

BASIX[®]Certificate

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

Multi Dwelling

Certificate number: 1019698M_02




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: Wednesday, 05 June 2019

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



Project summary		
Project name	Proposed Road Jordan Springs - AND-3_02	
Street address	Proposed Road Jordan Springs 2747	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited 1248480	
Lot no.	1	
Section no.	-	
No. of residential flat buildings	0	
No. of units in residential flat buildings	0	
No. of multi-dwelling houses	0	
No. of single dwelling houses	20	
Project score		
Water	 40	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 50	Target 50

Certificate Prepared by
Name / Company Name: Energi Thermal Assessors Pty Ltd
ABN (if applicable): 77614736284

Description of project

Project address

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Lot no.	1
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Project type

No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	0
No. of single dwelling houses	20

Site details

Site area (m²)	1929.5
Roof area (m²)	1572
Non-residential floor area (m²)	-
Residential car spaces	23
Non-residential car spaces	-

Common area landscape

Common area lawn (m²)	0.0
Common area garden (m²)	0.0
Area of indigenous or low water use species (m²)	-

Assessor details

Assessor number	101182
Certificate number	0003916350
Climate zone	28

Project score

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

Description of project

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

Single dwelling houses

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
3340	3	103.1	4.75	59.0	59.0
3344	2	95.8	9.6	14.0	14.0
3348	2	99.3	10.2	14.0	14.0
3352	2	95.8	9.6	14.0	14.0
3356	2	95.8	9.6	14.0	14.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
3341	2	100.9	5.4	12.0	12.0
3345	2	94.4	11.45	33.0	33.0
3349	2	94.4	11.45	33.0	33.0
3353	2	95.8	9.6	14.0	14.0
3357	2	95.8	9.6	14.0	14.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
3342	2	94.4	11.45	55.0	55.0
3346	2	94.4	11.45	33.0	33.0
3350	2	94.4	11.25	33.0	33.0
3354	3	103.5	8.85	22.0	22.0
3358	2	95.8	9.6	14.0	14.0

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
3343	2	95.8	9.6	10.0	10.0
3347	2	99.3	10.2	14.0	14.0
3351	2	95.8	9.6	14.0	14.0
3355	2	94.4	11.25	33.0	33.0
3359	3	103.5	8.85	22.0	22.0

No common areas specified.

Schedule of BASIX commitments

1. Commitments for multi-dwelling houses

2. Commitments for single dwelling houses

(a) Dwellings

(i) Water

(ii) Energy

(iii) Thermal Comfort

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

(i) Water

(ii) Energy

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.

2. Commitments for single 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.		✓	✓
(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.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(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.	✓	✓	✓

	Fixtures					Appliances		Individual 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 (> 4.5 but <= 6 L/min)	3 star	3 star	4 star	-	-	-	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
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.		✓	✓
(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.		✓	✓
(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.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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.	✓	✓	✓

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
3340, 3341	gas instantaneous 6 star	individual fan, not ducted	interlocked to light	individual fan, ducted to façade or roof	manual switch on/off	natural ventilation only, or no laundry	-
All other dwellings	gas instantaneous 6 star	no mechanical ventilation (ie. natural)	-	individual fan, ducted to façade or roof	manual switch on/off	natural ventilation only, or no laundry	-

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	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 kitchen
3340, 3341, 3342, 3345, 3346, 3349, 3350, 3355	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.5 - 4.0 (zoned)	3-phase airconditioning EER 3.5 - 4.0 (zoned)	3 (dedicated)	2 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	3	yes
All other dwellings	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.0 - 3.5 (zoned)	3-phase airconditioning EER 3.5 - 4.0 (zoned)	3-phase airconditioning EER 3.5 - 4.0 (zoned)	3 (dedicated)	2 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	3	no

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	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	-	-	-	-	gas cooktop & electric oven	-	yes	-	-	-	yes	yes

Alternative energy	
Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)
3340, 3354, 3359	0.0
All other dwellings	-

(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: (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.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
3340	36.4	41.6
3341	41.1	35.3
3342	41.4	42.9
3343	35.0	32.2
3344	34.6	34.6

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
3345	50.1	46.3
3346	40.7	40.8
3347	39.4	34.6
3348	39.7	36.6
3349	53.1	42.8
3350	43.2	41.2
3351	35.5	35.5
3352	35.2	32.9
3353	27.1	32.9
3354	52.5	54.9
3355	48.1	46.5
3356	27.7	33.6
3357	31.0	34.3
3358	27.9	36.0
All other dwellings	54.3	56.0

	Construction of floors and walls				
Dwelling no.	Concrete slab on ground(m ²)	Suspended floor with open subfloor (m ²)	Suspended floor with enclosed subfloor (m ²)	Suspended floor above garage (m ²)	Primarily rammed earth or mudbrick walls
3340	41	-	-	9	No
3341	38	-	-	18	No
3354,3359	44	-	-	23	No
3342,3345,3346,3349	35	-	-	13	No
3343,3344,3350,3355	38	-	-	13	No
All other dwellings	38	-	-	14	No

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.		✓	✓
(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.	✓	✓	
(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.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

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.	✓	✓	✓

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

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).

BASIX® commitments

Assessor	Mr. Daniel Warda
Date	05 / 06 / 2019
BASIX Certificate No.	1019698M
NatHERS Certificate No.	0003916350

project details

Site Address	Lot 3340 - 3359 Proposed Road 27, JORDAN SPRINGS NSW 2747
Municipality	Penrith
Reference	9900022

thermal comfort

Floors	300mm Waffle Pod Slab as per job number 9900022
External Walls	R2.5 High Density Insulation to all external walls
Internal Walls	R2.0 Bulk Insulation to Garage internal walls & party walls
Cantilevered Floors	R3.5 Bulk Insulation to all first floor suspended floors
Ceilings	R3.5 Bulk Insulation to all trussed ceilings over living areas (Incl. Garage Ceiling Joists only)
Roof	Colorbond Dark
Roof Insulation	Sarking
Type A Windows (Aluminium Framed - Single Clear Glazing)	U - Value: 6.70 SHGC: 0.57
• To all awning windows/doors to all Wet Areas	
Type B Windows (Aluminium Framed - Single Clear Glazing)	U - Value: 6.70 SHGC: 0.70
• To all sliding, fixed & double hung windows to all Wet Areas	
Type A Windows (Aluminium Framed - Single Low-e Glazing)	U - Value: 5.40 SHGC: 0.49
• To all awning windows/doors excluding Wet Areas	
Type B Windows (Aluminium Framed - Single Low-e Glazing)	U - Value: 5.40 SHGC: 0.58
• To all sliding, fixed & double hung windows excluding Wet Areas	

Note: SHGC may have a tolerance of +/- 10% of the nominated values in NSW only

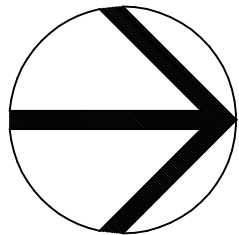
Skylights	N/A
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water


energy

Landscape Area	As Per BASIX Certificate	Hot Water	Gas Instantaneous 6 Stars
W.C's	3 Star	Air-Con (Cooling)	3-Phase Ducted A/C EER 3.5 - 4.0
Kitchen Taps	4 Star	Air-Con (Heating)	3-Phase Ducted A/C EER 3.0 - 3.5
Shower Heads	3 Star (>4.5 but <= 6L/min)	Ventilation	As Per Basix Assessment
Basin Taps	3 Star	PV System	N/A
Alternative Water	N/A	Cooking	Gas Cooktop & Electric Oven
Roof Water To Tank	N/A	Drying	Outdoor/Indoor Clothesline
Alt. Water Uses	N/A	Lighting	As Per BASIX Certificate





MASTER PLAN 1:200



Eden Brae Homes
70, Warring Road, Warring
Newport, Western NSW
P 080 022 7 1 888 033

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6.4
Average star rating

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LOT NO.	LOT AREA	UNITS	CHURCH	POWER	ADRESS	POST	DATE	TOTAL	PRIVATE
3340	60.00m	40.00m	35.00m	17.00m	10.00m	70.00m	70	60.00m	70.00m
3341	97.00m	47.00m	70.00m	14.00m	11.00m	60.00m	70	60.00m	70.00m
3342	18.00m	47.00m	2.00m	8.00m	7.00m	6.00m	6.00m	6.00m	6.00m
3343	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3344	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3345	112.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3346	112.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3347	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3348	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3349	112.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3350	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3351	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3352	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3353	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3354	112.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3355	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3356	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3357	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3358	95.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m
3359	112.00m	46.00m	21.00m	10.00m	8.00m	65.00m	70.00m	65.00m	70.00m



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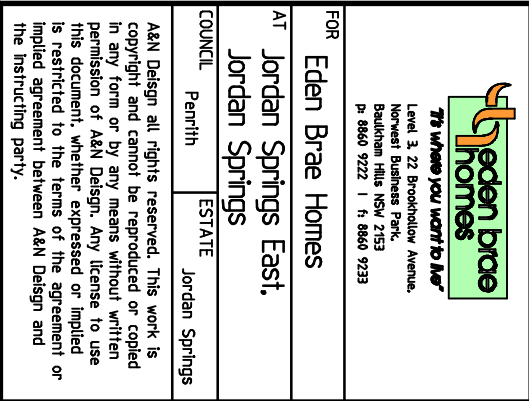
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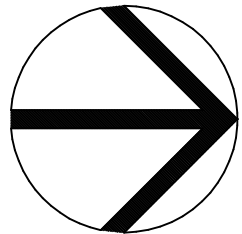
Average star rating

6.4

Certificate no.:
Assessor Name:
Accreditation no.:
Certificate date:
Dwelling Address:
Proposed Road 27
Jordan Springs, NSW
2747

www.nabers.gov.au

		2nd & 3rd Fls. Reception Point No. 5701 So. Sam Houston P.O. Box 440, Baytown, Texas 77520 Phone: (281) 844-3032 Fax: (281) 844-3044 info@designgroupinc.com	
REV	DESCRIPTION	DN	DATE
A	Issued for consultants	PF	2/15/2019
House Type	Custom	DRAWING N°	AND-30280
Reside	Custom	SHEET	3 of 3
Hand	N/A	JOB No.	
		Date	May 2019



Eden Price Homes
77, Manning Road, East Jordan Springs, NSW
P 0883 5321 F 0883 5323

5501 Eden Price Homes
PT Jordan Springs East, 3349
Jordan Springs

Eden Price Homes
77, Manning Road, East Jordan Springs, NSW
P 0883 5321 F 0883 5323

PART SITE & FIRST FLOOR PLAN 1:100



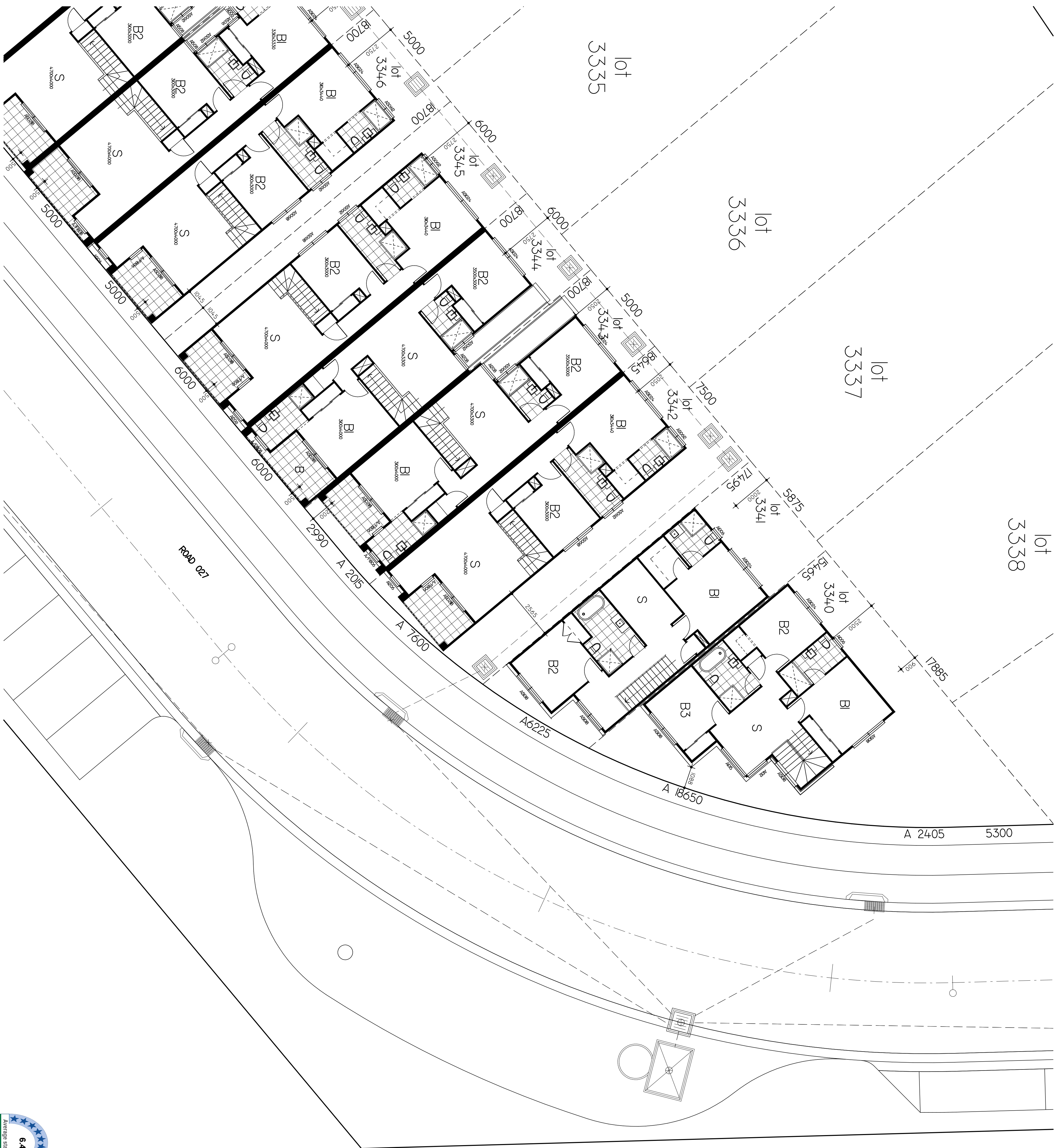
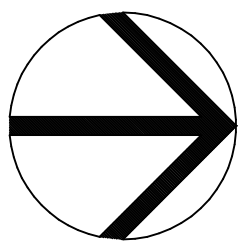
Star rating
6.4
NATIONAL HOUSE BUILDING COUNCIL
www.nhbpc.gov.au


