

Accreditation Number

VIC/BDAV/10/1001

Assessor Email

Assessor Reference Number

Assessor Name

Michelle Monaghan

Assessor Phone

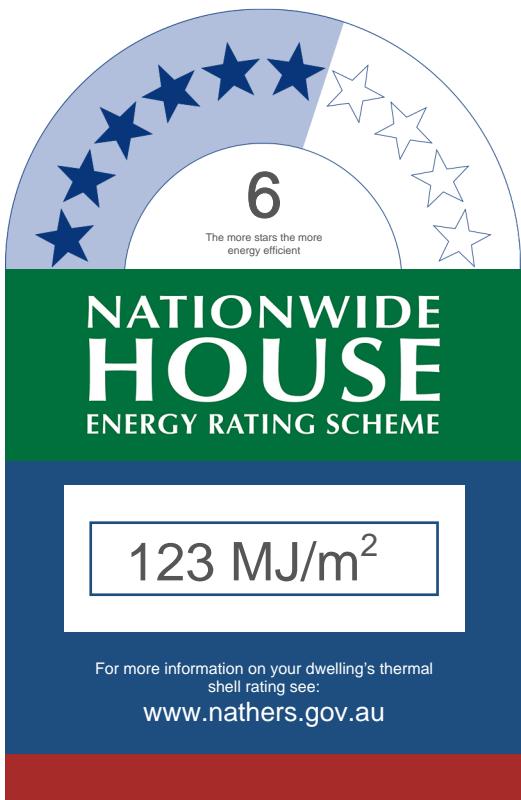
Organisation Name

LMD Studio

Date of Upload

1 Mar 2016

1. OVERVIEW



Scan the QR code below to view the online certificate



<https://www.fr5.com.au/QRCodeLanding?PublicId=E3NAJDSTXP>

Star rating

6

Dwelling address

[Address]

Postcode

3809

Climate zone

62

Thermal performance loads (area adjusted) MJ/m²

Heating	Cooling	Total
112.8	10.2	123

Floor Area (m²)

Conditioned	Unconditioned	Total	Garage
200.5	20.6	254.5	33.4

NatHERS Accredited Assessor's Stamp

2. BUILDING FEATURES

Zones	Occupancy Type	Conditioning	Area (m ²)	Ceiling Fans
WIR	otherNightCond	Heated & Cooled	7	0
Master Bedroom	bedroom	Heated & Cooled	17.5	0
Ensuite	otherNightCond	Heated & Cooled	9.4	0
WIR/Study	otherNightCond	Heated & Cooled	7.2	0
WIL/Ldry	otherDayCond		12.5	0
Rumpus/Theatre	living	Heated & Cooled	16.8	0
Entry	otherDayCond	Heated & Cooled	19.3	0
Kitch/Din/Fam	kitchen	Heated & Cooled	53.2	0
Bedroom 2	bedroom	Heated & Cooled	11.2	0
Bath/Pdr	otherDayCond		8	0
Bedroom 3	bedroom	Heated & Cooled	10.6	0
Hall	otherDayCond	Heated & Cooled	3.9	0
Prayer	otherDayCond	Heated & Cooled	6.1	0
B'Ptry	otherDayCond	Heated & Cooled	11.9	0
WC	otherDayCond	Heated & Cooled	1.8	0
Store	otherDayCond	Heated & Cooled	5.6	0
Salon	living	Heated & Cooled	18.8	0
Garage	garage		33.4	0

Window Types

Code	Glass Type	Frame Type	U-value	SHGC
GGG-05-001a	clear glass	Generic 01: Aluminium standard single-glazed	7.32	0.77
GGG-05-007a	clear/6 air gap/clear	Generic 15: Aluminium improved double-glazed	3.95	0.68

