Assessor Certificate





Assessed and issued in accordance with the BASIX Thermal Comfort Protocol for the Simulation Method

29 May 2023 **BSA File ref:** 14858 Date: Assessor

Name: **Gavin Chambers** Company: Building Sustainability Assessments Assessor #: DMN/13/1491

Address: 7 William Street, HAMILTON NSW 2303

Phone: (02) 4962 3439 Email: enquiries@buildingsustainability.net.au

Declaration of interest in the project design: None

Project

Address: 5-9 Croydon Street

> LAKEMBA NSW 2195 Climate Zone: 56

Assessment

Software: BERS Pro 4.4 Ceiling fans used in the modelling: Living areas: None, Bedrooms: None

Documentation

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Drawings used for this assessment:

(Title, Ref.#, Revision, Issue date, etc)

Team2 Architects Project # 1136 19/05/2023 D

Thermal Performance Specification (copy on page 2)

Attached to the drawings and is on page: DA-000

0005268770 29 May 2023 Assessor Gavin Chambers Accreditation No. DMN/13/1491 Address 5-9 Croydon Street , Lakemba , NSW, 2195 hstar.com.au

Scan QR code to see NatHERS Certificate ↑

Thermal perf	ons	Cert	tificate #	ŧ	0005268770 Page 1 of 5		
Unit No.	Floor Areas		Predict. loads (MJ/M²/y)			⁻ /y)	Basix Floor Type and Area m²
Oint No.	Cond.	Uncond.	Heat	Cool	Total	Star	Basix 1 loor Type and Area in
A001	77	0	38.5	20.2	58.7	5.4	
A002	80	0	32.5	27.3	59.8	5.4	
A101	79	0	18.8	22.3	41.1	6.8	
A102	75	0	7.2	18.7	25.9	8.0	
A103	75	0	14.2	23.1	37.3	7.1	
A104	75	0	31.8	24.5	56.3	5.6	
A105	80	0	23.6	25.1	48.7	6.2	
A201	80	0	18.8	25.0	43.8	6.6	
A202	79	0	7.6	14.3	21.9	8.3	
A203	79	0	13.0	15.4	28.4	7.8	
A204	75	0	25.9	20.5	46.4	6.4	
A205	86	0	21.8	16.5	38.3	7.0	
A301	80	0	22.3	24.5	46.8	6.4	
A302	79	0	11.3	16.1	27.4	7.9	
A303	76	0	17.9	18.8	36.7	7.2	



May 2023 BSA Reference: 14858
Building Sustainability Assessments Ph: (02) 4962 3439
enquiries@buildingsustainability.net.au www. buildingsustainability.net.au

Important Note

The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate. If the proposed construction varies to those detailed below than the Assessor and NatHERS certificates will no longer be valid. Assessments assume that the BCA provisions for building sealing & ventilation are complied with at construction.

In NSW both BASIX & the BCA variations must be complied with, in particular the following:

- Thermal construction in accordance with Vol 1 Section J1.2 or Vol 2 Part 3.12.1.1
- Thermal breaks for Class 1 dwellings in accordance with Part 3.12.1.2(c) & 3.12.1.4(d)
- Floor insulation for Class 1 dwellings as per Part 3.12.1.5(a)(ii), (iii) & (e) or (c), (d) & (e)