003931520
Approved Name: Daniel Ward
Certificate No: 101182
Dwelling Address: Jordan Springs NSW 2747
05 June 2019

REVISION	DATE
1. Initial Design	21/05/19
2. Final Design	21/05/19

Drawn: J. Ward
Checked: J. Ward
Scale: 1:100
Date: 21/05/19

Project: 2019-01
Sheet: 2 of 3
Date: 21/05/19



	
<p>Let's 12, 22, 32, 42, 52, 62, 72, 82, 92, 102, 112, 122, 132, 142, 152, 162, 172, 182, 192, 202, 212, 222, 232, 242, 252, 262, 272, 282, 292, 302, 312, 322, 332, 342, 352, 362, 372, 382, 392, 402, 412, 422, 432, 442, 452, 462, 472, 482, 492, 502, 512, 522, 532, 542, 552, 562, 572, 582, 592, 602, 612, 622, 632, 642, 652, 662, 672, 682, 692, 702, 712, 722, 732, 742, 752, 762, 772, 782, 792, 802, 812, 822, 832, 842, 852, 862, 872, 882, 892, 902, 912, 922, 932, 942, 952, 962, 972, 982, 992, 1002, 1012, 1022, 1032, 1042, 1052, 1062, 1072, 1082, 1092, 1102, 1112, 1122, 1132, 1142, 1152, 1162, 1172, 1182, 1192, 1202, 1212, 1222, 1232, 1242, 1252, 1262, 1272, 1282, 1292, 1302, 1312, 1322, 1332, 1342, 1352, 1362, 1372, 1382, 1392, 1402, 1412, 1422, 1432, 1442, 1452, 1462, 1472, 1482, 1492, 1502, 1512, 1522, 1532, 1542, 1552, 1562, 1572, 1582, 1592, 1602, 1612, 1622, 1632, 1642, 1652, 1662, 1672, 1682, 1692, 1702, 1712, 1722, 1732, 1742, 1752, 1762, 1772, 1782, 1792, 1802, 1812, 1822, 1832, 1842, 1852, 1862, 1872, 1882, 1892, 1902, 1912, 1922, 1932, 1942, 1952, 1962, 1972, 1982, 1992, 2002, 2012, 2022, 2032, 2042, 2052, 2062, 2072, 2082, 2092, 2102, 2112, 2122, 2132, 2142, 2152, 2162, 2172, 2182, 2192, 2202, 2212, 2222, 2232, 2242, 2252, 2262, 2272, 2282, 2292, 2302, 2312, 2322, 2332, 2342, 2352, 2362, 2372, 2382, 2392, 2402, 2412, 2422, 2432, 2442, 2452, 2462, 2472, 2482, 2492, 2502, 2512, 2522, 2532, 2542, 2552, 2562, 2572, 2582, 2592, 2602, 2612, 2622, 2632, 2642, 2652, 2662, 2672, 2682, 2692, 2702, 2712, 2722, 2732, 2742, 2752, 2762, 2772, 2782, 2792, 2802, 2812, 2822, 2832, 2842, 2852, 2862, 2872, 2882, 2892, 2902, 2912, 2922, 2932, 2942, 2952, 2962, 2972, 2982, 2992, 3002, 3012, 3022, 3032, 3042, 3052, 3062, 3072, 3082, 3092, 3102, 3112, 3122, 3132, 3142, 3152, 3162, 3172, 3182, 3192, 3202, 3212, 3222, 3232, 3242, 3252, 3262, 3272, 3282, 3292, 3302, 3312, 3322, 3332, 3342, 3352, 3362, 3372, 3382, 3392, 3402, 3412, 3422, 3432, 3442, 3452, 3462, 3472, 3482, 3492, 3502, 3512, 3522, 3532, 3542, 3552, 3562, 3572, 3582, 3592, 3602, 3612, 3622, 3632, 3642, 3652, 3662, 3672, 3682, 3692, 3702, 3712, 3722, 3732, 3742, 3752, 3762, 3772, 3782, 3792, 3802, 3812, 3822, 3832, 3842, 3852, 3862, 3872, 3882, 3892, 3902, 3912, 3922, 3932, 3942, 3952, 3962, 3972, 3982, 3992, 4002, 4012, 4022, 4032, 4042, 4052, 4062, 4072, 4082, 4092, 4102, 4112, 4122, 4132, 4142, 4152, 4162, 4172, 4182, 4192, 4202, 4212, 4222, 4232, 4242, 4252, 4262, 4272, 4282, 4292, 4302, 4312, 4322, 4332, 4342, 4352, 4362, 4372, 4382, 4392, 4402, 4412, 4422, 4432, 4442, 4452, 4462, 4472, 4482, 4492, 4502, 4512, 4522, 4532, 4542, 4552, 4562, 4572, 4582, 4592, 4602, 4612, 4622, 4632, 4642, 4652, 4662, 4672, 4682, 4692, 4702, 4712, 4722, 4732, 4742, 4752, 4762, 4772, 4782, 4792, 4802, 4812, 4822, 4832, 4842, 4852, 4862, 4872, 4882, 4892, 4902, 4912, 4922, 4932, 4942, 4952, 4962, 4972, 4982, 4992, 5002, 5012, 5022, 5032, 5042, 5052, 5062, 5072, 5082, 5092, 5102, 5112, 5122, 5132, 5142, 5152, 5162, 5172, 5182, 5192, 5202, 5212, 5222, 5232, 5242, 5252, 5262, 5272, 5282, 5292, 5302, 5312, 5322, 5332, 5342, 5352, 5362, 5372, 5382, 5392, 5402, 5412, 5422, 5432, 5442, 5452, 5462, 5472, 5482, 5492, 5502, 5512, 5522, 5532, 5542, 5552, 5562, 5572, 5582, 5592, 5602, 5612, 5622, 5632, 5642, 5652, 5662, 5672, 5682, 5692, 5702, 5712, 5722, 5732, 5742, 5752, 5762, 5772, 5782, 5792, 5802, 5812, 5822, 5832, 5842, 5852, 5862, 5872, 5882, 5892, 5902, 5912, 5922, 5932, 5942, 5952, 5962, 5972, 5982, 5992, 6002, 6012, 6022, 6032, 6042, 6052, 6062, 6072, 6082, 6092, 6102, 6112, 6122, 6132, 6142, 6152, 6162, 6172, 6182, 6192, 6202, 6212, 6222, 6232, 6242, 6252, 6262, 6272, 6282, 6292, 6302, 6312, 6322, 6332, 6342, 6352, 6362, 6372, 6382, 6392, 6402, 6412, 6422, 6432, 6442, 6452, 6462, 6472, 6482, 6492, 6502, 6512, 6522, 6532, 6542, 6552, 6562, 6572, 6582, 6592, 6602, 6612, 6622, 6632, 6642, 6652, 6662, 6672, 6682, 6692, 6702, 6712, 6722, 6732, 6742, 6752, 6762, 6772, 6782, 6792, 6802, 6812, 6822, 6832, 6842, 6852, 686</p>	

PART SITE & FIRST FLOOR PLAN 1:100



**NATIONWIDE
ENERGY RATING SCHEME**
www.natethere.gov.au

Average star rating


6.4

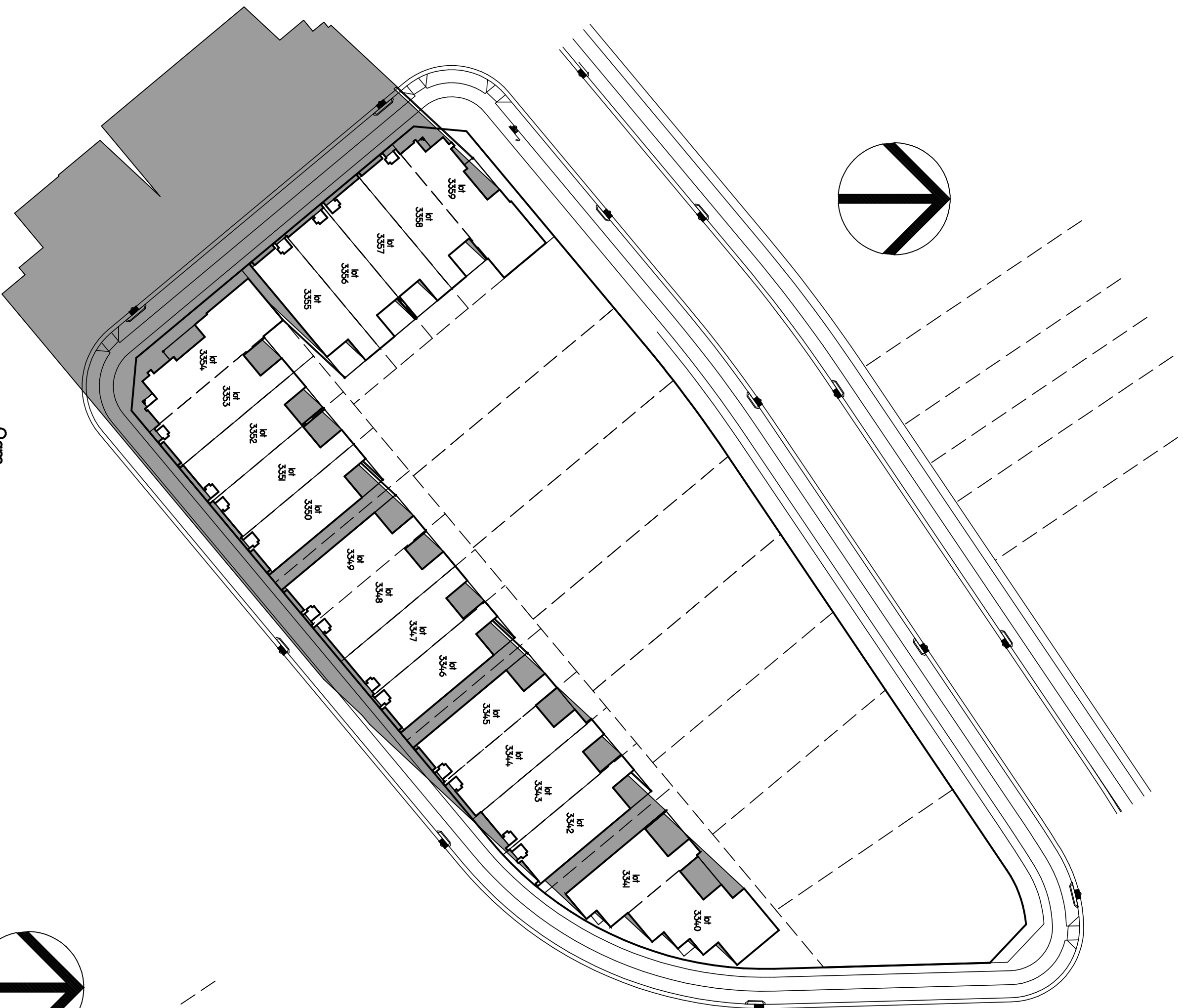
Certificate no.: 0003916350
 Assessor Name: Daniel Warda
 Accreditation no.: 101182
 05 June 2019

Proposed Road 27
 Jordan Springs, NSW
 2747

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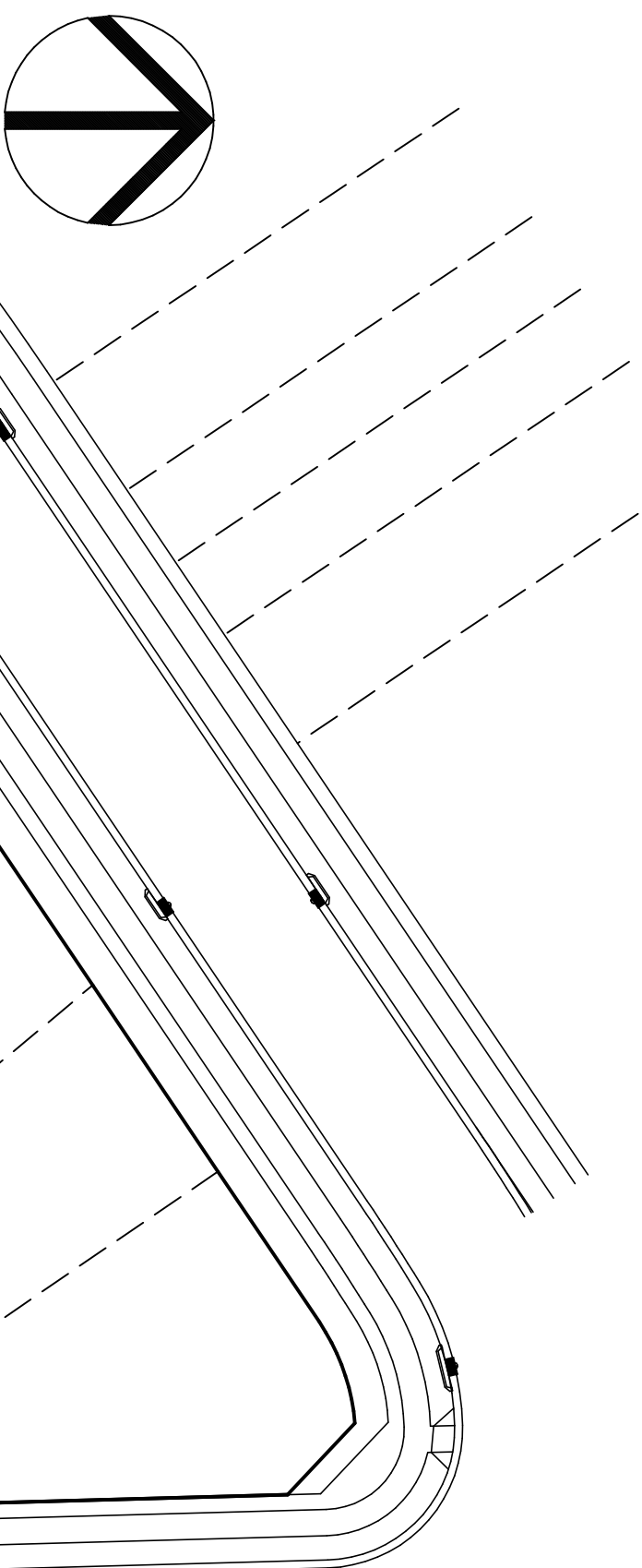


