

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 970616S

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 February 2019

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



Project summary		
Project name	78 Hudson Parade	
Street address	78 Hudson Parade Clareville 2107	
Local Government Area	Northern Beaches Council	
Plan type and plan number	deposited 221631	
Lot no.	2	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	5	
Project score		
Water	✔ 40	Target 40
Thermal Comfort	✔ Pass	Target Pass
Energy	✔ 87	Target 50

Certificate Prepared by
Name / Company Name: Marker Architecture & Design
ABN (if applicable): 12624281858

Description of project

Project address

Project name	78 Hudson Parade
Street address	78 Hudson Parade Clareville 2107
Local Government Area	Northern Beaches Council
Plan type and plan number	Deposited Plan 221631
Lot no.	2
Section no.	-

Project type

Project type	separate dwelling house
No. of bedrooms	5

Site details

Site area (m ²)	1366
Roof area (m ²)	450
Conditioned floor area (m2)	417.0
Unconditioned floor area (m2)	33.0
Total area of garden and lawn (m2)	737

Assessor details and thermal loads

Assessor number	101225
Certificate number	WA2DRVRF09
Climate zone	56
Area adjusted cooling load (MJ/m ² .year)	25
Area adjusted heating load (MJ/m ² .year)	31

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 87	Target 50

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
Landscape			
The applicant must plant indigenous or low water use species of vegetation throughout 500 square metres of the site.	✓	✓	
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 4.5 but ≤ 6 L/min plus spray force and/or coverage tests) in all showers in the development.		✓	✓
The applicant must install a toilet flushing system with a minimum rating of 6 star in each toilet in the development.		✓	✓
The applicant must install taps with a minimum rating of 6 star in the kitchen in the development.		✓	
The applicant must install basin taps with a minimum rating of 6 star in each bathroom in the development.		✓	
Alternative water			
Rainwater tank			
The applicant must install a rainwater tank of at least 6000 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 205 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"> 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.) 		✓	✓
Swimming pool			
The swimming pool must not have a volume greater than 40 kilolitres.	✓	✓	
The swimming pool must have a pool cover.		✓	

Water Commitments

The swimming pool must be outdoors.

Show on
DA plans

Show on CC/CDC
plans & specs

Certifier
check



Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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.		✓	✓
Where there is an in-slab heating or cooling system, the applicant must install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab, and underneath the slab if it is a suspended floor.	✓	✓	✓
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 - concrete slab on ground	290.0 square metres
floor - suspended floor/open subfloor	130.0 square metres
floor - suspended floor/enclosed subfloor	30.0 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.	✓	✓	✓
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 3 Star		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 3 Star		✓	✓
The cooling system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: electric floor heating; Energy rating: n/a		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 6 Star		✓	✓
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, 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 6 of the bedrooms / study; dedicated		✓	✓
• at least 3 of the living / dining rooms; dedicated		✓	✓


Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> the kitchen; dedicated 		✓	✓
<ul style="list-style-type: none"> all bathrooms/toilets; dedicated 		✓	✓
<ul style="list-style-type: none"> the laundry; dedicated 		✓	✓
<ul style="list-style-type: none"> all hallways; dedicated 		✓	✓
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 3 bathroom(s)/toilet(s) in the development for natural lighting.	✓	✓	✓
Swimming pool			
The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool): gas		✓	
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 15.6 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	✓	✓	✓
Other			
The applicant must install a gas 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: **WA2DRVRF09**

Date of Certificate: **10 Feb 2019**

★ Star rating: **5.6**



Assessor details

Accreditation number: **101225**
Name: **Pranab chakma**
Organisation: **Paul & c Associates**
Email: **info@basixcertifier.com.au**
Phone: **0490511593**
Declaration of interest: **Employed by designer of the building**
Software: **FirstRate5: 5.2.9 (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Address: **78 Hudson Parade**
Suburb: **Clareville**
State: **NSW** Postcode: **2107**
Type: **New Home** NCC Class: **Class 1a**
Lot/DP number: **-** NatHERS climate zone: **56**
Exposure: **suburban**

Key construction and insulation materials

(see following pages for details)