Brick Veneer & Lightweight & Spandrel panel R2.0 Internal Wall Construction	- Floor insulation for Class 1 c - Building sealing in accordan	iwellings a ce with S	as per Part 3. I ection J3 or Pa	2.1.5(a)(ii), (iii) & (art 3.12.3.1 to 3.12	re) or (c), (d) & (e) 2.3.6.
Brick Veneer & Lightweight & Spandrel panel R2.0 Internal Wall Construction Added Insulation Plasterboard on studs (walls internal to units) None 75mm AAC Veneer (walls adjacent to lobbies) R2.0 Concrete + Plasterboard (walls adjacent to lift and stair cores) R1.0 Plasterboard + studs + 75mm AAC + studs + Plasterboard (party walls) R2.0 Ceiling Construction Added Insulation Plasterboard R3.5 to ceilings adjacent to roof space and decks above Roof Construction Colour Added Insulation Concrete Default colour for concrete (SA0.70) None Floor Construction Covering Added Insulation Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Type A windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doors Type B windows are awning windows, sliding windows & doors, fixed windows, stacker doors, louve Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (downlights, exhaust fans, flues etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.	Thermal Perform	ance Spe	ecifications (c	loes not apply to	garage)
Internal Wall Construction Plasterboard on studs (walls internal to units) None 75mm AAC Veneer (walls adjacent to lobbies) R2.0 Concrete + Plasterboard (walls adjacent to lift and stair cores) R1.0 Plasterboard + studs + 75mm AAC + studs + Plasterboard (party walls) R2.0 Ceiling Construction R3.5 to ceilings adjacent to roof space and decks above Roof Construction Colour Added Insulation Concrete Default colour for concrete (SA0.70) None Floor Construction Covering Added Insulation Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.35 To B105, B206, B306, B406, B506 onl Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 onl Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sidding windows & doors, fixed windows, stacker doors, lower Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	External Wall Construction				Added Insulation
Plasterboard on studs (walls internal to units) None 75mm AAC Veneer (walls adjacent to lobbies) R2.0 Concrete + Plasterboard (walls adjacent to lift and stair cores) Plasterboard + studs + 75mm AAC + studs + Plasterboard (party walls) R2.0 Ceiling Construction Plasterboard R3.5 to ceilings adjacent to roof space and decks above Roof Construction Colour Added Insulation Concrete Default colour for concrete (SA0.70) None Floor Construction Covering Added Insulation Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 onl Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, lowere Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (leaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Brick Veneer & Lightweight &	Spandre	l panel		R2.0
75mm AAC Veneer (walls adjacent to lobbies) R2.0 Concrete + Plasterboard (walls adjacent to lift and stair cores) R1.0 Plasterboard + studs + 75mm AAC + studs + Plasterboard (party walls) R2.0 Ceiling Construction Added Insulation Plasterboard R3.5 to ceilings adjacent to roof space and decks above Roof Construction Colour Added Insulation Concrete Default colour for concrete (SA0.70) None Floor Construction Covering Added Insulation Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other	Internal Wall Construction				Added Insulation
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Plasterboard + studs + 75mm AAC + studs + Plasterboard (party walls) Ceiling Construction Radded Insulation Plasterboard R3.5 to cellings adjacent to roof space and decks above Roof Construction Concrete Default colour for concrete (SA0.70) None Floor Construction Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Type A windows are awning windows, bifolds, casements, till in 'turn' windows, entry doors, french doors Type B windows are awning windows, bifolds, casements, till in 'turn' windows, entry doors, french doors Type B windows are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	· ·	·	•		R2.0
Ceiling Construction Plasterboard R3.5 to ceilings adjacent to roof space and decks above Roof Construction Concrete Default colour for concrete (SA0.70) None Floor Construction Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					R1.0
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Roof ConstructionColourAdded InsulationConcreteDefault colour for concrete (SA0.70)NoneFloor ConstructionCoveringAdded InsulationConcreteAs drawnR1.0 to unit B105 where carpark belowConcreteAs drawnR2.0 to units C205 & C206 where open belowWindowsU ValueSHGC RangeArea sq nPerformance glazing Type A4.900.30 - 0.36To A002, A701, B702 onlyPerformance glazing Type B4.900.30 - 0.36To A002, A701, B702 onlyPerformance glazing Type B4.100.42 - 0.52To B105, B206, B306, B406, B506 onlyPerformance glazing Type B4.100.47 - 0.57To B105, B206, B306, B406, B506 onlyPerformance glazing Type B5.600.44 - 0.54All other unitsPerformance glazing Type B5.600.52 - 0.64All other unitsType A windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doorsType B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvreSkylightsGlass and frame typeU ValueSHGCArea sq nDouble Glazed in aluminium framesAs drawnU and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specifiedShade elements(eaves, verandahs, awnings etc.All shade elements(downlights, exhaust fans, flues etc.Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					Added Insulation
Concrete Default colour for concrete (SA0.70) None Floor Construction Covering Added Insulation Concrete As drawn R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA		R	3.5 to ceilings	adjacent to roof sp	pace and decks above
Floor Construction Covering R1.0 to unit B105 where carpark below Concrete As drawn R2.0 to units C205 & C206 where open below Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type B windows are awning windows, bifolds, casements, till 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					Added Insulation
Concrete As drawn R2.0 to unit B105 where carpark below R2.0 to units C205 & C206 where open below R2.0 to unit	Concrete De	fault colo	ur for concrete	(SA0.70)	None
Windows U Value SHGC Range Area sq n Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type B 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA		vering			Added Insulation
Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units All other units Type A windows are awning windows, bifolds, casements, tilt in 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	7.5				•
Performance glazing Type A 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Concrete As				06 where open below
Performance glazing Type B 4.90 0.30 - 0.36 To A002, A701, B702 only Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Performance glazing Type B windows, bifolds, casements, tilt in 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Windows	U Valu	e SHGC Ran		Area sq m
Performance glazing Type A 4.10 0.42 - 0.52 To B105, B206, B306, B406, B506 only Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 only Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA		4.90	0.30 - 0.36	To A	A002, A701, B702 only
Performance glazing Type B 4.10 0.47 - 0.57 To B105, B206, B306, B406, B506 onl Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Performance glazing Type B	4.90	0.30 - 0.36		
Performance glazing Type A 5.60 0.44 - 0.54 All other units Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA		4.10	0.42 - 0.52		
Performance glazing Type B 5.60 0.52 - 0.64 All other units Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA		4.10	0.47 - 0.57	To B105, B206, I	
Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq n Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Performance glazing Type B	5.60	0.52 - 0.64		All other units
Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvre Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
Skylights Glass and frame type U Value SHGC Area sq m Double Glazed in aluminium frames As drawn U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
Double Glazed in aluminium frames U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified Shade elements (eaves, verandahs, awnings etc.) All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc.) Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA				U Value SHG	
Shade elements (eaves, verandahs, awnings etc. All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
All shade elements modelled as drawn Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA			Alternate produ	cts may be used if th	ne U value is lower & the
Ceiling Penetrations (downlights, exhaust fans, flues etc. Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	Shade elements			(eaves, ve	erandahs, awnings etc)
Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA	All shade elements modelled	as drawn			
	Ceiling Penetrations			(downlights, e	exhaust fans, flues etc)
Ducting is modelled at 150mm. No insulation losses from downlighting have been modelled					
		n. No insu	ulation losses f	rom downlighting l	have been modelled.
Additional Notes					
Nil	Nil				