band		house type	REV	DESCRIPTION	DRAWN	DATE	 <p>Design Group S D B R V</p> <p> 1st fl. 2 x 6, 7/6 2nd fl. 2 x 6, 7/6 3rd fl. 2 x 6, 7/6 4th fl. 2 x 6, 7/6 5th fl. 2 x 6, 7/6 6th fl. 2 x 6, 7/6 7th fl. 2 x 6, 7/6 8th fl. 2 x 6, 7/6 9th fl. 2 x 6, 7/6 10th fl. 2 x 6, 7/6 11th fl. 2 x 6, 7/6 12th fl. 2 x 6, 7/6 13th fl. 2 x 6, 7/6 14th fl. 2 x 6, 7/6 15th fl. 2 x 6, 7/6 16th fl. 2 x 6, 7/6 17th fl. 2 x 6, 7/6 18th fl. 2 x 6, 7/6 19th fl. 2 x 6, 7/6 20th fl. 2 x 6, 7/6 21st fl. 2 x 6, 7/6 22nd fl. 2 x 6, 7/6 23rd fl. 2 x 6, 7/6 24th fl. 2 x 6, 7/6 25th fl. 2 x 6, 7/6 26th fl. 2 x 6, 7/6 27th fl. 2 x 6, 7/6 28th fl. 2 x 6, 7/6 29th fl. 2 x 6, 7/6 30th fl. 2 x 6, 7/6 31st fl. 2 x 6, 7/6 32nd fl. 2 x 6, 7/6 33rd fl. 2 x 6, 7/6 34th fl. 2 x 6, 7/6 35th fl. 2 x 6, 7/6 36th fl. 2 x 6, 7/6 37th fl. 2 x 6, 7/6 38th fl. 2 x 6, 7/6 39th fl. 2 x 6, 7/6 40th fl. 2 x 6, 7/6 41st fl. 2 x 6, 7/6 42nd fl. 2 x 6, 7/6 43rd fl. 2 x 6, 7/6 44th fl. 2 x 6, 7/6 45th fl. 2 x 6, 7/6 46th fl. 2 x 6, 7/6 47th fl. 2 x 6, 7/6 48th fl. 2 x 6, 7/6 49th fl. 2 x 6, 7/6 50th fl. 2 x 6, 7/6 51st fl. 2 x 6, 7/6 52nd fl. 2 x 6, 7/6 53rd fl. 2 x 6, 7/6 54th fl. 2 x 6, 7/6 55th fl. 2 x 6, 7/6 56th fl. 2 x 6, 7/6 57th fl. 2 x 6, 7/6 58th fl. 2 x 6, 7/6 59th fl. 2 x 6, 7/6 60th fl. 2 x 6, 7/6 61st fl. 2 x 6, 7/6 62nd fl. 2 x 6, 7/6 63rd fl. 2 x 6, 7/6 64th fl. 2 x 6, 7/6 65th fl. 2 x 6, 7/6 66th fl. 2 x 6, 7/6 67th fl. 2 x 6, 7/6 68th fl. 2 x 6, 7/6 69th fl. 2 x 6, 7/6 70th fl. 2 x 6, 7/6 71st fl. 2 x 6, 7/6 72nd fl. 2 x 6, 7/6 73rd fl. 2 x 6, 7/6 74th fl. 2 x 6, 7/6 75th fl. 2 x 6, 7/6 76th fl. 2 x 6, 7/6 77th fl. 2 x 6, 7/6 78th fl. 2 x 6, 7/6 79th fl. 2 x 6, 7/6 80th fl. 2 x 6, 7/6 81st fl. 2 x 6, 7/6 82nd fl. 2 x 6, 7/6 83rd fl. 2 x 6, 7/6 84th fl. 2 x 6, 7/6 85th fl. 2 x 6, 7/6 86th fl. 2 x 6, 7/6 87th fl. 2 x 6, 7/6 88th fl. 2 x 6, 7/6 89th fl. 2 x 6, 7/6 90th fl. 2 x 6, 7/6 91st fl. 2 x 6, 7/6 92nd fl. 2 x 6, 7/6 93rd fl. 2 x 6, 7/6 94th fl. 2 x 6, 7/6 95th fl. 2 x 6, 7/6 96th fl. 2 x 6, 7/6 97th fl. 2 x 6, 7/6 98th fl. 2 x 6, 7/6 99th fl. 2 x 6, 7/6 100th fl. 2 x 6, 7/6 101st fl. 2 x 6, 7/6 102nd fl. 2 x 6, 7/6 103rd fl. 2 x 6, 7/6 104th fl. 2 x 6, 7/6 105th fl. 2 x 6, 7/6 106th fl. 2 x 6, 7/6 107th fl. 2 x 6, 7/6 108th fl. 2 x 6, 7/6 109th fl. 2 x 6, 7/6 110th fl. 2 x 6, 7/6 111th fl. 2 x 6, 7/6 112th fl. 2 x 6, 7/6 113th fl. 2 x 6, 7/6 114th fl. 2 x 6, 7/6 115th fl. 2 x 6, 7/6 116th fl. 2 x 6, 7/6 117th fl. 2 x 6, 7/6 118th fl. 2 x 6, 7/6 119th fl. 2 x 6, 7/6 120th fl. 2 x 6, 7/6 121st fl. 2 x 6, 7/6 122nd fl. 2 x 6, 7/6 123rd fl. 2 x 6, 7/6 124th fl. 2 x 6, 7/6 125th fl. 2 x 6, 7/6 126th fl. 2 x 6, 7/6 127th fl. 2 x 6, 7/6 128th fl. 2 x 6, 7/6 129th fl. 2 x 6, 7/6 130th fl. 2 x 6, 7/6 131st fl. 2 x 6, 7/6 132nd fl. 2 x 6, 7/6 133rd fl. 2 x 6, 7/6 134th fl. 2 x 6, 7/6 135th fl. 2 x 6, 7/6 136th fl. 2 x 6, 7/6 137th fl. 2 x 6, 7/6 138th fl. 2 x 6, 7/6 139th fl. 2 x 6, 7/6 140th fl. 2 x 6, 7/6 141st fl. 2 x 6, 7/6 142nd fl. 2 x 6, 7/6 143rd fl. 2 x 6, 7/6 144th fl. 2 x 6, 7/6 145th fl. 2 x 6, 7/6 146th fl. 2 x 6, 7/6 147th fl. 2 x 6, 7/6 148th fl. 2 x 6, 7/6 149th fl. 2 x 6, 7/6 150th fl. 2 x 6, 7/6 151st fl. 2 x 6, 7/6 152nd fl. 2 x 6, 7/6 153rd fl. 2 x 6, 7/6 154th fl. 2 x 6, 7/6 155th fl. 2 x 6, 7/6 156th fl. 2 x 6, 7/6 157th fl. 2 x 6, 7/6 158th fl. 2 x 6, 7/6 159th fl. 2 x 6, 7/6 160th fl. 2 x 6, 7/6 161st fl. 2 x 6, 7/6 162nd fl. 2 x 6, 7/6 163rd fl. 2 x 6, 7/6 164th fl. 2 x 6, 7/6 165th fl. 2 x 6, 7/6 166th fl. 2 x 6, 7/6 167th fl. 2 x 6, 7/6 168th fl. 2 x 6, 7/6 169th fl. 2 x 6, 7/6 170th fl. 2 x 6, 7/6 171st fl. 2 x 6, 7/6 172nd fl. 2 x 6, 7/6 173rd fl. 2 x 6, 7/6 174th fl. 2 x 6, 7/6 175th fl. 2 x 6, 7/6 176th fl. 2 x 6, 7/6 177th fl. 2 x 6, 7/6 178th fl. 2 x 6, 7/6 179th fl. 2 x 6, 7/6 180th fl. 2 x 6, 7/6 181st fl. 2 x 6, 7/6 182nd fl. 2 x 6, 7/6 183rd fl. 2 x 6, 7/6 184th fl. 2 x 6, 7/6 185th fl. 2 x 6, 7/6 186th fl. 2 x 6, 7/6 187th fl. 2 x 6, 7/6 188th fl. 2 x 6, 7/6 189th fl. 2 x 6, 7/6 190th fl. 2 x 6, 7/6 191st fl. 2 x 6, 7/6 192nd fl. 2 x 6, 7/6 193rd fl. 2 x 6, 7/6 194th fl. 2 x 6, 7/6 195th fl</p>
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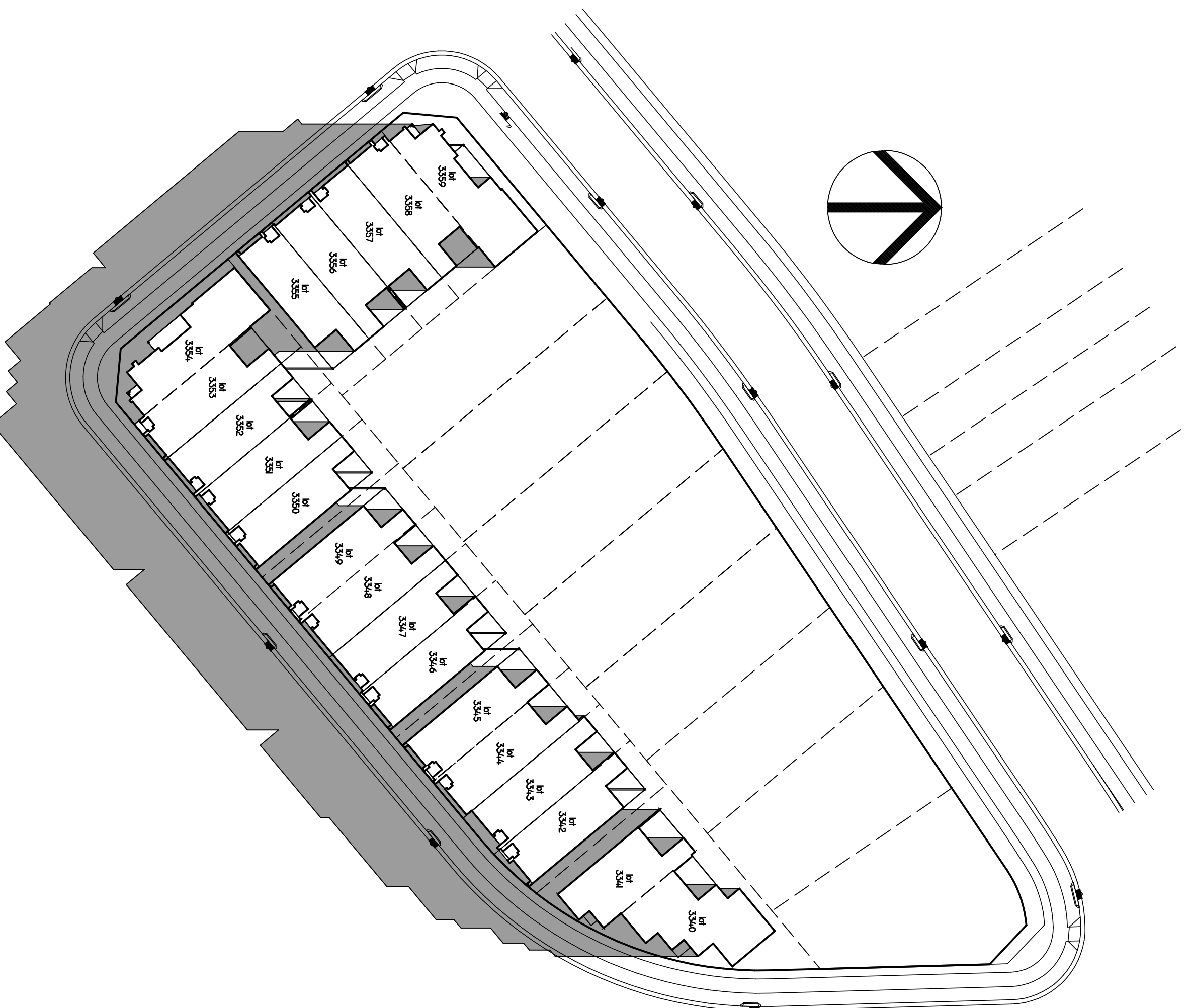
SHADOW DIAGRAMS 20mm MID WINTER 1:300
to be used as a guide only, site conditions may cause variations

to be used as a guide only. site conditions may cause variations



SHADOW DIAGRAMS MID WINTER 1:300

to be used as a guide only. site conditions may cause variations



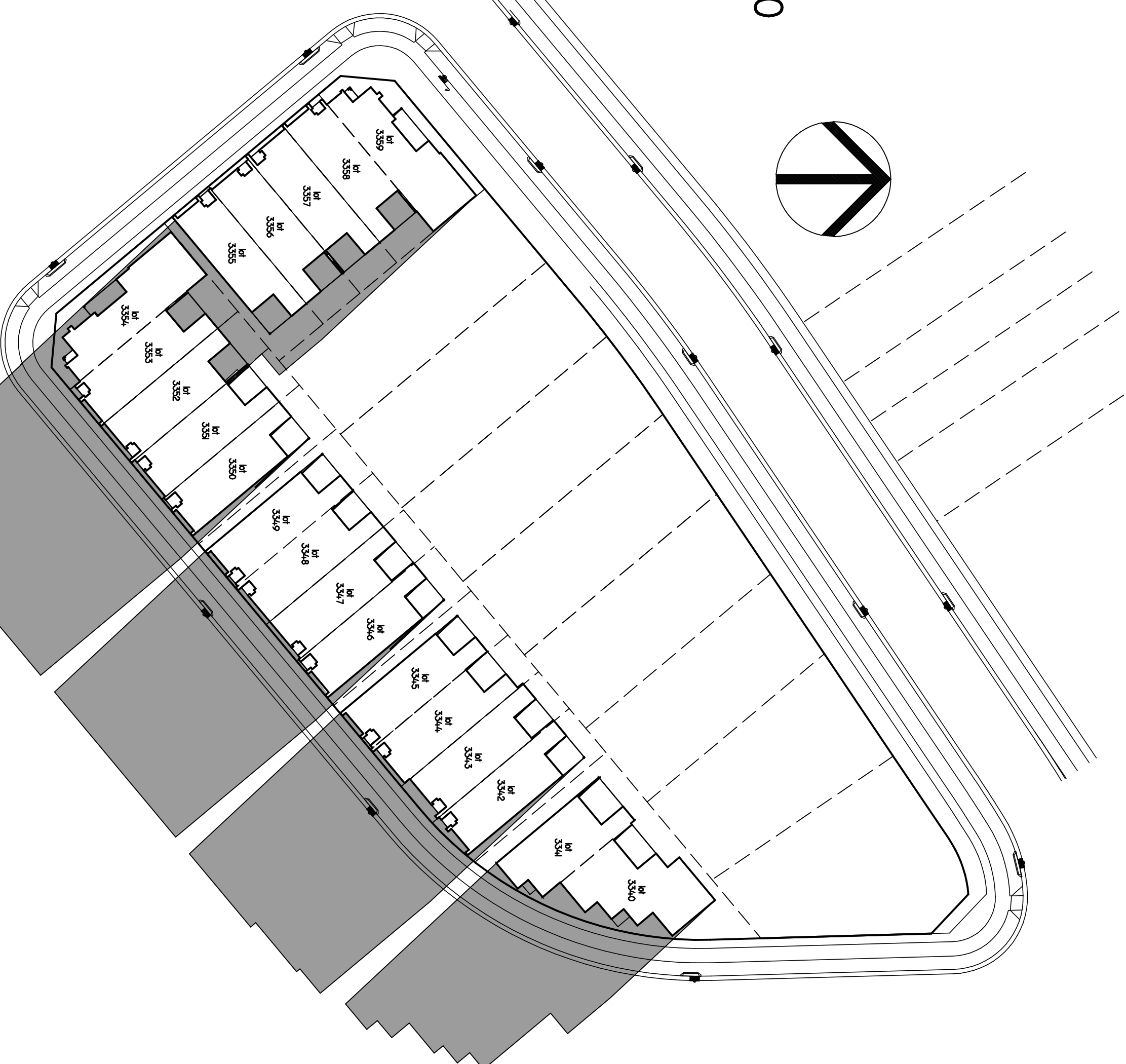
It's where you want to live
 Level 3, 22 Brookmellow Avenue,
 Norwest Business Park,
 Baulkham Hills NSW 2153

Eden Brae Homes

AT Jordan Springs East.

Jordan Springs

Pennth	Jordan Springs
--------	----------------




SHADOW DIAGRAMS MID WINTER 1:300

to be used as a guide only. site conditions may cause variations



Certificate no.:	0003916350
Assessor Name:	Daniel Ward
Accreditation no.:	101182
Certificate date:	05 June 2016
Dwelling Address:	
Proposed Road 27	
Jordan Springs, NSW	
2747	
www.nathers.gov.au	



 <p>A & N DESIGN GROUP www.designgroupinc.com</p>		<p>Headquarters: 116 Ave. 27-27 South Chula P.O. Box 6439 Balakrishna Hill Houston, TX 77261-6439 Phone: 281.322.3644 Fax: 281.322.3644</p>	
Lead: 1, 2, 3, 4, 5			
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Rev: 133			
Rev: 134			
Rev: 135			
Rev: 136			

Certificate no:	0003916350
Assessor Name:	Daniel Warda
Accreditation no:	101182
Certificate date:	05 June 2019
Dwelling Address:	
Proposed Road 27	
Jordan Springs NSW	
2747	

Average star rating
6.4

NATIONWIDE HOUSE
A FRANCHISE SYSTEM

www.nationwide.gov.au



Nationwide House Energy Rating Scheme* Certificate



Certificate number: 0003907458-02

Certificate Date: 05 Jun 2019

★ Star rating: 6.4

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3340/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

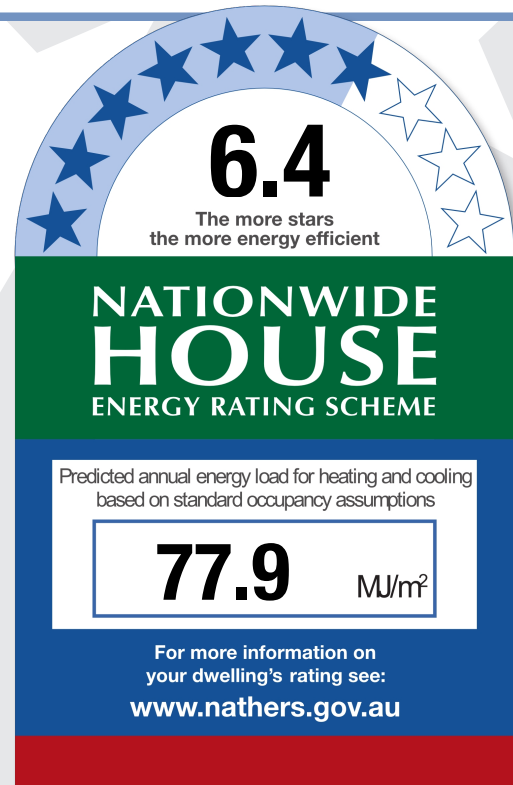
Conditioned: **100.0**
Unconditioned: **35.0**
Garage: **30.0**
TOTAL: **135.0**

Annual thermal performance loads (MJ/m²)

Heating: **36.4**
Cooling: **41.6**
TOTAL: **77.9**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

Sealed: **1**
Unsealed: **0**
TOTAL:** **1**

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 daylight type: **Unknown**

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: **0003907458-02**

Certificate Date:

05 Jun 2019

★ Star rating:

