</sup> Concrete Slab on Ground Ceramic Tiles 8mm Bulk Insulation in Contact with Floor R 1.0  
61.0 m<sup>2</sup> Suspended Timber Floor Carpet 10mm Bulk Insulation in Contact with Floor R 2.0  
82.6 m<sup>2</sup> Suspended Timber Floor Ceramic Tiles 8mm Bulk Insulation in Contact with Floor R 2.0

## External Ceiling


293.5 m<sup>2</sup> Plasterboard Bulk Insulation R3.0 Unventilated roofspace

## Internal Floor/Ceiling

149.9 m<sup>2</sup> Timber Above Plasterboard No Insulation

## Roof (Horizontal area)

293.5 m<sup>2</sup> Roof Tiles Foil, Gap Above, Reflective Side Down, Anti-glare Up 25° slope Hip roof

	<b>Energy Rating</b>	Certificate Number <u>14731991</u>
<input checked="" type="checkbox"/> single-dwelling rating		<u>4.0</u> stars
<input type="checkbox"/> multi-unit development (attach listing of ratings) <small>If selected, data specified is the average across the entire development</small>	heating <u>63</u> MJ/m <sup>2</sup>	
	cooling <u>39</u> MJ/m <sup>2</sup>	
Recessed downlights confirmation: <input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number <u>Tracey Cools VIC/BDAV/12/1473</u>		
Assessor Signature <u><i>Tracey Cools</i></u>	Date <u>05/09/14</u>	

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 571526S\_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 18/09/2014 published by Planning & Infrastructure. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Director-General

Date of issue: Monday, 13 October 2014

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



Planning &  
Infrastructure

### Project summary

Project name	J & C Mantilla_03
Street address	Paddock Close Elernore Vale 2287
Local Government Area	Lake Macquarie City Council
Plan type and plan number	deposited -
Lot no.	6
Section no.	-
Project type	separate dwelling house
No. of bedrooms	6

### Project score

Water	✓ 44	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40

### Certificate Prepared by

Name / Company Name: Efficient Living

ABN (if applicable): 82116346082

# Description of project

Project address	
Project name	J & C Mantilla_03
Street address	n/a Paddock Close Elermore Vale 2287
Local Government Area	Lake Macquarie City Council
Plan type and plan number	Deposited Plan -
Lot no.	6
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	6
Site details	
Site area (m <sup>2</sup> )	1420
Roof area (m <sup>2</sup> )	410
Conditioned floor area (m <sup>2</sup> )	335
Unconditioned floor area (m <sup>2</sup> )	26
Total area of garden and lawn (m <sup>2</sup> )	250

Assessor details and thermal loads		
Assessor number	BDAV/12/1473	
Certificate number	14731991	
Climate zone	15	
Area adjusted cooling load (MJ/m <sup>2</sup> .year)	39	
Area adjusted heating load (MJ/m <sup>2</sup> .year)	63	
Other		
none	n/a	
Project score		
Water	✓ 44	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 40	Target 40



## Schedule of BASIX commitments

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

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Fixtures</b>			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.		✓	
<b>Alternative water</b>			
<b>Rainwater tank</b>			
The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 410 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).		✓	✓
The applicant must connect the rainwater tank to: <ul style="list-style-type: none"> <li>• all toilets in the development</li> <li>• the cold water tap that supplies each clothes washer in the development</li> <li>• at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)</li> </ul>		✓ ✓ ✓	✓ ✓ ✓

## Thermal Comfort Commitments

### Simulation Method

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.

	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
		✓	✓
	✓	✓	✓

### Floor and wall construction

#### Area

floor - concrete slab on ground

80.0 square metres

floor - suspended floor/enclosed subfloor

144.0 square metres



## Energy Commitments

### Hot water

The applicant must install the following hot water system in the development, or a system with a higher energy rating: solar (gas boosted) with a performance of 21 to 25 RECs or better.



### Cooling system

The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: airconditioning ducting only; Energy rating: n/a



The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: airconditioning ducting only; Energy rating: n/a



### Heating system

The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: gas fixed flued heater; Energy rating: 4 Star



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, ducted to façade or roof; Operation control: manual switch on/off



Kitchen: individual fan, not ducted; 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 5 of the bedrooms / study;
- at least 4 of the living / dining rooms;
- all hallways;



**Energy Commitments**

	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>Natural lighting</b>			
The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
<b>Other</b>			
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.		✓	



## 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.

## Amy Oosterhoff

---

**From:** Amy Oosterhoff  
**Sent:** Monday, 13 October 2014 11:26 AM  
**To:** 'Mary tullipan'; 'The Digges'  
**Subject:** Sammut

Hey Mary see below, I underlined the dates that I added in. Also I changed AAPA to ATFA, is this correct? Not sure what AAPA is but if this is referring to the letter Rodney received yesterday they were called ATFA.