Windows

Zones	Window No.	Code	Height	Width	Orientation	Shade	Weather-strips
WIR	Opening 16	GGG-05-001a	2057	610	E	No	Yes
Master Bedroom	Opening 15	GGG-05-001a	2110	2690	E	No	Yes
Ensuite	Opening 17	GGG-05-001a	514	1450	N	No	Yes
Rumpus/Theatre	Opening 12	GGG-05-007a	2057	610	E	No	Yes
Rumpus/Theatre	Opening 13	GGG-05-007a	2057	610	E	No	Yes
Entry	Opening 5	GGG-05-001a	2150	200	W	No	Yes
Kitch/Din/Fam	Opening 10	GGG-05-007a	2057	850	S	No	Yes
Kitch/Din/Fam	Opening 11	GGG-05-007a	2057	850	S	No	Yes
Kitch/Din/Fam	Opening 14	GGG-05-001a	2110	2690	E	No	Yes
Bedroom 2	Opening 9	GGG-05-001a	2057	1810	S	No	Yes
Bath/Pdr	Opening 7	GGG-05-001a	1200	850	S	No	Yes
Bath/Pdr	Opening 8	GGG-05-001a	1200	849	S	No	Yes
Bedroom 3	Opening 6	GGG-05-001a	2057	1810	S	No	Yes
Prayer	Opening 3	GGG-05-007a	2057	610	W	No	Yes
Prayer	Opening 4	GGG-05-007a	2057	610	W	No	Yes
Salon	Opening 1	GGG-05-007a	2057	610	W	No	Yes
Salon	Opening 2	GGG-05-007a	2057	610	W	No	Yes

Roof Window Types

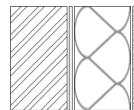
Code	Glass Type		U-value	SHGC		
Roof Windows						
Zones	Roof Window No.	Code	Area (m ²)	Orientation		
Zones	Roof Window No.	Code	Area (m ²)	Orientation	Outdoor Shade	Indoor Shade

Skylights

Zones	Skylight No.	Type	Area (m ²)	Orientation	Outdoor Shade	Diffuser
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External Wall Types ¹

	Thickness (mm)	Added Bulk Insulation (R)	
1: FR5-BV : Brick Veneer			FR5 Wall
Brickwork: generic extruded clay brick (typical density)	110		
Air gap vertical >66 mm (90 nominal) ventilated non-reflective (0.9/0.9; E = 0.82)	2		
Glass fibre batt: R2.5	110	2.5	
Plasterboard	10		
2: FR5-BV : Brick Veneer			FR5 Wall
Brickwork: generic extruded clay brick (typical density)	110		
Air gap vertical >66 mm (90 nominal) unventilated non-reflective (0.9/0.9; E = 0.82)	130		
Plasterboard	10		



External Walls

Zone	Wall Type	Area (m ²)	Orientation
WIR	1 : FR5-BV : Brick Veneer	3.9	E
WIR	1 : FR5-BV : Brick Veneer	13.1	N
Master Bedroom	1 : FR5-BV : Brick Veneer	1.1	S
Master Bedroom	1 : FR5-BV : Brick Veneer	9.9	E
Ensuite	1 : FR5-BV : Brick Veneer	10.1	N
WIL/Ldry	1 : FR5-BV : Brick Veneer	7.5	N
Rumpus/Theatre	1 : FR5-BV : Brick Veneer	12.5	S
Rumpus/Theatre	1 : FR5-BV : Brick Veneer	9.8	E
Rumpus/Theatre	1 : FR5-BV : Brick Veneer	6.6	N
Rumpus/Theatre	1 : FR5-BV : Brick Veneer	1.7	N
Entry	1 : FR5-BV : Brick Veneer	4.3	W
Kitch/Din/Fam	1 : FR5-BV : Brick Veneer	11.7	S
Kitch/Din/Fam	1 : FR5-BV : Brick Veneer	10.7	E
Bedroom 2	1 : FR5-BV : Brick Veneer	9.9	S
Bath/Pdr	1 : FR5-BV : Brick Veneer	10.9	S
Bedroom 3	1 : FR5-BV : Brick Veneer	9.9	S
Prayer	1 : FR5-BV : Brick Veneer	6.3	W
Prayer	1 : FR5-BV : Brick Veneer	1.8	W
Prayer	1 : FR5-BV : Brick Veneer	1.3	S
Prayer	1 : FR5-BV : Brick Veneer	3.7	S
Prayer	1 : FR5-BV : Brick Veneer	1.8	N
Salon	1 : FR5-BV : Brick Veneer	1.9	S
Salon	1 : FR5-BV : Brick Veneer	6.4	N
Salon	1 : FR5-BV : Brick Veneer	3.8	W
Salon	1 : FR5-BV : Brick Veneer	6.4	W
Garage	2 : FR5-BV : Brick Veneer	3.3	E
Garage	2 : FR5-BV : Brick Veneer	16.8	N
Garage	2 : FR5-BV : Brick Veneer	15.3	W