6.4



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	1800	800	SE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	600	1300	SE	No Shading
Laundry/Powder	ALM-001-01 A	n/a	1000	500	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	1800	NE	No Shading
Ensuite	ALM-001-01 A	n/a	1000	600	NW	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2000	NW	No Shading
Bedroom 3	ALM-002-03 A	n/a	1000	1800	SE	No Shading
Upstairs Living	ALM-002-03 A	n/a	1000	1800	SE	No Shading
Upstairs Living	ALM-001-03 A	n/a	1000	1200	NE	No Shading
Upstairs Living	ALM-001-03 A	n/a	1000	1800	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	4000	2590	NW	No	2600
Kitchen/Living	EW-1	2095	2590	NE	No	100
Kitchen/Living	EW-1	2300	2590	SE	No	1800
Kitchen/Living	EW-1	1700	2590	NE	No	1200
Kitchen/Living	EW-1	2300	2590	SE	No	100
Kitchen/Living	EW-1	1600	2590	NE	No	100
Kitchen/Living	EW-1	3700	2590	SE	No	100

Nationwide House Energy Rating Scheme* Certificate

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★ Star rating:

6.4



Building features continued

Laundry/Powder	EW-1	2495	2590	SW	No	4100
Laundry/Powder	EW-1	1895	2590	NW	No	100
Garage 1	EW-1	1600	2590	SW	No	100
Garage 1	EW-1	5500	2590	NW	No	100
Garage 1	EW-2	5500	2590	NE	No	100
Garage 1	EW-3	3100	2590	SE	No	100
Bedroom 1	EW-4	3595	2590	NW	No	100
Bedroom 1	EW-4	3895	2590	NE	No	100
Ensuite	EW-4	1590	2590	NW	No	100
Bedroom 2	EW-4	1100	2590	SW	No	100
Bedroom 2	EW-4	3095	2590	NW	No	100
Bedroom 3	EW-1	1595	450	NE	No	0
Bedroom 3	EW-4	1595	2140	NE	No	100
Bedroom 3	EW-1	3700	450	SE	No	0
Bedroom 3	EW-4	3700	2140	SE	No	100
Upstairs Living	EW-1	2095	450	NE	No	0
Upstairs Living	EW-4	2095	2140	NE	No	100
Upstairs Living	EW-1	2300	450	SE	No	0
Upstairs Living	EW-4	2300	2140	SE	No	100
Upstairs Living	EW-1	1700	450	NE	No	0
Upstairs Living	EW-4	1700	2140	NE	No	100
Upstairs Living	EW-1	2300	450	SE	No	0
Upstairs Living	EW-4	2300	2140	SE	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	74.0	No insulation	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	16.0	Bulk Insulation, No Air Gap R2	No
IW-3 - Shaft liner party wall with plaster	39.0	Bulk Insulation both sides of shaft liner R2	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Waffle pod slab 300 mm 100mm	41.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Laundry/Powder	Waffle pod slab 300 mm 100mm	4.6	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	30.0	None	Waffle Pod 300mm	Bare
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	1.6		No Insulation	Carpet 10mm
Bedroom 1/Laundry/Powder	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1/Garage	Timber Above Plasterboard	9.1		Bulk Insulation	Carpet 10mm

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003907458-02**

Certificate Date:

05 Jun 2019

★ Star rating:

6.4



Building features continued

	19mm			R3.5	
Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	0.9		No Insulation	Ceramic Tiles 8mm
Ensuite/Laundry/Powder	Timber Above Plasterboard 19mm	1.6		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	2.1	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	1.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	7.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
B2 WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.4		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	10.3		No Insulation	Carpet 10mm
Upstairs Living/Kitchen/Living	Timber Above Plasterboard 19mm	18.3		No Insulation	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Laundry/Powder	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
B2 WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes
Upstairs Living	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bath	1	Exhaust Fans	300	Sealed

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003907458-02**

Certificate Date:

05 Jun 2019

★ Star rating:

6.4



Building features continued

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003907458-02

Certificate Date: 05 Jun 2019

★ Star rating: 6.4



Additional information

Explanatory notes

About this report

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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.

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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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For more information on energy efficient design and insulation visit www.yourhome.gov.au

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: 0003907466-01

Certificate Date: 05 Jun 2019

★ Star rating: 6.6

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3341/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Brick Veneer**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

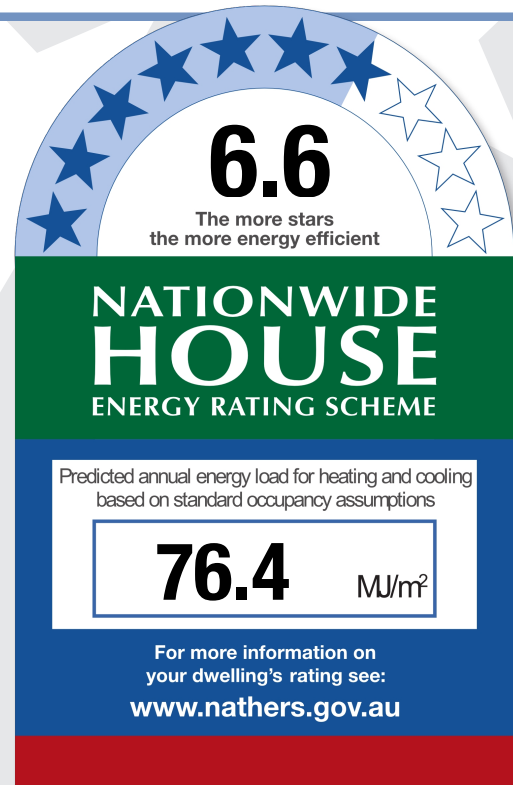
Conditioned: **98.0**
Unconditioned: **23.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **41.1**
Cooling: **35.3**
TOTAL: **76.4**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

Sealed: **1**
Unsealed: **0**
TOTAL:** **1**

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: **Unknown**

Window selection - default windows only

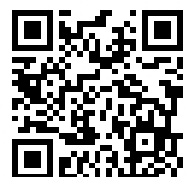
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: 0003907466-01

Certificate Date:

05 Jun 2019

★ Star rating:

6.6



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Entry/Stairs	ALM-001-03 A	n/a	1800	600	SE	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-001-01 A	n/a	1000	600	NW	No Shading
Study	ALM-002-03 A	n/a	1000	1800	SE	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	1800	SE	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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Kitchen/Living	EW-1	3900	2590	NW	No	3100
Kitchen/Living	EW-1	5095	2590	SW	No	100
Bath/Laundry	EW-1	2995	2590	SW	No	4000
Bath/Laundry	EW-1	1800	2590	NW	No	100
Bath/Laundry	EW-1	400	2590	NE	No	100
Garage 1	EW-2	1400	2590	NE	No	1500
Garage 1	EW-3	3200	2590	SE	No	100
Garage 1	EW-1	5595	2590	SW	No	100
Entry/Stairs	EW-1	2300	2590	NE	No	100
Entry/Stairs	EW-1	2495	2590	SE	No	1000
Bedroom 1	EW-4	3595	2590	NW	No	0
Ensuite	EW-4	1995	2590	SW	No	0

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003907466-01**

Certificate Date:

05 Jun 2019

★ Star rating:

6.6



Building features continued

Ensuite	EW-4	2095	2590	NW	No	0
WIR	EW-4	1690	2590	SW	No	0
Study	EW-4	2200	2590	NE	No	0
Study	EW-1	2495	2590	SE	No	0
Study	EW-4	2490	2590	SW	No	0
Bath	EW-4	1790	2590	SW	No	0
Bedroom 2	EW-1	1400	450	NE	No	0
Bedroom 2	EW-4	1400	2140	NE	No	0
Bedroom 2	EW-1	3200	450	SE	No	0
Bedroom 2	EW-4	3200	2140	SE	No	0
Bedroom 2	EW-4	3895	2590	SW	No	0

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	78.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	46.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	19.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.2	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.3	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.6	None	Waffle Pod 300mm	Bare
Entry/Stairs	Waffle pod slab 300 mm 100mm	11.7	None	Waffle Pod 300mm	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	9.5		No Insulation	Carpet 10mm
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	2.1		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	2.1	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	1.6		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	2.4	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	3.3		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	11.8		No Insulation	Carpet 10mm
Study/Entry/Stairs	Timber Above Plasterboard 19mm	10.5		No Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003907466-01**

Certificate Date:

05 Jun 2019

★ Star rating:

6.6



Building features continued

Bath/Garage 1	Timber Above Plasterboard 19mm	6.0	Bulk Insulation R3.5	Ceramic Tiles 8mm
Bath/Entry/Stairs	Timber Above Plasterboard 19mm	1.1	No Insulation	Ceramic Tiles 8mm
Bedroom 2/Garage	Timber Above Plasterboard 19mm	11.3	Bulk Insulation R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bath/Laundry	Plasterboard	Bulk Insulation R3.5	Yes
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Entry/Stairs	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
Bath	1	Exhaust Fans	300	Sealed

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003907466-01

Certificate Date: 05 Jun 2019

★ Star rating: 6.6



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916152**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.2**

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Assessor details

Accreditation number: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3342/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

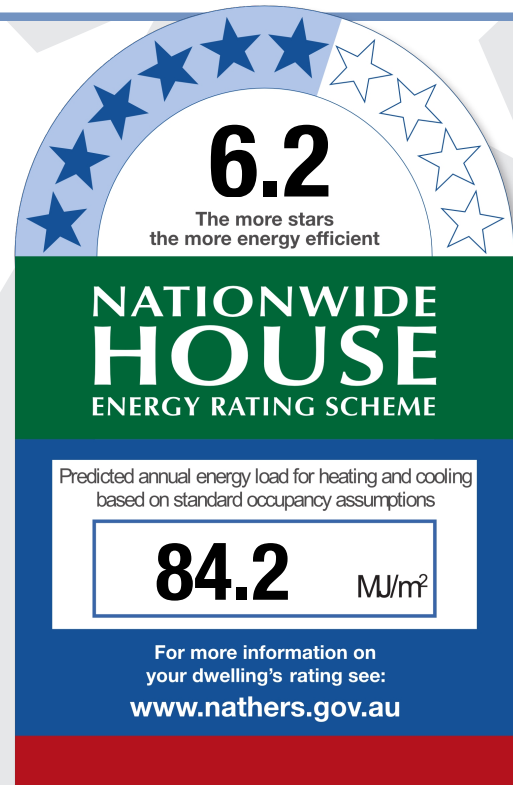
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **41.4**
Cooling: **42.9**
TOTAL: **84.2**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916152**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	NE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Study	ALM-001-03 A	n/a	1800	600	NE	No Shading
Study	ALM-001-03 A	n/a	1200	600	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	1800	2590	NW	No	100
Bath/Laundry	EW-1	2895	2590	NE	No	3000
Kitchen/Living	EW-1	2900	2590	NW	No	3000
Kitchen/Living	EW-1	5695	2590	NE	No	100

Nationwide House Energy Rating Scheme* Certificate

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Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

Hall/Stairs	EW-1	990	2590	NE	No	100
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	5595	2590	NE	No	100
Garage 1	EW-3	3100	2590	SE	No	100
Garage 1	EW-2	1100	2590	SW	No	1700
Bedroom 1	EW-4	3295	2590	NW	No	100
Ensuite	EW-4	1395	2590	NW	No	100
Ensuite	EW-4	2495	2590	NE	No	100
WIR	EW-4	1390	2590	NE	No	100
Bath	EW-4	1490	2590	NE	No	100
Bedroom 2	EW-4	3090	2590	NE	No	100
Study	EW-4	5095	2590	NE	No	100
Study	EW-4	3100	2590	SE	No	1800
Study	EW-4	1700	2590	NE	No	3200
Study	EW-1	1600	450	SE	No	0
Study	EW-4	1600	2140	SE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	76.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916152**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916152**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916152

Certificate Date: 05 Jun 2019

★ Star rating: 6.2



Additional information

Explanatory notes

About this report

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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

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Disclaimer

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Contact

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916160**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.9**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3343/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-01 A Aluminium A SG Clear**

Net floor area (m²)

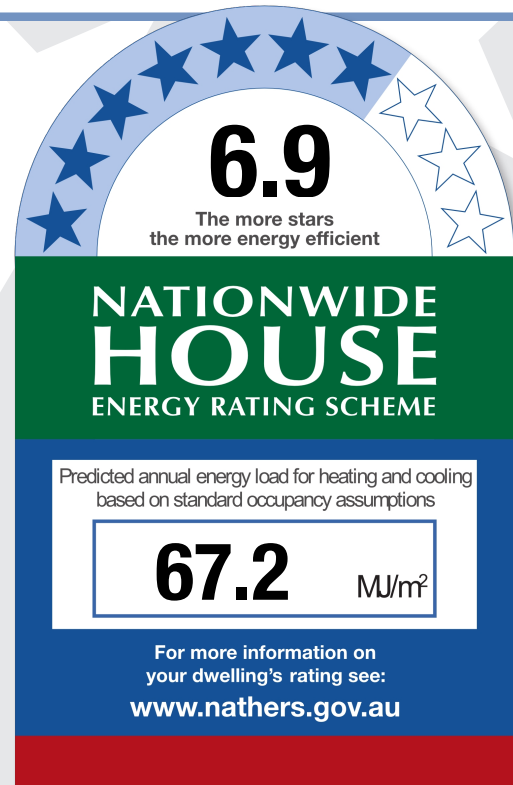
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **35.0**
Cooling: **32.2**
TOTAL: **67.2**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

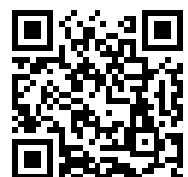
Note on allowable window values:
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Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

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: **0003916160**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	NE	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	SW	No Shading
Study	ALM-001-03 A	n/a	1200	800	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SW	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	NW	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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	1800	2590	NW	No	100
Laundry/Bath	EW-1	2895	2590	NE	No	3100
Laundry/Bath	EW-1	600	2590	SW	No	100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	1100	2590	NE	No	1700
Garage 1	EW-3	3200	2590	SE	No	100
Bedroom 1	EW-4	3195	2590	SE	No	1800

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916160**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features continued

Ensuite	EW-4	1600	2590	SE	No	100
Ensuite	EW-4	1700	2590	SW	No	3300
Study	EW-4	1200	2590	NW	No	100
Bath	EW-4	1490	2590	SW	No	100
Bedroom 2	EW-4	3695	2590	SW	No	100
Bedroom 2	EW-4	3600	2590	NW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	128.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916160**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9

Building features continued

Ceiling type

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	Bulk Insulation R3.5	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916160

Certificate Date: 05 Jun 2019

★ Star rating: 6.9



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916210**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.9**

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Assessor details

Accreditation number: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3344/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

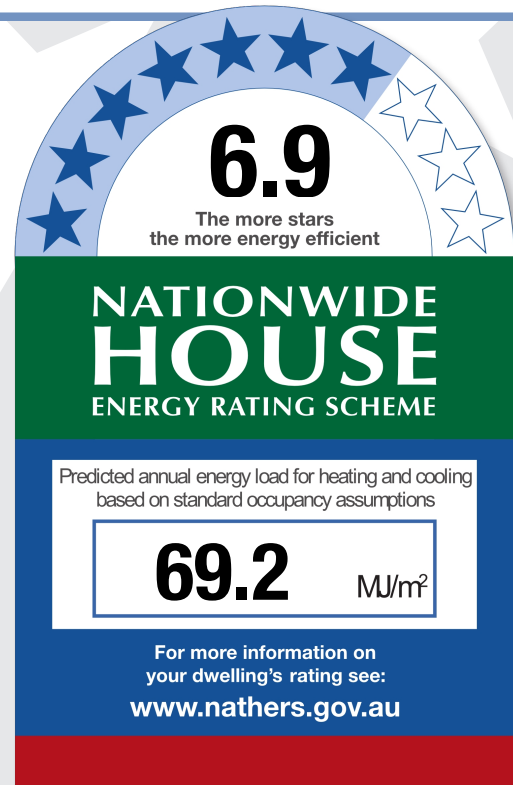
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **34.6**
Cooling: **34.6**
TOTAL: **69.2**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

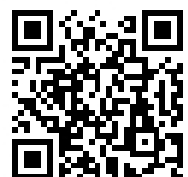
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Scan to access this certificate online and confirm this is valid.