Construction: Wall: **Reverse Brick Venner & Clad**
Roof: **CONCRETE ROOF**
Floor: **CONCRETE FLOOR**
Insulation: Wall: **R2**
Roof: **FIRST FLOOR R6, G & LG R2**
Floor: **NA**
Glazing: **Timber**
Clear

Net floor area (m²)

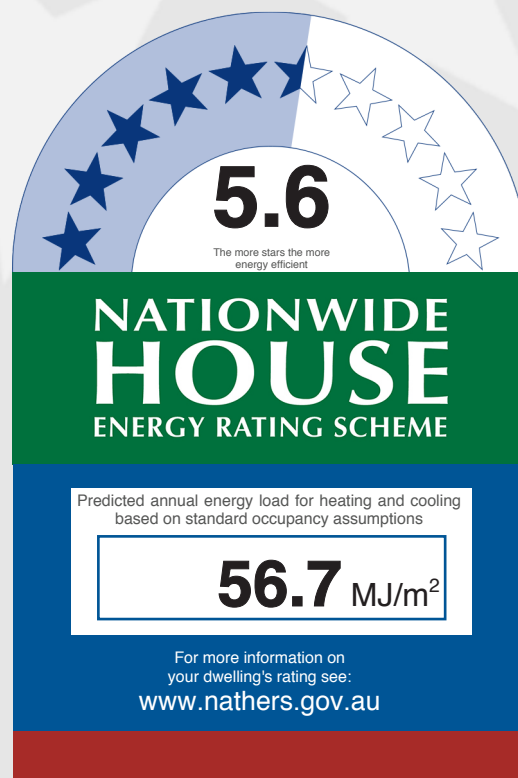
Conditioned: **417**
Unconditioned: **32.7**
Garage: **-**
TOTAL: **449.7**

Annual thermal performance loads (MJ/m²)

Heating: **31.4**
Cooling: **25.3**
TOTAL: **56.7**

Plan documents

Plan ref/date: **-**
Prepared by: **-**



Ceiling penetrations

(see following pages for details)

Sealed: **84**
Unsealed: **0**
TOTAL:** **84**

Principal downlight type: **LED**

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.

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=WA2DRVRF09>

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Building Features

Windows type and performance value

Window ID	Window type	U-value	SHGC
TIM-002-01 W	Timber B SG Clear	5.4	0.63
TIM-001-01 W	Timber A SG Clear	5.4	0.56

Windows schedule

Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Zone name	Outdoor shade
TIM-002-01 W	W1	3050	3322	W	rampus	Yes
TIM-002-01 W	D05	3025	4125	N	kitchen+dinning	No
TIM-002-01 W	D6	3057	6900	W	kitchen+dinning	Yes
TIM-001-01 W	W9	2706	561	N	Bedroom3	Yes
TIM-002-01 W	D24	2707	3014	N	Bedroom3	Yes
TIM-002-01 W	W8	2706	561	N	bedroom2	Yes
TIM-002-01 W	D22	2707	3014	N	bedroom2	Yes
TIM-002-01 W	W7	2706	561	N	bedroom1	Yes
TIM-002-01 W	D20	2707	3014	N	bedroom1	Yes
TIM-002-01 W	W6	2706	561	N	shower	No
TIM-002-01 W	W5	2706	561	NW	wc	No
TIM-002-01 W	W4	3306	2737	NE	corridor	No
TIM-001-01 W	D35	2200	3200	S	corridor	No
TIM-002-01 W	W10	2506	467	E	corridor	Yes
TIM-001-01 W	W11	2650	1650	E	bunk room	Yes
TIM-001-01 W	W14	2650	500	E	bunk room	No
TIM-001-01 W	W11	600	1500	S	bathroom	No
TIM-001-01 W	W13	600	1500	S	laundry	No
TIM-002-01 W	D12	3257	3200	W	snug	Yes
TIM-002-01 W	W02	1650	1100	N	masterbed	No
TIM-002-01 W	D13	3257	3558	W	masterbed	Yes
TIM-002-01 W	W03	1650	1100	N	ensuite	No

Roof windows and skylight type and performance value

ID	Window type	U-value	SHGC
DEFAULTS:DG-Generic-02 A	Clear AI DG DEFAULT ROOF WINDOW System 02	4.22	0.72