Internal Insulated Wall Types

	Thickness (mm)	Added Bulk Insulation (R)	
1: FR5-Int : Internal Plasterboard Stud Wall			FR5 Wall
Plasterboard	10		
Glass fibre batt: R2.5	110	2.5	
Plasterboard	10		



Internal Insulated Walls

Adjacent Zones	Wall Type	Area (m ²)
WIL/Ldry & WIR/Study	1 : FR5-Int : Internal Plasterboard Stud Wall	5.1
WIL/Ldry & Ensuite	1 : FR5-Int : Internal Plasterboard Stud Wall	6.8
Bath/Pdr & Bedroom 2	1 : FR5-Int : Internal Plasterboard Stud Wall	5.4
Bedroom 3 & Bath/Pdr	1 : FR5-Int : Internal Plasterboard Stud Wall	5.3
Hall & Bath/Pdr	1 : FR5-Int : Internal Plasterboard Stud Wall	11
B'Ptry & WIL/Ldry	1 : FR5-Int : Internal Plasterboard Stud Wall	7.6
Garage & Salon	1 : FR5-Int : Internal Plasterboard Stud Wall	7.3
Garage & Store	1 : FR5-Int : Internal Plasterboard Stud Wall	5.7
Garage & B'Ptry	1 : FR5-Int : Internal Plasterboard Stud Wall	3.2
Garage & WIL/Ldry	1 : FR5-Int : Internal Plasterboard Stud Wall	12.6

Floors ²

Zone	Construction	Area (m ²)	Sub Floor Ventilation	Added Bulk Insulation (R)	Covering
WIR	CSOG: Slab on Ground	7	encl	0.5	floattimber
Master Bedroom	CSOG: Slab on Ground	17.5	encl	0.5	floattimber
Ensuite	CSOG: Slab on Ground	9.4	encl	0.5	Tiles
WIR/Study	CSOG: Slab on Ground	7.2	encl	0.5	floattimber
WIL/Ldry	CSOG: Slab on Ground	12.5	encl	0.5	Tiles
Rumpus/Theatre	CSOG: Slab on Ground	16.8	encl	0.5	floattimber
Entry	CSOG: Slab on Ground	19.3	encl	0.5	floattimber
Kitch/Din/Fam	CSOG: Slab on Ground	53.2	encl	0.5	floattimber
Bedroom 2	CSOG: Slab on Ground	11.2	encl	0.5	floattimber
Bath/Pdr	CSOG: Slab on Ground	8	encl	0.5	Tiles
Bedroom 3	CSOG: Slab on Ground	10.6	encl	0.5	floattimber
Hall	CSOG: Slab on Ground	3.9	encl	0.5	floattimber
Prayer	CSOG: Slab on Ground	6.1	encl	0.5	Carpet
B'Ptry	CSOG: Slab on Ground	11.9	encl	0.5	floattimber
WC	CSOG: Slab on Ground	1.8	encl	0.5	Tiles
Store	CSOG: Slab on Ground	5.6	encl	0.5	Tiles
Salon	CSOG: Slab on Ground	18.8	encl	0.5	Tiles
Garage	CSOG: Slab on Ground	33.4	encl	0.5	none

Roofs²

Zone	Code	Area (m ²)	Added Bulk Insulation (R) Ceiling	Added Bulk Insulation (R) Roof
WIR	Disc	7	6.0	0.0
Master Bedroom	Disc	17.5	6.0	0.0
Ensuite	Disc	9.4	6.0	0.0
WIR/Study	Disc	7.2	6.0	0.0
WIL/Ldry	Disc	12.5	6.0	0.0
Rumpus/Theatre	Disc	16.8	6.0	0.0
Entry	Disc	19.3	6.0	0.0
Kitch/Din/Fam	Disc	53.2	6.0	0.0
Bedroom 2	Disc	11.2	6.0	0.0
Bath/Pdr	Disc	8	6.0	0.0
Bedroom 3	Disc	10.6	6.0	0.0
Hall	Disc	3.9	6.0	0.0
Prayer	Disc	6.1	6.0	0.0
B'Ptry	Disc	11.9	6.0	0.0
WC	Disc	1.8	6.0	0.0
Store	Disc	5.6	6.0	0.0
Salon	Disc	18.8	6.0	0.0
Garage	Disc	33.4	0.0	0.0