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916210**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	SW	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1200	600	SE	No Shading
Study	ALM-001-03 A	n/a	1200	800	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	NW	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	SW	No	3100
Laundry/Bath	EW-1	1800	2590	NW	No	100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	600	2590	NE	No	100
Garage 1	EW-3	3200	2590	SE	No	100
Garage 1	EW-2	1100	2590	SW	No	1700
Bedroom 1	EW-4	3195	2590	SE	No	1800
Ensuite	EW-4	1700	2590	NE	No	3300

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916210**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features continued

Ensuite	EW-4	1600	2590	SE	No	100
Study	EW-4	1200	2590	NW	No	100
Bath	EW-4	1490	2590	NE	No	100
Bedroom 2	EW-4	3600	2590	NW	No	100
Bedroom 2	EW-4	3695	2590	NE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	128.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916210**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9

Building features continued

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916210

Certificate Date: 05 Jun 2019

★ Star rating: 6.9



Additional information

Explanatory notes

About this report

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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.

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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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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916186**

Certificate Date: **05 Jun 2019**

★ Star rating: **5.7**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3345/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

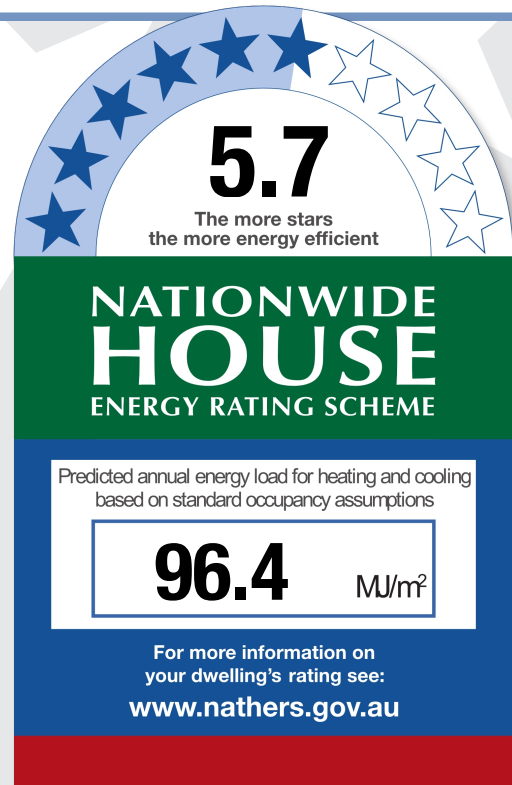
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **50.1**
Cooling: **46.3**
TOTAL: **96.4**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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.

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916186

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	SW	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SW	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	SW	No Shading
Study	ALM-001-03 A	n/a	1200	600	SE	No Shading
Study	ALM-001-03 A	n/a	1800	600	SW	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	2895	2590	SW	No	3000
Bath/Laundry	EW-1	1800	2590	NW	No	100
Kitchen/Living	EW-1	5695	2590	SW	No	100
Kitchen/Living	EW-1	2900	2590	NW	No	3000

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916186**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

Hall/Stairs	EW-1	1595	2590	SE	No	1200
Hall/Stairs	EW-1	990	2590	SW	No	100
Garage 1	EW-2	1100	2590	NE	No	1700
Garage 1	EW-3	3100	2590	SE	No	100
Garage 1	EW-1	5595	2590	SW	No	100
Bedroom 1	EW-4	3295	2590	NW	No	100
Ensuite	EW-4	2495	2590	SW	No	100
Ensuite	EW-4	1395	2590	NW	No	100
WIR	EW-4	1390	2590	SW	No	100
Bath	EW-4	1490	2590	SW	No	100
Bedroom 2	EW-4	3090	2590	SW	No	100
Study	EW-1	1600	450	SE	No	0
Study	EW-4	1600	2140	SE	No	100
Study	EW-4	1700	2590	SW	No	3200
Study	EW-4	3100	2590	SE	No	1800
Study	EW-4	5095	2590	SW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	76.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916186**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.8		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916186**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916186

Certificate Date: 05 Jun 2019

★ Star rating: 5.7



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916178**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.3**

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Assessor details

Accreditation number: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3346/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

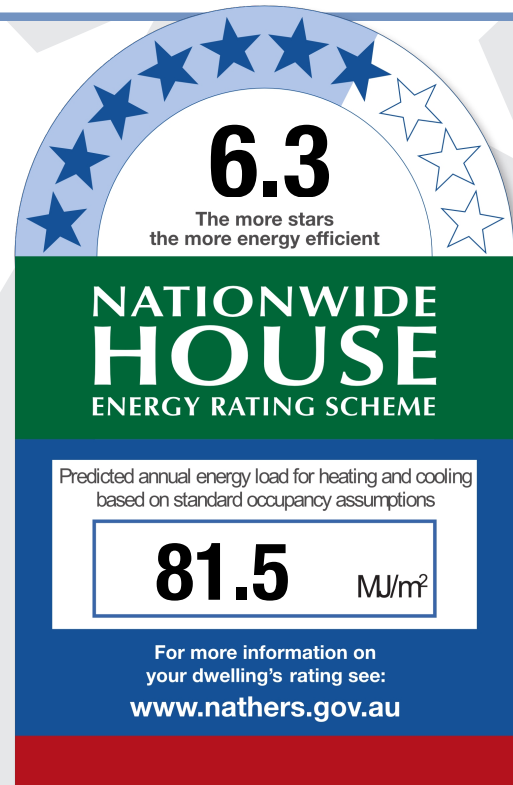
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **40.7**
Cooling: **40.8**
TOTAL: **81.5**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

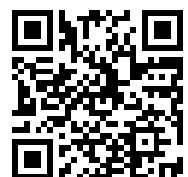
Note on allowable window values:
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Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

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: **0003916178**

Certificate Date:

05 Jun 2019

★ Star rating:

6.3



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	NE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Study	ALM-001-03 A	n/a	1800	600	NE	No Shading
Study	ALM-001-03 A	n/a	1200	600	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	1800	2590	NW	No	100
Bath/Laundry	EW-1	2895	2590	NE	No	3000
Kitchen/Living	EW-1	2900	2590	NW	No	3000
Kitchen/Living	EW-1	5695	2590	NE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916178**

Certificate Date:

05 Jun 2019

★ Star rating:

6.3



Building features continued

Hall/Stairs	EW-1	990	2590	NE	No	100
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	5595	2590	NE	No	100
Garage 1	EW-3	3100	2590	SE	No	100
Garage 1	EW-2	1100	2590	SW	No	1700
Bedroom 1	EW-4	3295	2590	NW	No	100
Ensuite	EW-4	1395	2590	NW	No	100
Ensuite	EW-4	2495	2590	NE	No	100
WIR	EW-4	1390	2590	NE	No	100
Bath	EW-4	1490	2590	NE	No	100
Bedroom 2	EW-4	3090	2590	NE	No	100
Study	EW-4	5095	2590	NE	No	100
Study	EW-4	3100	2590	SE	No	1800
Study	EW-4	1700	2590	NE	No	3200
Study	EW-1	1600	450	SE	No	0
Study	EW-4	1600	2140	SE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	76.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916178**

Certificate Date:

05 Jun 2019

★ Star rating:

6.3



Building features continued

WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916178**

Certificate Date:

05 Jun 2019

★ Star rating:

6.3



Building features continued

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916178

Certificate Date: 05 Jun 2019

★ Star rating: 6.3



Additional information

Explanatory notes

About this report

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

General Information

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

The actual energy consumption of your home may vary significantly from the predicted energy load figures in 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.

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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

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916202**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.7**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3347/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-01 A Aluminium B SG Clear**

Net floor area (m²)

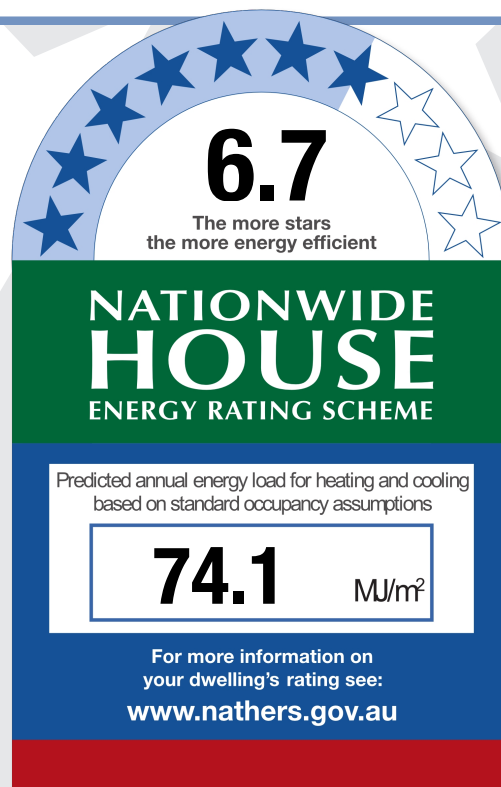
Conditioned: **93.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.4**
Cooling: **34.6**
TOTAL: **74.1**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916202**

Certificate Date:

05 Jun 2019

★ Star rating:

6.7



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	NE	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-001-03 A	n/a	1500	800	NW	No Shading
Bedroom 1	ALM-001-03 A	n/a	1500	600	SW	No Shading
Bedroom 1	ALM-002-01 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-001-01 A	n/a	1000	600	SE	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SW	No Shading
Study	ALM-001-03 A	n/a	1800	800	SE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	1800	2590	NW	No	100
Laundry/Bath	EW-1	2895	2590	NE	No	3100
Laundry/Bath	EW-1	600	2590	SW	No	100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	1100	2590	NE	No	1700

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916202**

Certificate Date:

05 Jun 2019

★ Star rating:

6.7



Building features continued

Garage 1	EW-3	3200	2590	SE	No	100
Bedroom 1	EW-4	900	2590	NW	No	5600
Bedroom 1	EW-4	1490	2590	SW	No	1000
Bedroom 1	EW-4	3395	2590	NW	No	100
Ensuite	EW-4	900	2590	SE	No	13000
Ensuite	EW-4	1395	2590	NW	No	100
Bath	EW-4	1490	2590	SW	No	1000
Study	EW-4	1600	2590	SE	No	100
Study	EW-4	1700	2590	SW	No	3300
Study	EW-4	3200	2590	SE	No	1800

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	68.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	134.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	11.3		No Insulation	Carpet 10mm
Bedroom 1/Laundry/Bath	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	3.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite/Laundry/Bath	Timber Above Plasterboard 19mm	3.4		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.1		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.8		Bulk Insulation R3.5	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

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Certificate Date:

05 Jun 2019

★ Star rating:

6.7

Building features continued

Study Suspended Timber Floor 19mm 2.1 Totally Open Bulk Insulation in Contact with Floor R3.5 Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916202

Certificate Date: 05 Jun 2019

★ Star rating: 6.7



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916236**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.6**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3348/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-01 A Aluminium A SG Clear**

Net floor area (m²)

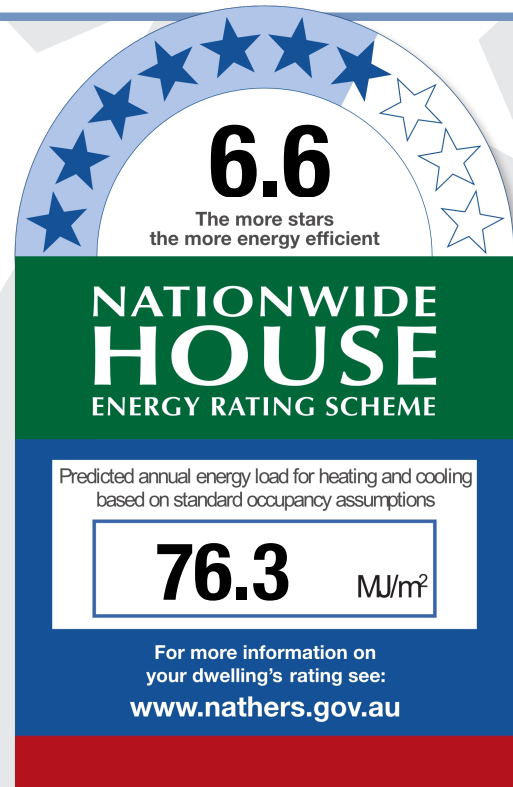
Conditioned: **93.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **39.7**
Cooling: **36.6**
TOTAL: **76.3**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

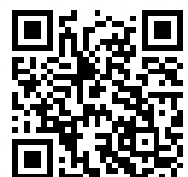
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: 0003916236

Certificate Date:

05 Jun 2019

★ Star rating:

6.6



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	SW	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-001-03 A	n/a	1500	800	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Bedroom 1	ALM-001-01 A	n/a	1500	600	NE	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Ensuite	ALM-001-01 A	n/a	1000	600	SE	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Study	ALM-001-03 A	n/a	1800	800	SE	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 (m²)	Orientation	Outdoor shade	Indoor shade/diffuser
None Present						

External wall type

ID	Wall type	Insulation	Wall wrap or foil
EW-1	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	SW	No	3100
Laundry/Bath	EW-1	1800	2590	NW	No	100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	3200	2590	SE	No	100
Garage 1	EW-3	1100	2590	SW	No	1700

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916236**

Certificate Date:

05 Jun 2019

★ Star rating:

6.6



Building features continued

Bedroom 1	EW-4	900	2590	NW	No	5600
Bedroom 1	EW-4	3395	2590	NW	No	100
Bedroom 1	EW-4	1490	2590	NE	No	1000
Ensuite	EW-4	1395	2590	NW	No	100
Ensuite	EW-4	900	2590	SE	No	13000
Bath	EW-4	1490	2590	NE	No	1000
Study	EW-4	3200	2590	SE	No	1800
Study	EW-4	1700	2590	NE	No	3300
Study	EW-4	1600	2590	SE	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	136.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	68.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	11.3		No Insulation	Carpet 10mm
Bedroom 1/Laundry/Bath	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	3.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite/Laundry/Bath	Timber Above Plasterboard 19mm	3.4		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.1		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.8		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	2.1	Totally Open	Bulk Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916236**

Certificate Date:

05 Jun 2019

★ Star rating:

6.6

Building features continued

in Contact with
Floor R3.5

Ceiling type

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916236

Certificate Date: 05 Jun 2019

★ Star rating: 6.6



Additional information

Explanatory notes

About this report

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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.