Roof window and skylight schedule

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Building Features

ID	Roof window/ skylight no.	Area (m ²)	Orientation	Zone name	Outdoor shade	Indoor shade/ diffuser
DEFAULTS:DG-Generic-02 A	Element 2	1.5	N	corridor	None	None
DEFAULTS:DG-Generic-02 A	Element 1	1.4	N	bunk room	None	None
DEFAULTS:DG-Generic-02 A	Element 3	1.5	N	bathroom	None	None

External wall type

Type	Insulation	Wall wrap
1 : FR5 - Reverse Brick Veneer	Rockwool batt: R2.0 (R2.0)	No
2 : FR5 - AAC Block		No
3 : FR5 - AAC Block		No

External wall schedule

Wall type	Area (m ²)	Orientation	Zone name	Fixed shade	Eaves
1 : FR5 - Reverse Brick Veneer	6.4	W	store-lg	Yes	No
2 : FR5 - AAC Block	30.1	N	store-lg	Yes	No
2 : FR5 - AAC Block	9.8	N	stair+corridor	Yes	No
1 : FR5 - Reverse Brick Veneer	11.3	S	stair+corridor	No	No
2 : FR5 - AAC Block	14.2	SE	stair+corridor	Yes	No
2 : FR5 - AAC Block	7.4	S	stair+corridor	Yes	No
2 : FR5 - AAC Block	8.7	N	bathroom-lg	Yes	No
2 : FR5 - AAC Block	5.4	N	store/lift	No	No
2 : FR5 - AAC Block	6.1	S	store/lift	Yes	No
2 : FR5 - AAC Block	11.3	E	store/lift	No	No
1 : FR5 - Reverse Brick Veneer	1.8	SE	rampus	Yes	No
1 : FR5 - Reverse Brick Veneer	4.3	N	rampus	Yes	No
1 : FR5 - Reverse Brick Veneer	18.4	W	rampus	No	Yes
1 : FR5 - Reverse Brick Veneer	27.6	S	rampus	No	No
1 : FR5 - Reverse Brick Veneer	24.1	N	kitchen+dinning	No	No
1 : FR5 - Reverse Brick Veneer	35.9	W	kitchen+dinning	No	Yes
1 : FR5 - Reverse Brick Veneer	17.7	S	kitchen+dinning	No	No
1 : FR5 - Reverse Brick Veneer	1.5	SE	kitchen+dinning	Yes	No
1 : FR5 - Reverse Brick Veneer	7.9	N	pantry	No	No

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Building Features

1 : FR5 - Reverse Brick Veneer	10.6	E	pantry	Yes	No
1 : FR5 - Reverse Brick Veneer	11.3	S	stair	No	No
1 : FR5 - Reverse Brick Veneer	5.8	SE	stair	Yes	No
1 : FR5 - Reverse Brick Veneer	3.1	N	stair	Yes	No
1 : FR5 - Reverse Brick Veneer	10.5	NE	stair	Yes	No
3 : FR5 - AAC Block	4.8	W	store-g	Yes	No
3 : FR5 - AAC Block	5.5	S	store-g	Yes	No
3 : FR5 - AAC Block	11.2	E	store-g	Yes	No
3 : FR5 - AAC Block	5.4	N	store-g	No	No
1 : FR5 - Reverse Brick Veneer	7.1	E	wc	Yes	No
1 : FR5 - Reverse Brick Veneer	11.3	S	wc	Yes	No
1 : FR5 - Reverse Brick Veneer	10.4	E	Bedroom3	No	Yes
1 : FR5 - Reverse Brick Veneer	14.4	N	Bedroom3	Yes	Yes
1 : FR5 - Reverse Brick Veneer	14.6	N	bedroom2	Yes	Yes
1 : FR5 - Reverse Brick Veneer	14.5	N	bedroom1	Yes	Yes
1 : FR5 - Reverse Brick Veneer	2.9	N	shower	Yes	Yes
1 : FR5 - Reverse Brick Veneer	0.5	N	shower	Yes	No
1 : FR5 - Reverse Brick Veneer	1	NNW	shower	Yes	No
1 : FR5 - Reverse Brick Veneer	1.9	NNW	shower	Yes	No
1 : FR5 - Reverse Brick Veneer	0.8	NW	shower	Yes	No
1 : FR5 - Reverse Brick Veneer	7.2	NW	wc	Yes	No
1 : FR5 - Reverse Brick Veneer	10.9	NE	corridor	Yes	No
1 : FR5 - Reverse Brick Veneer	6.1	W	corridor	No	Yes
1 : FR5 - Reverse Brick Veneer	11.3	S	corridor	No	No
1 : FR5 - Reverse Brick Veneer	14.4	SE	corridor	Yes	No
1 : FR5 - Reverse Brick Veneer	22.9	S	corridor	Yes	No
1 : FR5 - Reverse Brick Veneer	5	E	corridor	No	Yes
1 : FR5 - Reverse Brick Veneer	13.4	E	bunk room	Yes	Yes
1 : FR5 - Reverse Brick Veneer	21.2	S	bunk room	No	No
1 : FR5 - Reverse Brick Veneer	8.5	S	bathroom	No	No
1 : FR5 - Reverse Brick Veneer	13.3	W	laundry	Yes	No
1 : FR5 - Reverse Brick Veneer	7.3	S	laundry	No	No
1 : FR5 - Reverse Brick Veneer	1.7	SE	snug	Yes	No
1 : FR5 - Reverse Brick Veneer	1.2	W	snug	No	Yes
1 : FR5 - Reverse Brick Veneer	11.9	W	snug	No	Yes