Assessor	Certifica	ate	Asse	ssor#	DMN/1	3/149	91 Issued: 29 May 2023
Thermal per	formance	specificati	ons	Cert	tificate #	‡	0005268770 Page 3 of 5
Unit No. Floor Areas		Pred	ict. loads	s (MJ/M²	²/ y)	Basix Floor Type and Area m²	
Ome No.	Cond.	Uncond.	Heat	Cool	Total	Star	
A304	75	0	31.2	21.1	52.3	5.9	
A305	86	0	30.6	16.6	47.2	6.3	
A401	80	0	23.0	21.0	44.0	6.6	
A402	79	0	10.6	13.5	24.1	8.2	
A403	79	0	16.6	13.2	29.8	7.7	00500077050000
A404	75	0	32.1	20.6	52.7	5.9	0005268770 29 May 2023
A405	86	0	31.5	16.6	48.1	6.2	Assessor Gavin Chambers
A501	80	0	23.7	20.5	44.2	6.6	7.0 Average Average Accreditation No. DMN/13/1491
A502	79	0	11.1	13.6	24.7	8.1	star rating Address
A503	79	0	17.3	12.8	30.1	7.7	NATIONWIDE HOUSE NSW , 2195
A504	75	0	32.8	20.6	53.4	5.8	www.nathers.gov.au hstar.com.au
A505	86	0	36.7	17.1	53.8	5.8	KEEL, LAKEMBA, N
A601	80	0	29.9	19.3	49.2	6.1	
A602	79	0	11.3	11.1	22.4	8.3	
A603	79	0	17.1	11.5	28.6	7.8	
A604	75	0	39.2	16.9	56.1	5.6	
A701	106	0	12.2	27.4	39.6	6.9	
A702	106	0	21.2	24.9	46.1	6.4	
A703	75	0	44.2	29.1	73.3	4.6	
B101	56	0	30.7	14.3	45.0	6.4	
B102	54	0	24.7	15.3	40.0	6.9	
B103	77	0	14.7	15.7	30.4	7.6	
B104	80	0	30.4	9.6	40.0	6.9	
B105	75	0	41.1	22.1	63.2	5.2	
B201	81	0	22.2	9.0	31.2	7.6	
B202	77	0	15.9	16.3	32.2	7.4	
B203	54	0	16.4	20.3	36.7	7.2	
B204	77	0	11.1	19.7	30.8	7.6	
B205	80	0	17.9	9.4	27.3	7.9	
B206	75	0	37.6	15.7	53.3	5.8	
B301	81	0	16.3	8.7	25.0	8.1	
B302	77	0	20.0	15.2	35.2	7.3	
B303	54	0	20.8	18.3	39.1	6.9	
B304	77	0	14.3	17.9	32.2	7.4	
B305	80	0	23.6	8.1	31.7	7.5	
B306	75	0	43.5	13.2	56.7	5.6	
B401	81	0	17.1	8.5	25.6	8.0	
B402	77	0	20.9	15.1	36.0	7.2	
B403	54	0	21.8	18.4	40.2	6.9	
B404	77	0	15.0	17.8	32.8	7.4	
B405	80	0	24.4	7.8	32.2	7.4	
B406	75	0	44.4	12.3	56.7	5.6	
B501	81	0	17.7	8.2	25.9	8.0	
B502	77	0	21.4	14.9	36.3	7.2	