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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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For more information on energy efficient design and insulation visit www.yourhome.gov.au

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916251**

Certificate Date: **05 Jun 2019**

★ Star rating: **5.7**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3349/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

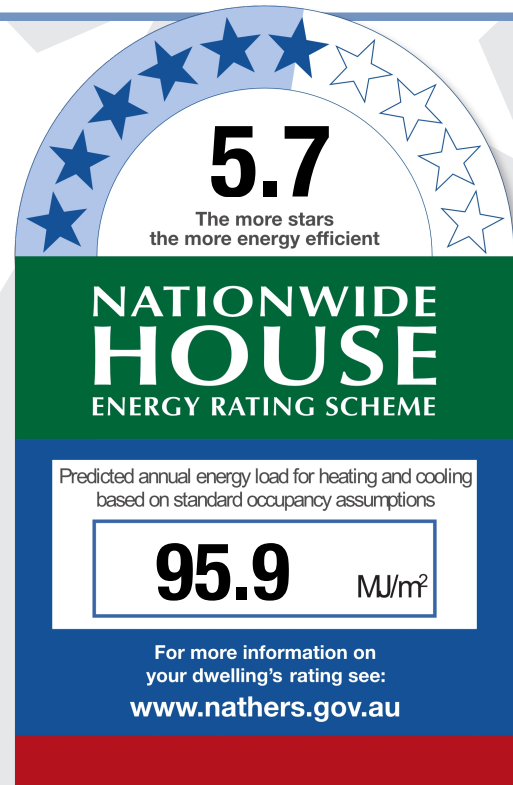
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **53.1**
Cooling: **42.8**
TOTAL: **95.9**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

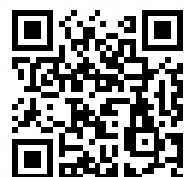
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003916251**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	SW	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SW	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	SW	No Shading
Study	ALM-001-03 A	n/a	1200	600	SE	No Shading
Study	ALM-001-03 A	n/a	1800	600	SW	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	2895	2590	SW	No	3000
Bath/Laundry	EW-1	1800	2590	NW	No	100
Kitchen/Living	EW-1	5695	2590	SW	No	100
Kitchen/Living	EW-1	2900	2590	NW	No	3000

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916251**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

Hall/Stairs	EW-1	1595	2590	SE	No	1200
Hall/Stairs	EW-1	990	2590	SW	No	100
Garage 1	EW-2	1100	2590	NE	No	1700
Garage 1	EW-3	3100	2590	SE	No	100
Garage 1	EW-2	5595	2590	SW	No	100
Bedroom 1	EW-4	3295	2590	NW	No	100
Ensuite	EW-4	2495	2590	SW	No	100
Ensuite	EW-4	1395	2590	NW	No	100
WIR	EW-4	1390	2590	SW	No	100
Bath	EW-4	1490	2590	SW	No	100
Bedroom 2	EW-4	3090	2590	SW	No	100
Study	EW-1	1600	450	SE	No	0
Study	EW-4	1600	2140	SE	No	100
Study	EW-4	1700	2590	SW	No	3200
Study	EW-4	3100	2590	SE	No	1800
Study	EW-4	5095	2590	SW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	76.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916251**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.8		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	Bulk Insulation R3.5	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916251**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916251

Certificate Date: 05 Jun 2019

★ Star rating: 5.7



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916285**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.2**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3350/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

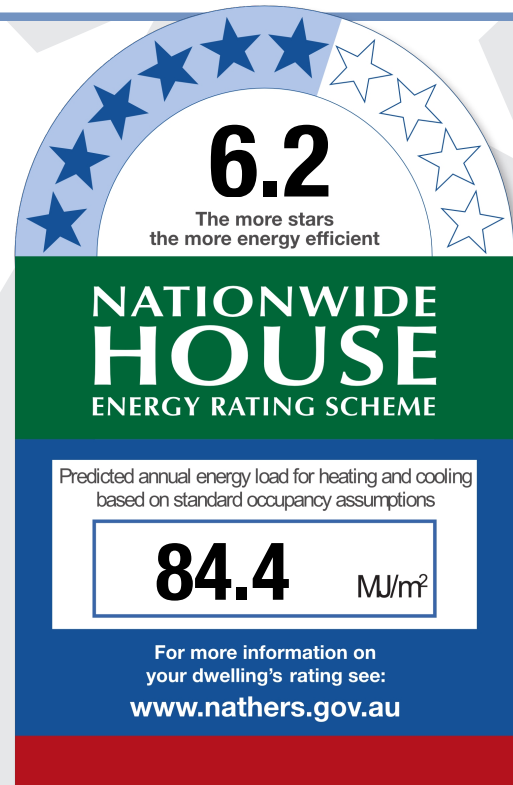
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **43.2**
Cooling: **41.2**
TOTAL: **84.4**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916285**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1000	600	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NW	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	NE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Study	ALM-001-03 A	n/a	1800	600	NE	No Shading
Study	ALM-001-03 A	n/a	1200	600	SE	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	1800	2590	NW	No	100
Bath/Laundry	EW-1	2895	2590	NE	No	3000
Kitchen/Living	EW-1	2900	2590	NW	No	3000
Kitchen/Living	EW-1	5695	2590	NE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916285**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

Hall/Stairs	EW-1	990	2590	NE	No	100
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	5595	2590	NE	No	100
Garage 1	EW-3	3100	2590	SE	No	100
Garage 1	EW-2	1100	2590	SW	No	1700
Bedroom 1	EW-4	4295	2590	SW	No	100
Bedroom 1	EW-4	3295	2590	NW	No	100
Ensuite	EW-4	1395	2590	NW	No	100
Ensuite	EW-4	2495	2590	NE	No	100
WIR	EW-4	1390	2590	NE	No	100
Bath	EW-4	1490	2590	NE	No	100
Bedroom 2	EW-4	3090	2590	NE	No	100
Study	EW-4	5095	2590	NE	No	100
Study	EW-4	3100	2590	SE	No	1800
Study	EW-4	1700	2590	NE	No	3200
Study	EW-1	1600	450	SE	No	0
Study	EW-4	1600	2140	SE	No	100
Study	EW-4	795	2590	SW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	63.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916285**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm
WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916285**

Certificate Date:

05 Jun 2019

★ Star rating:

6.2



Building features continued

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916285

Certificate Date: 05 Jun 2019

★ Star rating: 6.2



Additional information

Explanatory notes

About this report

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

General Information

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

The actual energy consumption of your home may vary significantly from the predicted energy load figures in 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

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916228**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.8**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3351/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

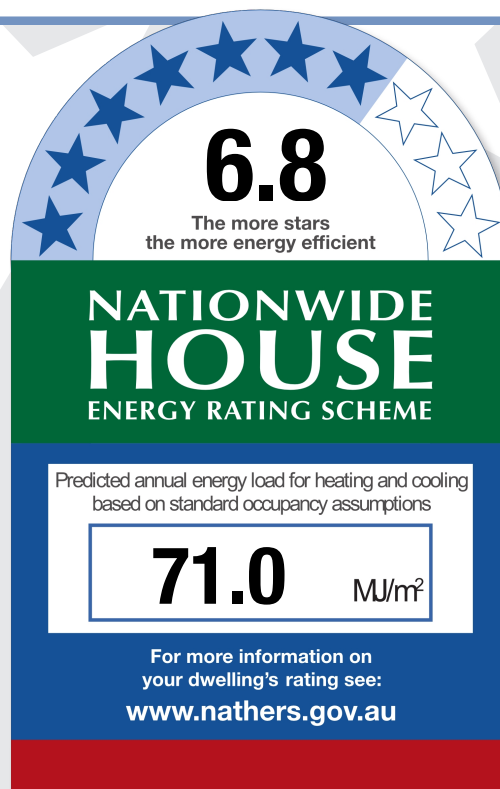
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **35.5**
Cooling: **35.5**
TOTAL: **71.0**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: 0003916228

Certificate Date:

05 Jun 2019

★ Star rating:

6.8



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	SW	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	800	SE	No Shading
Study	ALM-001-03 A	n/a	1200	800	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	NW	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	SW	No	3100
Laundry/Bath	EW-1	1800	2590	NW	No	100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	3200	2590	SE	No	100
Garage 1	EW-3	1100	2590	SW	No	1700
Bedroom 1	EW-4	3195	2590	SE	No	1800
Ensuite	EW-4	1700	2590	NE	No	3300
Ensuite	EW-4	1600	2590	SE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916228**

Certificate Date:

05 Jun 2019

★ Star rating:

6.8



Building features continued

Study	EW-4	1200	2590	NW	No	100
Bath	EW-4	1490	2590	NE	No	100
Bedroom 2	EW-4	3600	2590	NW	No	100
Bedroom 2	EW-4	3695	2590	NE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	130.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction
----------	--------------

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916228**

Certificate Date:

05 Jun 2019

★ Star rating:

6.8



Building features continued

		Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916228

Certificate Date: 05 Jun 2019

★ Star rating: 6.8



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916269**

Certificate Date: **05 Jun 2019**

★ Star rating: **6.9**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3352/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-01 A Aluminium A SG Clear**

Net floor area (m²)

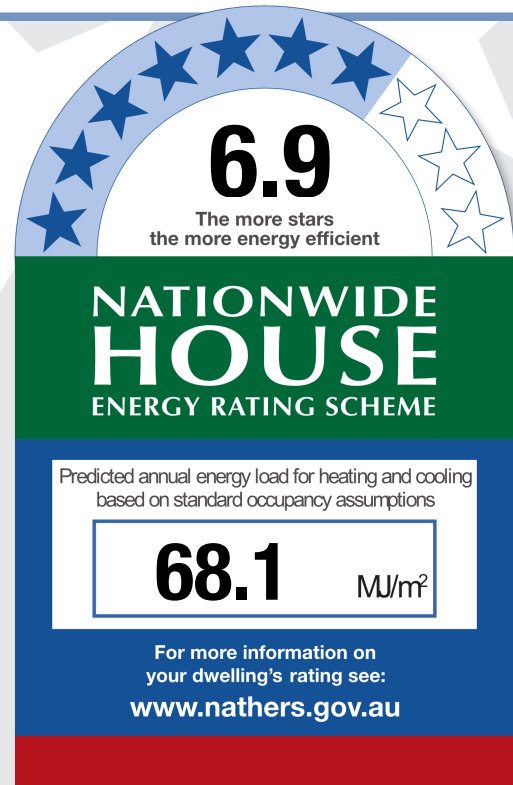
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **35.2**
Cooling: **32.9**
TOTAL: **68.1**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

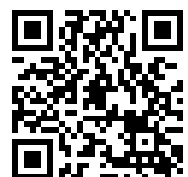
Note on allowable window values:
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Note: Only a +/- 5% SHGC tolerance is allowed with this rating.

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



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916269**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	NE	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	NE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NW	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	SW	No Shading
Study	ALM-001-03 A	n/a	1200	800	NW	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SW	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	NW	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	1800	2590	NW	No	100
Laundry/Bath	EW-1	2895	2590	NE	No	3100
Kitchen/Living	EW-1	3000	2590	NW	No	3000
Hall/Stairs	EW-1	1595	2590	SE	No	1200
Garage 1	EW-2	1100	2590	NE	No	1700
Garage 1	EW-3	3200	2590	SE	No	100
Bedroom 1	EW-4	3195	2590	SE	No	1800
Ensuite	EW-4	1600	2590	SE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916269**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9



Building features continued

Ensuite	EW-4	1700	2590	SW	No	3300
Study	EW-4	1200	2590	NW	No	100
Bath	EW-4	1490	2590	SW	No	100
Bedroom 2	EW-4	3695	2590	SW	No	100
Bedroom 2	EW-4	3600	2590	NW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	130.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916269**

Certificate Date:

05 Jun 2019

★ Star rating:

6.9

Building features continued

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916269

Certificate Date: 05 Jun 2019

★ Star rating: 6.9



Additional information

Explanatory notes

About this report

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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.

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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

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916277**

Certificate Date: **05 Jun 2019**

★ Star rating: **7.3**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3353/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

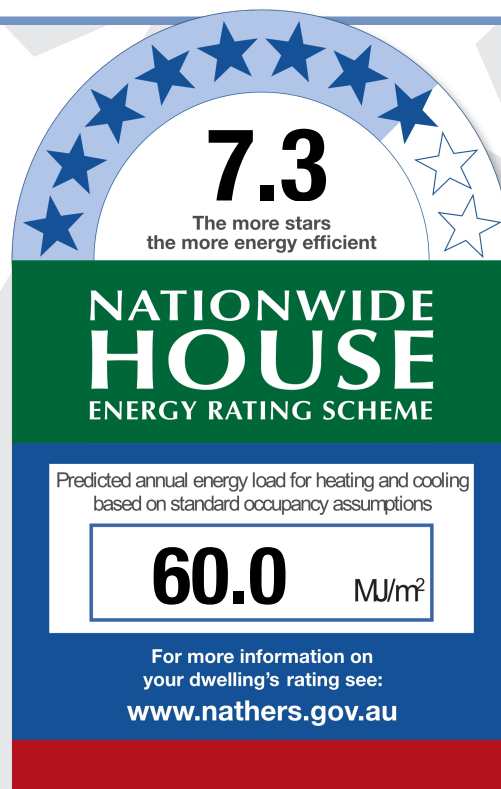
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **27.1**
Cooling: **32.9**
TOTAL: **60.0**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916277**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	NW	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	NW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SW	No Shading
Ensuite	ALM-001-01 A	n/a	1200	600	SW	No Shading
Study	ALM-001-03 A	n/a	1200	800	NE	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SE	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	NW	No	3100
Laundry/Bath	EW-1	1800	2590	NE	No	100
Kitchen/Living	EW-1	3000	2590	NE	No	3000
Hall/Stairs	EW-1	1595	2590	SW	No	1200
Garage 1	EW-2	3200	2590	SW	No	100
Garage 1	EW-3	1100	2590	NW	No	1700
Bedroom 1	EW-4	3195	2590	SW	No	1800
Ensuite	EW-4	1700	2590	SE	No	3300
Ensuite	EW-4	1600	2590	SW	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916277**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3



Building features continued

Ensuite	EW-1	1000	2590	NW	No	100
Study	EW-4	1200	2590	NE	No	100
Bath	EW-4	1490	2590	SE	No	100
Bedroom 2	EW-4	3600	2590	NE	No	100
Bedroom 2	EW-4	3695	2590	SE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	127.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916277**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3

Building features continued

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916277

Certificate Date: 05 Jun 2019

★ Star rating: 7.3



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916343**

Certificate Date: **05 Jun 2019**

★ Star rating: **5.2**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3354/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

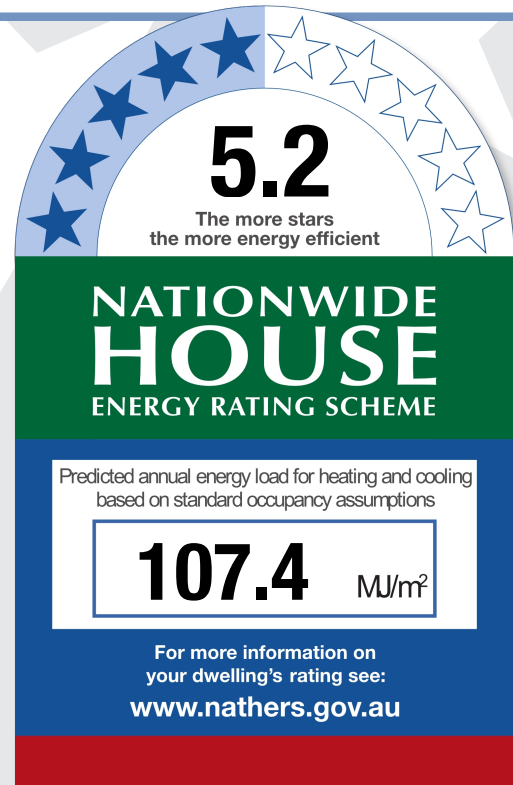
Conditioned: **101.0**
Unconditioned: **38.0**
Garage: **30.0**
TOTAL: **139.0**

Annual thermal performance loads (MJ/m²)

Heating: **52.5**
Cooling: **54.9**
TOTAL: **107.4**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

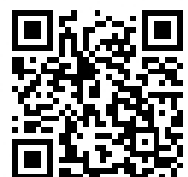
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: 0003916343

Certificate Date:

05 Jun 2019

★ Star rating:

5.2



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
WC	ALM-001-01 A	n/a	1000	600	SW	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	1200	SE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	800	SE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	1200	SW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2700	SW	No Shading
Bedroom 1	ALM-001-03 A	n/a	1800	800	SE	No Shading
Ensuite	ALM-001-01 A	n/a	1800	1200	SE	No Shading
Study	ALM-002-03 A	n/a	2100	2100	SW	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2000	SW	No Shading
Bath	ALM-002-01 A	n/a	1000	1500	SW	No Shading
Bedroom 3	ALM-002-03 A	n/a	1000	2000	SW	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	Brick Veneer	No insulation	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes
EW-4	Brick Veneer	Bulk Insulation R2.5	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	5500	2590	NW	No	100
Garage 1	EW-1	2700	2590	NE	No	100
Garage 1	EW-2	5495	2590	SW	No	100
WC	EW-3	995	2590	SE	No	4500
WC	EW-3	1895	2590	SW	No	100
Kitchen/Living	EW-4	1800	2590	SE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916343**

Certificate Date:

05 Jun 2019

★ Star rating:

5.2



Building features continued

Kitchen/Living	EW-4	1500	2590	SW	No	900
Kitchen/Living	EW-4	2500	2590	SE	No	100
Kitchen/Living	EW-4	1200	2590	SW	No	100
Kitchen/Living	EW-3	2700	2590	SW	No	100
Kitchen/Living	EW-3	500	2590	NW	No	11700
Kitchen/Living	EW-3	4200	2590	SW	No	1800
Kitchen/Living	EW-3	695	2590	SE	No	8200
Bedroom 1	EW-3	500	2590	NW	No	11700
Bedroom 1	EW-3	1600	2590	SE	No	100
Bedroom 1	EW-3	3900	2590	SW	No	100
Ensuite	EW-3	2700	2590	SE	No	100
Ensuite	EW-3	1495	2590	SW	No	100
Study	EW-3	2890	2590	SW	No	600
Study	EW-3	1195	2590	NE	No	100
Bedroom 2	EW-3	3095	2590	SW	No	100
Bedroom 2	EW-3	3295	2590	NW	No	100
WIR	EW-3	995	2590	NW	No	100
WIR	EW-3	1495	2590	NE	No	100
Bath	EW-3	1890	2590	SW	No	100
Bedroom 3	EW-3	500	2590	SE	No	6900
Bedroom 3	EW-3	3695	2590	SW	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	74.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	14.0	Bulk Insulation, No Air Gap R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	81.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 300 mm 100mm	30.0	None	Waffle Pod 300mm	Bare
WC	Waffle pod slab 300 mm 100mm	1.8	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	43.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	12.9		No Insulation	Carpet 10mm
Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	3.0		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Garage 1		3.8			Carpet 10mm

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916343**

Certificate Date:

05 Jun 2019

★ Star rating:

5.2



Building features continued

	Timber Above Plasterboard 19mm			Bulk Insulation R3.5	
Study/Kitchen/Living	Timber Above Plasterboard 19mm	16.6		No Insulation	Carpet 10mm
Bedroom 2/Garage	Timber Above Plasterboard 19mm	9.9		Bulk Insulation R3.5	Carpet 10mm
WIR/Garage 1	Timber Above Plasterboard 19mm	1.4		Bulk Insulation R3.5	Carpet 10mm
Bath/Garage 1	Timber Above Plasterboard 19mm	6.4		Bulk Insulation R3.5	Ceramic Tiles 8mm
Bedroom 3/Garage	Timber Above Plasterboard 19mm	1.1		Bulk Insulation R3.5	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	9.4		No Insulation	Carpet 10mm
Bedroom 3	Suspended Timber Floor 19mm	0.6	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	Bulk Insulation R3.5	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
WC	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916343**

Certificate Date:

05 Jun 2019

★ Star rating:

5.2



Building features continued

None Present

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916343

Certificate Date: 05 Jun 2019

★ Star rating: 5.2



Additional information

Explanatory notes

About this report

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General Information

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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.