1. 28 February 2013 the Sammutts reported water ingress into the house by email. *We received email on 01/03/2013 as it was sent after hours on 28<sup>th</sup> Feb*
2. 19 March 2013 An inspection was carried out by David Tullipan and Rodney Tullipan and took photographs of the landscaping works which included the removal of the retaining wall and construction of a staircase and path adjacent to the area where the water ingress was evident. (Photos attached No. ....)
3. 19 March 2013 Report sent to Sammutts and advising them to resolve the water ingress the works must be removed. (copy attached NO.....)
4. 24 May 2013 Video received from the Sammutts showing evidence of the water ingress even though the staircase had been removed coming from under the first course of blocks from the retaining wall which was partly removed.
5. 27 May 2013 A reinspection was carried out by David and Rodney and they found the path had been lowered and the stairs removed and part of the retaining wall removed. By only partly removing the retaining wall and leaving the bottom course of the retaining wall, this created a dam which caused the water ingress which was the cause shown on the video.
6. 4 June 2013 Re issued a second report from the above inspection .(copy attached No. ....)
7. This explanation in the report was not accepted by the Sammut and engaged the services of Michael Palmer, Building Durability, Specialist ( remedial Builders). At the same time an application was lodged with the Dept. of Fair Trading.
8. An on site meeting was arranged on 1 October 2013 with the Dept. of Fair Trading .
9. At the meeting it was witnessed that Michael Palmer had been to the site and had started investigative works. As the Sammutts had confirmed to the Fair Trading Inspector that the water ingress had ceased once the landscaping works were removed in accordance with our instructions the Inspector, Mr. Chriss Hall, asked the Sammutts what they expected of him and their response was that they needed more time for Michael Palmer from Building Durability to prepare a report for Fair Trading.
10. Fair Trading then issued us with 21 days to complete any outstanding list of maintenance works which were agreed on site and for the Sammutts to produce a report for him to consider from Building Durability which was supposedly to show the cause of the previous water ingress. Please note to this date there was no water ingress into the house but we also note some of the works undertaken by Building Durability could now cause some water ingress into the house.
11. List of Maintenance works complete within 21 Days and the Sammutts did not produce a report so the matter was finalised. Copy of Fair Trading attached NO.....
12. 7 August 2014 Some .....months later The Sammutts made another application to the Dept of Fair Trading.



13 20 August 2014 Attended the meeting some further maintenance works were requested of which some were accepted by Tullipan HOMes and a list prepared by Chriss Hall, Inspector. It was also witnessed at this time by both parties that major structural construction works were being carried out with permission by these owners without Tullipan Homes Authority or the Dept. of Fair Trading Authority. These works has voided all structural works warranty by Tullipan HOMes. These works were not instructed by the Dept. of Fair Trading and rather a report only was agreed to be produced by Building Durability to be considered by Mr. Chriss Hall. As these works were not authorised Mr. Hall concluded the matter once again and gave us until 5 September 2014 complete the agreed works. Please note the Report from Building Durability was handed to the Fair Trading Inspector and our report (attached) was also handed in , in response to the Building Durability report. As these works were not authorised The Inspector concluded that he can make no further comment on the water ingress (Copy attached No.....)

14. 12 October 2014 Received an email with attached letter from ATFA advising the the Sammuts has requested that ATFA carry out an inspection and suggest the remedial works necessary to rectify the water ingress to the timber flooring of which to the last date of our inspection since the removal of the defective works by the Landscaper, there has been no evidence of any further water ingress.

Please note from Building Durability photographs there is no photos of evidence of water ingress with all of the rain we have had in this whole period since the removal of the defective works and also Building Durability made no mention of the water ingress caused by the installation of the staircase and rather chose to waterproof the whole of the wall where the Sammuts require the stairs to be reinstalled and Building Durability has only stated to them that they NOW can reinstall the stairs due to these works they carried out. (Photos attached) Also note that there was no mention of their intention of them constructing or installing these stairs at time of handover otherwise we would have advised them of the damage they will cause. Therefore because all of the above we find the cause of the water ingress to be the sole responsibility of the Landscaper engaged by the Sammuts whom should have been professional enough to know that weepholes cannot be covered or Termite Barrier be interfered with. Unfortunately this Landscaper..... is no longer in Business, being Bankrupt on..... but this is not our concern and the Sammuts cannot put this blame onto our Building Firm because they cannot be compensated by this Company. The Sammuts should be in a position to claim the water damage on House Insurance presuming they have insurance cover as we are not accepting liability for this occurrence.