Nationwide House Energy Rating Scheme* Certificate

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★ Star rating: **5.6**



Building Features

1 : FR5 - Reverse Brick Veneer	17.5	S	snug	No	No
1 : FR5 - Reverse Brick Veneer	21.8	N	masterbed	No	No
1 : FR5 - Reverse Brick Veneer	16.3	W	masterbed	No	Yes
1 : FR5 - Reverse Brick Veneer	10.9	E	ensuite	No	No
1 : FR5 - Reverse Brick Veneer	10.2	N	ensuite	No	No

Internal wall type

Type	Area (m ²)	Insulation
1 : FR5 - Internal Plasterboard Stud Wall	393.8	
2 : FR5 - AAC Block	7.2	

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
store-lg	CSOG: Slab on Ground	19.1	Enclosed	0.0	Tiles
stair+corridor	CSOG: Slab on Ground	26.1	Enclosed	0.0	floattimber
bathroom-lg	CSOG: Slab on Ground	5.5	Enclosed	0.0	Tiles
store/lift	CSOG: Slab on Ground	5.9	Enclosed	0.0	Tiles
rampus	CSOG: Slab on Ground	52	Enclosed	0.0	floattimber
kitchen+dinning	SuspSlab : 200mm: 200mm concrete slab	77.6	Enclosed	0.0	floattimber
pantry	SuspSlab : 200mm: 200mm concrete slab	11.4	Enclosed	0.0	Tiles
stair	SuspSlab : 200mm: 200mm concrete slab	25.9	Enclosed	0.0	floattimber
store-g	SuspSlab : 200mm: 200mm concrete slab	5.6	Enclosed	0.0	Tiles
wc	SuspSlab : 200mm: 200mm concrete slab	6	Enclosed	0.0	Tiles
Bedroom3	SuspSlab : 200mm: 200mm concrete slab	13.8	Enclosed	0.0	floattimber
bedroom2	SuspSlab : 200mm: 200mm concrete slab	13.8	Enclosed	0.0	floattimber
bedroom1	SuspSlab : 200mm: 200mm concrete slab	13.8	Enclosed	0.0	floattimber
shower	SuspSlab : 200mm: 200mm concrete slab	4.5	Enclosed	0.0	Tiles
wc	SuspSlab : 200mm: 200mm concrete slab	3	Enclosed	0.0	Tiles

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Building Features

corridor	SuspSlab : 200mm: 200mm concrete slab	65.5	Enclosed	0.0	floattimber
bunk room	SuspSlab : 200mm: 200mm concrete slab	26.1	Enclosed	0.0	Carpet
bathroom	SuspSlab : 200mm: 200mm concrete slab	10.4	Enclosed	0.0	Tiles
laundry	SuspSlab : 200mm: 200mm concrete slab	8.9	Enclosed	0.0	Tiles
snug	SuspSlab : 200mm: 200mm concrete slab	25.8	Enclosed	0.0	floattimber
masterbed	SuspSlab : 200mm: 200mm concrete slab	32.5	Enclosed	0.0	floattimber
ensuite	SuspSlab : 200mm: 200mm concrete slab	15.2	Enclosed	0.0	Tiles