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

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For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916244**

Certificate Date: **05 Jun 2019**

★ Star rating: **5.7**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3355/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Suspended Timber Floor
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-03 A Aluminium A SG High**
Solar Gain Low-E

Net floor area (m²)

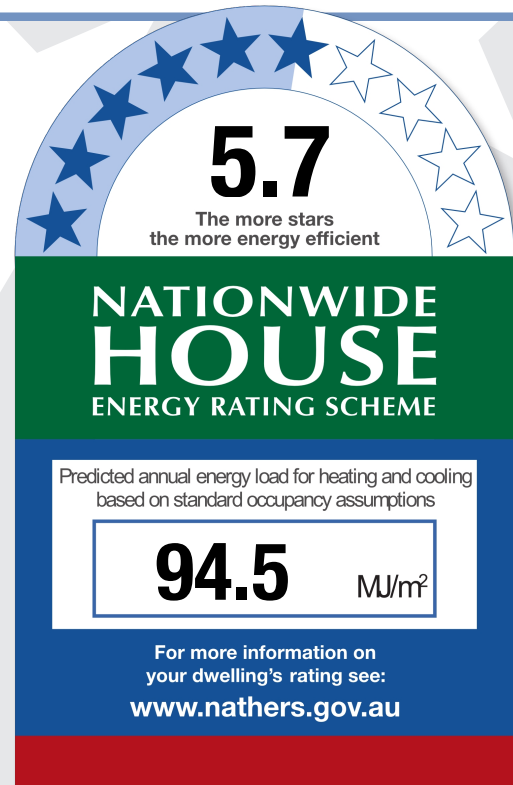
Conditioned: **92.0**
Unconditioned: **29.0**
Garage: **18.0**
TOTAL: **121.0**

Annual thermal performance loads (MJ/m²)

Heating: **48.1**
Cooling: **46.5**
TOTAL: **94.5**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

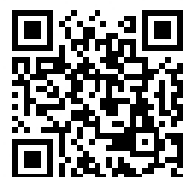
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003916244**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Bath/Laundry	ALM-002-01 A	n/a	2100	1500	SE	No Shading
Bath/Laundry	ALM-001-01 A	n/a	1000	600	SE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	SE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	SE	No Shading
Kitchen/Living	ALM-001-03 A	n/a	1800	600	SE	No Shading
Bedroom 1	ALM-002-03 A	n/a	1000	2400	NE	No Shading
Ensuite	ALM-002-01 A	n/a	600	1200	NE	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SE	No Shading
Bedroom 2	ALM-002-03 A	n/a	600	1800	SE	No Shading
Study	ALM-002-03 A	n/a	2100	1800	SW	No Shading
Study	ALM-001-03 A	n/a	1800	600	SE	No Shading
Study	ALM-001-03 A	n/a	1200	600	SW	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Bath/Laundry	EW-1	1800	2590	NE	No	100
Bath/Laundry	EW-1	2895	2590	SE	No	3000
Kitchen/Living	EW-1	2900	2590	NE	No	3000
Kitchen/Living	EW-1	5695	2590	SE	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916244**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

Hall/Stairs	EW-1	990	2590	SE	No	100
Hall/Stairs	EW-1	1595	2590	SW	No	1200
Garage 1	EW-1	5595	2590	SE	No	100
Garage 1	EW-2	3100	2590	SW	No	100
Garage 1	EW-3	1100	2590	NW	No	1700
Bedroom 1	EW-4	4295	2590	NW	No	100
Bedroom 1	EW-4	3295	2590	NE	No	100
Ensuite	EW-4	1395	2590	NE	No	100
Ensuite	EW-4	2495	2590	SE	No	100
WIR	EW-4	1390	2590	SE	No	100
Bath	EW-4	1490	2590	SE	No	100
Bedroom 2	EW-4	3090	2590	SE	No	100
Study	EW-4	5095	2590	SE	No	100
Study	EW-4	3100	2590	SW	No	1800
Study	EW-4	1700	2590	SE	No	3200
Study	EW-1	1600	450	SW	No	0
Study	EW-4	1600	2140	SW	No	100
Study	EW-4	695	2590	NW	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	75.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	63.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Bath/Laundry	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	26.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.4	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	17.9	None	Waffle Pod 300mm	Bare
Bedroom 1/Bath/Laundry	Timber Above Plasterboard 19mm	5.1		No Insulation	Carpet 10mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	2.9		No Insulation	Carpet 10mm
Bedroom 1	Suspended Timber Floor 19mm	4.2	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Ensuite	Suspended Timber Floor 19mm	3.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916244**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

WIR/Kitchen/Living	Timber Above Plasterboard 19mm	1.3		No Insulation	Carpet 10mm
WIR	Suspended Timber Floor 19mm	0.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	5.8		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	11.0		No Insulation	Carpet 10mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	4.6		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	10.9		No Insulation	Carpet 10mm
Study/Garage 1	Timber Above Plasterboard 19mm	13.1		Bulk Insulation R3.5	Carpet 10mm
Study	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Bath/Laundry	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	Bulk Insulation R3.5	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916244**

Certificate Date:

05 Jun 2019

★ Star rating:

5.7



Building features continued

None Present

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916244

Certificate Date: 05 Jun 2019

★ Star rating: 5.7



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916293**

Certificate Date: **05 Jun 2019**

★ Star rating: **7.3**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3356/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

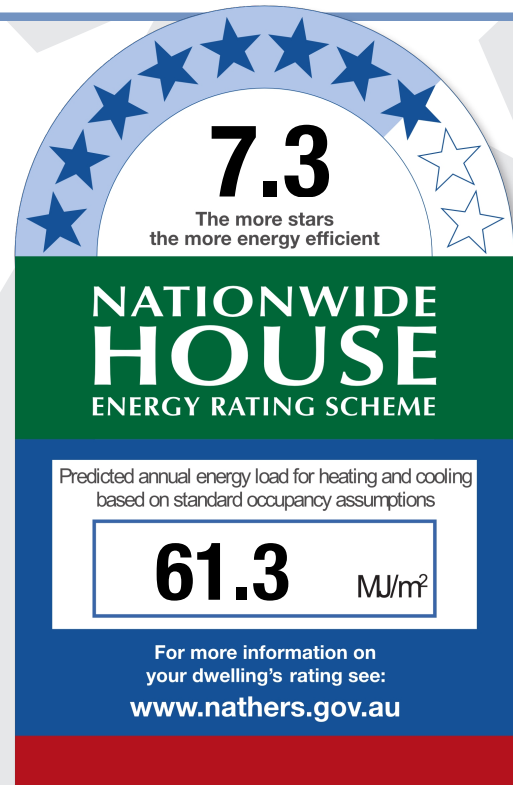
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **27.7**
Cooling: **33.6**
TOTAL: **61.3**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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.

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



Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916293**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	NW	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	NW	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SW	No Shading
Ensuite	ALM-001-01 A	n/a	1800	800	SW	No Shading
Study	ALM-001-03 A	n/a	1200	800	NE	No Shading
Bath	ALM-002-01 A	n/a	600	1200	SE	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	NW	No	3100
Laundry/Bath	EW-1	1800	2590	NE	No	100
Kitchen/Living	EW-1	3000	2590	NE	No	3000
Hall/Stairs	EW-1	1595	2590	SW	No	1200
Garage 1	EW-2	3200	2590	SW	No	100
Garage 1	EW-3	1100	2590	NW	No	1700
Bedroom 1	EW-4	3195	2590	SW	No	1800
Ensuite	EW-4	1700	2590	SE	No	3300
Ensuite	EW-4	1600	2590	SW	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916293**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3



Building features continued

Study	EW-4	1200	2590	NE	No	100
Bath	EW-4	1490	2590	SE	No	100
Bedroom 2	EW-4	3600	2590	NE	No	100
Bedroom 2	EW-4	3695	2590	SE	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	130.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916293**

Certificate Date:

05 Jun 2019

★ Star rating:

7.3

Building features continued

		Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916293

Certificate Date: 05 Jun 2019

★ Star rating: 7.3



Additional information

Explanatory notes

About this report

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

General Information

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

The actual energy consumption of your home may vary significantly from the predicted energy load figures in 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.

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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

* Nationwide House Energy Rating Scheme (NatHERS) is an initiative of the Australian, state and territory governments.

For more details see www.nathers.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916319**

Certificate Date: **05 Jun 2019**

★ Star rating: **7.1**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3357/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-01 A Aluminium A SG Clear**

Net floor area (m²)

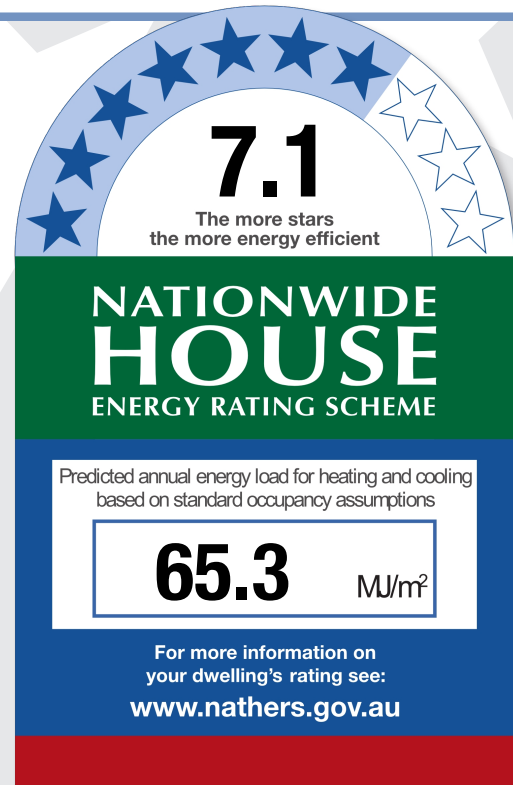
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **31.0**
Cooling: **34.3**
TOTAL: **65.3**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

Window selection - default windows only

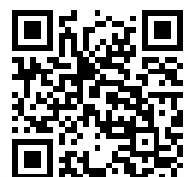
Note on allowable window values:
Only a 5% tolerance to the nominated SHGC window values shown on page 2 can be used with this rating.

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: **0003916319**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	SE	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	SE	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	NE	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	SW	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	SW	No Shading
Ensuite	ALM-001-01 A	n/a	1800	600	NW	No Shading
Study	ALM-001-03 A	n/a	1200	800	NE	No Shading
Bath	ALM-002-01 A	n/a	600	1200	NW	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Brick Veneer	No insulation	No
EW-3	Single Skin Brick	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	1800	2590	NE	No	100
Laundry/Bath	EW-1	2895	2590	SE	No	3100
Kitchen/Living	EW-1	3000	2590	NE	No	3000
Hall/Stairs	EW-1	1595	2590	SW	No	1200
Garage 1	EW-2	1100	2590	SE	No	1700
Garage 1	EW-3	3200	2590	SW	No	100
Bedroom 1	EW-4	3195	2590	SW	No	1800
Ensuite	EW-4	1600	2590	SW	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916319**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1



Building features continued

Ensuite	EW-4	1700	2590	NW	No	3300
Study	EW-4	1200	2590	NE	No	100
Bath	EW-4	1490	2590	NW	No	100
Bedroom 2	EW-4	3695	2590	NW	No	100
Bedroom 2	EW-4	3600	2590	NE	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-2 - Shaft liner party wall with plaster	130.0	Bulk Insulation both sides of shaft liner R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916319**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1



Building features continued

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916319

Certificate Date: 05 Jun 2019

★ Star rating: 7.1



Additional information

Explanatory notes

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916301**

Certificate Date: **05 Jun 2019**

★ Star rating: **7.1**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3358/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-002-03 A Aluminium B SG High**
Solar Gain Low-E

Net floor area (m²)

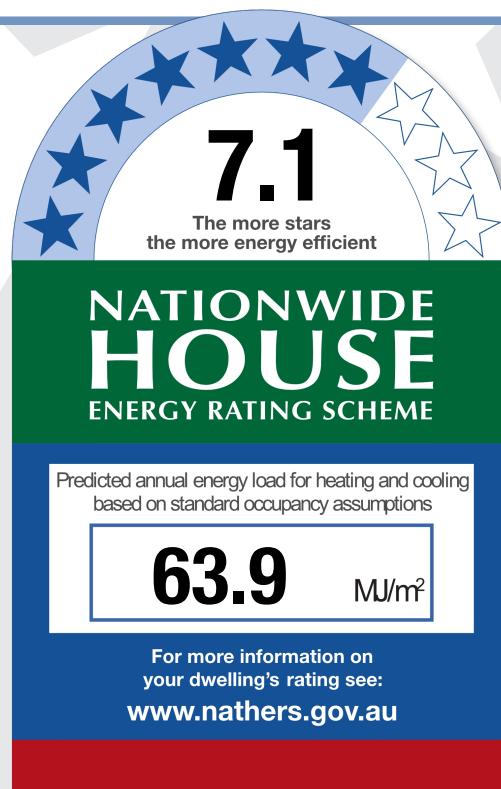
Conditioned: **90.0**
Unconditioned: **28.0**
Garage: **18.0**
TOTAL: **117.0**

Annual thermal performance loads (MJ/m²)

Heating: **27.9**
Cooling: **36.0**
TOTAL: **63.9**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916301**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70
ALM-002-03 A	ALM-002-03 A Aluminium B SG High Solar Gain Low-E	5.4	0.58
ALM-001-03 A	ALM-001-03 A Aluminium A SG High Solar Gain Low-E	5.4	0.49

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
Laundry/Bath	ALM-001-01 A	n/a	1000	600	N	No Shading
Laundry/Bath	ALM-002-01 A	n/a	2100	1500	N	No Shading
Kitchen/Living	ALM-002-03 A	n/a	2100	2400	E	No Shading
Bedroom 1	ALM-002-03 A	n/a	2100	1800	W	No Shading
Ensuite	ALM-001-01 A	n/a	1200	600	W	No Shading
Study	ALM-001-03 A	n/a	1200	800	E	No Shading
Bath	ALM-002-01 A	n/a	600	1200	S	No Shading
Bedroom 2	ALM-002-03 A	n/a	1000	2400	E	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	Brick Veneer	Bulk Insulation R2.5	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Brick Veneer	No insulation	No
EW-4	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Laundry/Bath	EW-1	2895	2590	N	No	3100
Laundry/Bath	EW-1	1800	2590	E	No	100
Kitchen/Living	EW-1	3000	2590	E	No	3000
Hall/Stairs	EW-1	1595	2590	W	No	1200
Garage 1	EW-2	3200	2590	W	No	100
Garage 1	EW-3	1100	2590	N	No	1700
Bedroom 1	EW-4	3195	2590	W	No	1800
Ensuite	EW-4	1700	2590	S	No	3300
Ensuite	EW-4	1600	2590	W	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916301**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1