Assessor	Certifica	ate	Asse	ssor#	DMN/1	3/149	1 Issued: 29 May 2023
Thermal per	formance	specificati	ions	Cert	tificate #	#	0005268770 Page 4 of 5
Unit No.	Floor	Areas	Pred	ict. loads	s (MJ/M²	²/y)	Basix Floor Type and Area m²
	Cond.	Uncond.	Heat	Cool	Total	Star	Daoix Floor Type and 7 and in
B503	54	0	22.5	18.1	40.6	6.9	
B504	77	0	22.8	21.3	44.1	6.6	
B505	80	0	30.9	8.6	39.5	6.9	
B506	75	0	45.4	12.6	58.0	5.5	
B601	81	0	18.2	8.1	26.3	7.9	005000770 5 0 000
B602	77	0	20.9	14.9	35.8	7.2	0005268770 29 May 2023
B603	124	0	22.5	7.6	30.1	7.7	7 0 Assessor Gavin Chambers
B701	81	0	16.5	11.9	28.4	7.8	Average Accreditation No. Divilo 13/1431
B702	77	0	9.9	28.7	38.6	7.0	star rating Address ■最新国
B703	124	0	19.2	13.9	33.1	7.4	NATIONWIDE HOUSE NSW , 2195
C101	101	0	8.9	16.4	25.3	8.1	www.nathers.gov.au hstar.com.au
C102	108	0	14.4	17.2	31.6	7.5	REEL, LAKENIBA, N.
C103	83	0	34.5	17.4	51.9	5.9	
C104	50	0	37.1	24.6	61.7	5.3	
C105	81	0	42.3	18.8	61.1	5.3	
C106	81	0	25.0	19.9	44.9	6.5	
C107	50	0	22.1	23.7	45.8	6.4	
C108	47	0	14.9	28.2	43.1	6.7	
C201	40	0	7.2	16.8	24.0	8.2	
C202	78	0	11.6	15.7	27.3	7.9	
C203	83	0	23.7	22.3	46.0	6.4	
C204	80	0	42.6	19.9	62.5	5.2	
C205	104	0	31.6	11.6	43.2	6.7	
C206	104	0	21.6	12.1	33.7	7.4	
C207	80	0	10.4	20.8	31.2	7.6	
C208	73	0	5.0	23.4	28.4	7.8	
C209	76	0	6.6	13.5	20.1	8.4	
C301	40	0	13.5	16.2	29.7	7.7	
C302	78	0	18.6	17.9	36.5	7.2	
C303	83	0	27.5	18.4	45.9	6.4	
C304	80	0	25.6	17.8	43.4	6.6	
C305	104	0	32.8	9.3	42.1	6.7	
C306	104	0	20.0	12.8	32.8	7.4	
C307	80	0	11.3	16.7	28.0	7.8	
C308	73	0	7.6	17.1	24.7	8.1	
C309	76	0	10.8	17.2	28.0	7.8	
C401	40	0	14.3	16.2	30.5	7.6	
C402	78	0	19.4	17.2	36.6	7.2	
C403	83	0	29.5	18.4	47.9	6.3	
C404	80	0	24.2	18.6	42.8	6.7	
C405	104	0	39.0	12.4	51.4	5.9	
C406	104	0	24.4	13.2	37.6	7.1	
C407	80	0	11.1	16.3	27.4	7.9	
C408	73	0	8.2	17.2	25.4	8.1	