Ceiling type

Location	Material	Added insulation	Roof space above
store-lg	Plasterboard	0.0	No
store-lg	Plasterboard	0.0	No
store-lg	Plasterboard	2.0	No
stair+corridor	Plasterboard	0.0	No
stair+corridor	Plasterboard	0.0	No
stair+corridor	Plasterboard	0.0	No
bathroom-lg	Plasterboard	0.0	No
bathroom-lg	Plasterboard	2.0	No
store/lift	Plasterboard	0.0	No
rampus	Plasterboard	0.0	No
rampus	Plasterboard	2.0	No
kitchen+dinning	Plasterboard	0.0	No
kitchen+dinning	Plasterboard	0.0	No
kitchen+dinning	Plasterboard	0.0	No
kitchen+dinning	Plasterboard	0.0	No
pantry	Plasterboard	0.0	No
stair	Plasterboard	0.0	No
stair	Plasterboard	0.0	No
store-g	Plasterboard	0.0	No
store-g	Plasterboard	0.0	No

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Building Features

store-g	Plasterboard	0.0	No
wc	Plasterboard	2.0	No
Bedroom3	Plasterboard	6.0	No
bedroom2	Plasterboard	6.0	No
bedroom1	Plasterboard	6.0	No
shower	Plasterboard	6.0	No
wc	Plasterboard	6.0	No
corridor	Plasterboard	6.0	No
bunk room	Plasterboard	6.0	No
bathroom	Plasterboard	6.0	No
laundry	Plasterboard	6.0	No
snug	Plasterboard	6.0	No
masterbed	Plasterboard	6.0	No
ensuite	Plasterboard	6.0	No

Ceiling penetrations

Location	Number	Type	Width (mm)	Length (mm)	Seal/ unsealed
store-lg	1	Exhaust Fans	200	200	Sealed
store-lg	1	Downlights	100	100	Sealed
stair+corridor	6	Downlights	100	100	Sealed
bathroom-lg	1	Exhaust Fans	200	200	Sealed
bathroom-lg	1	Downlights	100	100	Sealed
store/lift	1	Downlights	100	100	Sealed
rampus	8	Downlights	100	100	Sealed
kitchen+dinning	9	Downlights	100	100	Sealed
pantry	3	Downlights	100	100	Sealed
stair	3	Downlights	100	100	Sealed
store-g	1	Downlights	100	100	Sealed
wc	1	Exhaust Fans	200	200	Sealed
wc	1	Downlights	100	100	Sealed
Bedroom3	4	Downlights	100	100	Sealed
bedroom2	4	Downlights	100	100	Sealed
bedroom1	4	Downlights	100	100	Sealed
shower	1	Downlights	100	100	Sealed
wc	1	Downlights	100	100	Sealed
corridor	6	Downlights	100	100	Sealed

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Building Features

bunk room	8	Downlights	100	100	Sealed
bathroom	1	Exhaust Fans	200	200	Sealed
bathroom	1	Downlights	100	100	Sealed
laundry	1	Downlights	100	100	Sealed
snug	8	Downlights	100	100	Sealed
masterbed	6	Downlights	100	100	Sealed
ensuite	2	Downlights	100	100	Sealed

Ceiling fans

Location	Number	Diameter (mm)
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Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate Number: **WA2DRVRF09**

Date of Certificate: **10 Feb 2019**

★ Star rating: **5.6**



Additional Information

WINDOW FRAME COULD BE REPLACED WITH SIMILAR U-VALUE SUCH AS STEEL WHERE APPLICABLE

INSULATION TYPE COULD BE REPLACED WITH SIMILAR R-VALUE.

NOTE FOR COUNCIL & CERTIFIER: WINDOW NO, OPENING SERIAL ETC COULD DEFER FROM DRAWINGS DUE TO ASSESSOR OWN NAMING CONVENTION & SOFTWARE. SIZE, LOCATION COULD BE FOUND IN NETHERS CERTIFICATE. THERE ARE NO LEGAL REQUIREMENTS TO USE SIMILAR IDENTIFICATION METHOD.

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

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

Accredited Assessors

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

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

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

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

Disclaimer

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

Contact

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