Building features continued

Ensuite	EW-1	1000	2590	N	No	100
Study	EW-4	1200	2590	E	No	100
Bath	EW-4	1490	2590	S	No	100
Bedroom 2	EW-4	3600	2590	E	No	100
Bedroom 2	EW-4	3695	2590	S	No	100

Internal wall type

Wall type	Area (m²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	127.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	64.0	No insulation	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	23.0	Bulk Insulation, No Air Gap R2	No

Floors

Location	Construction	Area (m²)	Sub floor ventilation	Added insulation	Covering
Laundry/Bath	Waffle pod slab 300 mm 100mm	5.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	27.1	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Hall/Stairs	Waffle pod slab 300 mm 100mm	10.5	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Garage 1	Waffle pod slab 300 mm 100mm	18.4	None	Waffle Pod 300mm	Bare
Bedroom 1/Garage	Timber Above Plasterboard 19mm	13.3		Bulk Insulation R3.5	Carpet 10mm
Ensuite/Hall/Stairs	Timber Above Plasterboard 19mm	2.8		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.9	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Kitchen/Living	Timber Above Plasterboard 19mm	17.0		No Insulation	Carpet 10mm
Study/Hall/Stairs	Timber Above Plasterboard 19mm	7.5		No Insulation	Carpet 10mm
Bath/Kitchen/Living	Timber Above Plasterboard 19mm	4.0		No Insulation	Ceramic Tiles 8mm
Bedroom 2/Laundry/Bath	Timber Above Plasterboard 19mm	1.7		No Insulation	Carpet 10mm
Bedroom 2/Kitchen/Living	Timber Above Plasterboard 19mm	2.8		No Insulation	Carpet 10mm
Bedroom 2	Suspended Timber Floor 19mm	8.5	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916301**

Certificate Date:

05 Jun 2019

★ Star rating:

7.1

Building features continued

Location	Construction	Added insulation	Roof space above
Laundry/Bath	Plasterboard	Bulk Insulation R3.5	Yes
Laundry/Bath	Timber Above Plasterboard	No Insulation	No
Kitchen/Living	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Hall/Stairs	Timber Above Plasterboard	No Insulation	No
Garage 1	Plasterboard	No insulation	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
None Present		

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916301

Certificate Date: 05 Jun 2019

★ Star rating: 7.1



Additional information

Explanatory notes

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General Information

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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.

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Contact

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For more information on energy efficient design and insulation visit www.yourhome.gov.au

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Nationwide House Energy Rating Scheme* Certificate



Certificate number: **0003916327**

Certificate Date: **05 Jun 2019**

★ Star rating: **5.1**

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: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Overview

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW** Postcode: **2747**
Type: **New Dwelling** NCC Class: **1A**
NatHERS climate zone: **28**
Lot/DP number: **3359/0000** Exposure: **Suburban**

Key construction and insulation materials

(see following pages for details)

Construction: **Fibro Cavity Panel Direct Fix**
Corrugated Iron
Waffle pod slab 300 mm
Insulation: **R2.5 wall insulation**
R3.5 ceiling insulation
No floor insulation
Glazing: **ALM-001-04 A Aluminium A SG Low**
Solar Gain Low-E

Net floor area (m²)

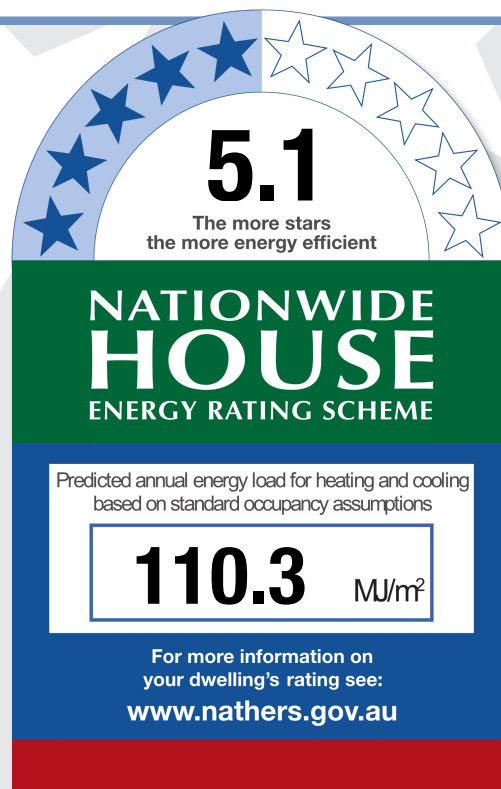
Conditioned: **101.0**
Unconditioned: **38.0**
Garage: **30.0**
TOTAL: **139.0**

Annual thermal performance loads (MJ/m²)

Heating: **54.3**
Cooling: **56.0**
TOTAL: **110.3**

Plan documents

Plan ref/date: **AND-30280**
Prepared by: **Eden Brae Homes**



Ceiling penetrations

(see following pages for details)

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

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: **Unknown**

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: **0003916327**

Certificate Date:

05 Jun 2019

★ Star rating:

5.1



Building features

Window type and performance value

Window ID	Window type	U-value	SHGC
ALM-001-01 A	ALM-001-01 A Aluminium A SG Clear	6.7	0.57
ALM-001-04 A	ALM-001-04 A Aluminium A SG Low Solar Gain Low-E	5.6	0.36
ALM-002-04 A	ALM-002-04 A Aluminium B SG Low Solar Gain Low-E	5.6	0.41
ALM-002-01 A	ALM-002-01 A Aluminium B SG Clear	6.7	0.70

Window schedule

Location	Window ID	Window no.	Height (mm)	Width (mm)	Orientation	Outdoor shade
WC	ALM-001-01 A	n/a	1000	600	NW	No Shading
Kitchen/Living	ALM-001-04 A	n/a	1800	1200	SW	No Shading
Kitchen/Living	ALM-001-04 A	n/a	1800	800	SW	No Shading
Kitchen/Living	ALM-001-04 A	n/a	1800	1200	NW	No Shading
Kitchen/Living	ALM-002-04 A	n/a	2100	2700	NW	No Shading
Bedroom 1	ALM-001-04 A	n/a	1800	800	SW	No Shading
Ensuite	ALM-001-01 A	n/a	1800	1200	SW	No Shading
Study	ALM-002-04 A	n/a	2100	2100	NW	No Shading
Bedroom 2	ALM-002-04 A	n/a	1000	2000	NW	No Shading
Bath	ALM-002-01 A	n/a	1000	1500	NW	No Shading
Bedroom 3	ALM-002-04 A	n/a	1000	2000	NW	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	Brick Veneer	No insulation	No
EW-2	Single Skin Brick	No insulation	No
EW-3	Fibro Cavity Panel Direct Fix	Anti-glare foil with bulk no gap R2.5	Yes
EW-4	Brick Veneer	Bulk Insulation R2.5	No

External wall schedule

Location	ID	Width (mm)	Height (mm)	Orientation	Fixed Shade	Eaves (mm)
Garage 1	EW-1	5500	2590	NE	No	100
Garage 1	EW-1	2700	2590	SE	No	100
Garage 1	EW-2	5495	2590	NW	No	100
WC	EW-3	995	2590	SW	No	4500
WC	EW-3	1895	2590	NW	No	100
Kitchen/Living	EW-4	1800	2590	SW	No	100

Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916327**

Certificate Date:

05 Jun 2019

★ Star rating:

5.1



Building features continued

Kitchen/Living	EW-4	1500	2590	NW	No	900
Kitchen/Living	EW-4	2500	2590	SW	No	100
Kitchen/Living	EW-4	1200	2590	NW	No	100
Kitchen/Living	EW-3	2700	2590	NW	No	100
Kitchen/Living	EW-3	500	2590	NE	No	11700
Kitchen/Living	EW-3	4200	2590	NW	No	1800
Kitchen/Living	EW-3	695	2590	SW	No	8200
Bedroom 1	EW-3	500	2590	NE	No	11700
Bedroom 1	EW-3	1600	2590	SW	No	100
Bedroom 1	EW-3	3900	2590	NW	No	100
Ensuite	EW-3	2700	2590	SW	No	100
Ensuite	EW-3	1495	2590	NW	No	100
Study	EW-3	2890	2590	NW	No	600
Study	EW-3	1195	2590	SE	No	100
Bedroom 2	EW-3	3095	2590	NW	No	100
Bedroom 2	EW-3	3295	2590	NE	No	100
WIR	EW-3	995	2590	NE	No	100
WIR	EW-3	1495	2590	SE	No	100
Bath	EW-3	1890	2590	NW	No	100
Bedroom 3	EW-3	500	2590	SW	No	6900
Bedroom 3	EW-3	3695	2590	NW	No	100

Internal wall type

Wall type	Area (m ²)	Insulation	Wall wrap or foil
IW-1 - Shaft liner party wall with plaster	74.0	Bulk Insulation both sides of shaft liner R2	No
IW-2 - Cavity wall, direct fix plasterboard, single gap	14.0	Bulk Insulation, No Air Gap R2	No
IW-3 - Cavity wall, direct fix plasterboard, single gap	81.0	No insulation	No

Floors

Location	Construction	Area (m ²)	Sub floor ventilation	Added insulation	Covering
Garage 1	Waffle pod slab 300 mm 100mm	30.0	None	Waffle Pod 300mm	Bare
WC	Waffle pod slab 300 mm 100mm	1.8	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Kitchen/Living	Waffle pod slab 300 mm 100mm	43.7	None	Waffle Pod 300mm	Ceramic Tiles 8mm
Bedroom 1/Kitchen/Living	Timber Above Plasterboard 19mm	12.9		No Insulation	Carpet 10mm
Ensuite/Kitchen/Living	Timber Above Plasterboard 19mm	3.0		No Insulation	Ceramic Tiles 8mm
Ensuite	Suspended Timber Floor 19mm	1.3	Totally Open	Bulk Insulation in Contact with Floor R3.5	Ceramic Tiles 8mm
Study/Garage 1		3.8			Carpet 10mm

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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916327**

Certificate Date:

05 Jun 2019

★ Star rating:

5.1



Building features continued

	Timber Above Plasterboard 19mm			Bulk Insulation R3.5	
Study/Kitchen/Living	Timber Above Plasterboard 19mm	16.6		No Insulation	Carpet 10mm
Bedroom 2/Garage	Timber Above Plasterboard 19mm	9.9		Bulk Insulation R3.5	Carpet 10mm
WIR/Garage 1	Timber Above Plasterboard 19mm	1.4		Bulk Insulation R3.5	Carpet 10mm
Bath/Garage 1	Timber Above Plasterboard 19mm	6.4		Bulk Insulation R3.5	Ceramic Tiles 8mm
Bedroom 3/Garage	Timber Above Plasterboard 19mm	1.1		Bulk Insulation R3.5	Carpet 10mm
Bedroom 3/Kitchen/Living	Timber Above Plasterboard 19mm	9.4		No Insulation	Carpet 10mm
Bedroom 3	Suspended Timber Floor 19mm	0.6	Totally Open	Bulk Insulation in Contact with Floor R3.5	Carpet 10mm

Ceiling type

Location	Construction	Added insulation	Roof space above
Garage 1	Plasterboard	Bulk Insulation R3.5	Yes
Garage 1	Timber Above Plasterboard	Bulk Insulation R3.5	No
WC	Plasterboard	Bulk Insulation R3.5	Yes
Kitchen/Living	Timber Above Plasterboard	No Insulation	No
Bedroom 1	Plasterboard	Bulk Insulation R3.5	Yes
Ensuite	Plasterboard	Bulk Insulation R3.5	Yes
Study	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 2	Plasterboard	Bulk Insulation R3.5	Yes
WIR	Plasterboard	Bulk Insulation R3.5	Yes
Bath	Plasterboard	Bulk Insulation R3.5	Yes
Bedroom 3	Plasterboard	Bulk Insulation R3.5	Yes

Ceiling penetrations

Location	Number	Type	Diameter (mm)	Sealed/unsealed
None Present				

Ceiling fans

Location	Number	Diameter (mm)
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Nationwide House Energy Rating Scheme* Certificate

Certificate number: **0003916327**

Certificate Date:

05 Jun 2019

★ Star rating:

5.1



Building features continued

None Present

Roof type

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

Nationwide House Energy Rating Scheme* Certificate

Certificate number: 0003916327

Certificate Date: 05 Jun 2019

★ Star rating: 5.1



Additional information

Explanatory notes

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Nationwide House Energy Rating Scheme* — Multiple-dwelling summary

Certificate number: **0003916350**

Certificate Date: **05 Jun 2019**

★ Average Star rating: **6.4**



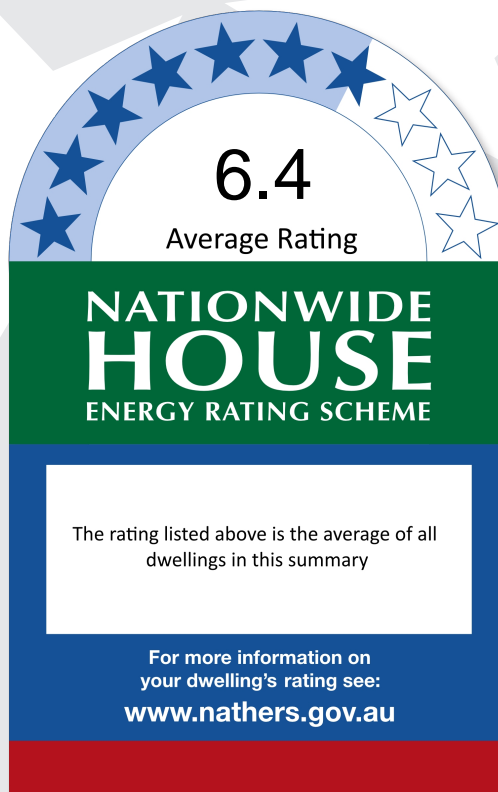
Assessor details

Accreditation number: **101182**
Name: **Daniel.Warda**
Organisation: **Energi Thermal Assessors Pty Ltd**
Email: **daniel.warda@hotmail.com**
Phone: **0452504125**
Declaration of interest: **None**
Software: **BERS Pro v4.3.0.2d (3.13)**
AAO: **ABSA**

Dwelling details

Street: **Proposed Road 27**
Suburb: **Jordan Springs**
State: **NSW**
Postcode: **2747**

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



Summary of all dwellings

Certificate Details

Certificate number	Dwelling/Unit number	Heating load	Cooling load	Total load	Star Rating
0003907458-02		36.4	41.6	77.9	6.4
0003907466-01		41.1	35.3	76.4	6.6
0003916152		41.4	42.9	84.2	6.2
0003916160		35.0	32.2	67.2	6.9
0003916178		40.7	40.8	81.5	6.3
0003916186		50.1	46.3	96.4	5.7
0003916202		39.4	34.6	74.1	6.7
0003916210		34.6	34.6	69.2	6.9
0003916228		35.5	35.5	71.0	6.8
0003916236		39.7	36.6	76.3	6.6
0003916244		48.1	46.5	94.5	5.7
0003916251		53.1	42.8	95.9	5.7
0003916269		35.2	32.9	68.1	6.9
0003916277		27.1	32.9	60.0	7.3
0003916285		43.2	41.2	84.4	6.2

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Nationwide House Energy Rating Scheme* - Multiple Dwelling Summary

Certificate number: **0003916350**

Certificate Date:

05 Jun 2019

★ Average Star rating: **6.4**



Summary of all dwellings continued

Certificate Details

Certificate number	Dwelling/Unit number	Heating load	Cooling load	Total load	Star Rating
0003916293		27.7	33.6	61.3	7.3
0003916301		27.9	36.0	63.9	7.1
0003916319		31.0	34.3	65.3	7.1
0003916327		54.3	56.0	110.3	5.1
0003916343		52.5	54.9	107.4	5.2