Assessor	Certifica	ate	Asse	ssor#I	DMN/1	3/149)1 Issued: 29 May 202
Thermal perf	formance s	specificati	ons	Cert	tificate #	ŧ	0005268770 Page 5 of 5
Unit No.	Floor Areas		Predict. loads (MJ/M²/y)				Basix Floor Type and Area m²
Offic NO.	Cond.	Uncond.	Heat	Cool	Total	Star	Basix Floor Type and Area in
C409	76	0	11.5	17.0	28.5	7.8	
C501	40	0	14.7	15.9	30.6	7.6	
C502	78	0	19.8	16.8	36.6	7.2	
C503	83	0	29.0	17.8	46.8	6.4	
C504	80	0	24.5	17.2	41.7	6.8	
C505	76	0	32.0	11.3	43.3	6.6	
C506	76	0	20.1	11.0	31.1	7.6	
C507	80	0	12.5	16.2	28.7	7.8	
C508	73	0	11.5	16.7	28.2	7.8	
C509	76	0	12.1	16.4	28.5	7.8	
C601	40	0	15.2	15.5	30.7	7.6	
C602	78	0	20.3	16.9	37.2	7.1	
C603	83	0	30.7	18.1	48.8	6.2	
C604	80	0	25.3	18.5	43.8	6.6	
C605	76	0	35.4	12.0	47.4	6.3	
C606	76	0	21.7	13.1	34.8	7.3	
C607	80	0	12.1	15.9	28.0	7.8	000F2C9770 20 May 2022
C608	73	0	12.5	17.3	29.8	7.7	0005268770 29 May 2023 Assessor Gavin Chambers
C609	76	0	12.4	16.1	28.5	7.8	Accreditation No. DMN/13/1491
C701	40	0	8.2	27.1	35.3	7.3	Address Address 5.9 Crowdon Street Lakemba
C702	78	0	20.9	16.8	37.7	7.1	NATIONWIDE HOUSE NSW , 2195
C703	83	0	31.9	17.4	49.3	6.1	www.nathers.gov.au hstar.com.au
C704	80	0	28.5	28.7	57.2	5.6	REET LAKEMBA N
C705	76	0	36.9	17.0	53.9	5.8	TELL , E/ (IXEIVIB/ C, IX
C706	76	0	27.0	13.6	40.6	6.9	
C707	80	0	17.9	16.8	34.7	7.3	
C708	73	0	13.6	17.7	31.3	7.6	
C709	76	0	12.8	15.8	28.6	7.8	
C801	40	0	6.1	19.0	25.1	8.1	
C802	78	0	17.7	15.5	33.2	7.4	
C803	74	0	38.9	11.7	50.6	6.0	
C804	56	0	24.9	13.8	38.7	7.0	
C805	76	0	12.1	11.3	23.4	8.2	
C901	100	0	10.4	14.1	24.5	8.1	
C902	107	0	15.6	13.3	28.9	7.8	
C903	74	0	42.3	12.9	55.2	5.7	
C904	56	0	25.4	15.4	40.8	6.8	
C1001	100	0	16.2	15.0	31.2	7.6	
C1002	107	0	23.2	15.6	38.8	7.0	
C1003	74	0	39.1	25.5	64.6	5.1	
C1004	56	0	31.0	16.1	47.1	6.3	