Doors

Zone	Area (m ²)	Weather-strips
WIL/Ldry	1.7	Yes
Entry	1.9	Yes
Salon	1.7	Yes
Garage	1.7	No
Garage	10.1	No

Air leakage

Zone	Exhaust Fans		Wall/Ceiling Vents		Chimneys		Downlights		Unflued Gas Heaters		Heater Flues	
	Sealed	Unsealed	Sealed	Unsealed	Sealed	Unsealed	Sealed	Unsealed	Sealed	Unsealed	Sealed	Unsealed
WIR	0	0	0	0	0	0	3	0	-	0	-	0
Master Bedroom	0	0	0	0	0	0	4	0	-	0	-	0
Ensuite	1	0	0	0	0	0	3	0	-	0	-	0
WIR/Study	0	0	0	0	0	0	2	0	-	0	-	0
WIL/Ldry	0	0	0	0	0	0	4	0	-	0	-	0
Rumpus/Theatre	0	0	0	0	0	0	4	0	-	0	-	0
Entry	0	0	0	0	0	0	5	0	-	0	-	0
Kitch/Din/Fam	1	0	0	0	0	0	17	0	-	0	-	0
Bedroom 2	0	0	0	0	0	0	2	0	-	0	-	0
Bath/Pdr	2	0	0	0	0	0	4	0	-	0	-	0
Bedroom 3	0	0	0	0	0	0	2	0	-	0	-	0
Hall	0	0	0	0	0	0	1	0	-	0	-	0
Prayer	0	0	0	0	0	0	2	0	-	0	-	0
B'Ptry	0	0	0	0	0	0	3	0	-	0	-	0
WC	1	0	0	0	0	0	1	0	-	0	-	0
Store	0	0	0	0	0	0	2	0	-	0	-	0
Salon	0	0	0	0	0	0	5	0	-	0	-	0
Garage	0	0	0	0	0	0	0	0	-	0	-	0
Total	5	0	0	0	0	0	64	0	0	0	0	0

Site Exposure:	suburban
Software name and version:	FirstRate5: 51011 c
Restrictions on use of this software:	FirstRate5 cannot model slab edge insulation.

3. 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, TV's etc. or solar panel or water tank requirements. The efficiency or specification of these items is generally covered by other regulations, standards or guidelines.

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 certified drawing set. Changes to any of these 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

ENDNOTES

1. Each airspace within a wall construction has a thermal resistance. This varies based on a number of criteria. Each airspace in this certificate is described using these criteria. They are as follows:

Orientation (vertical, horizontal, etc); Width; Air movement (ventilated or non-ventilated); and the Emissivity (e) of the surfaces on either side of the air space. Emissivity ranges from 0.9 for common non reflective building materials to 0.03 for the shiniest reflective foil products. The figures in brackets in each description (eg 0.2/0.9; E = 0.2) refer firstly to the emissivity of each of the two vertical surfaces facing into the space (in this case one surface is 0.2, for example an anti glare coated foil, and the other 0.9, a normal building material). The value of E is the effective Emissivity of the air space taking into account the emissivity of the surfaces on either side of the air space.

2. Ceilings with zones above are described as the floor of the zone above (see Floors schedule).

Ceilings with a roof or a neighbour above are described as the roof of that zone/area (see Roofs schedule)

Project Notes

Slab Waffle Pods 225mm. Wall Insulation R2.5 batts to house with sisalation paper, incl. party walls between garage & house. R2.5 to internal walls to Ldy/WIL, Bath/WC. Ceiling Insulation R6.0 batts to house. Double glazing to the following windows: Salon, Prayer, Family, Rumpus. Single glazed alum windows and doors U-value 7.32, SHGC 0.77, Double glazed alum windows U-value 3.95, SHGC 0.68. All exhaust fans are self closing. All gaps around external doors, windows & down lights are sealed. Weather strips/seals to entry & garage P/A door.

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Slab Waffle Pods 225mm. Wall Insulation R2.5 batts to house with sisalation paper, incl. party walls between garage & house. R2.5 to internal walls to Ldy/WIL, Bath/WC. Ceiling Insulation R6.0 batts to house. Double glazing to the following windows: Salon, Prayer, Family, Rumpus. Single glazed alum windows and doors U-value 7.32, SHGC 0.77, Double glazed alum windows U-value 3.95, SHGC 0.68. All exhaust fans are self closing. All gaps around external doors, windows & down lights are sealed. Weather strips/seals to entry & garage P/A door.