## **BASIX THERMAL COMFORT COMMITMENTS**

Note: <u>Table 1 must be read in conjunction with Table 2</u>. <u>Table 2</u> outlines additional thermal enhancements / treatments to meet the mandatory thermal load targets to achieve compliance.

Element	Material	Detail
External walls	Brick Veneer	Insulation: See Table 3
	Brick veneer	Medium colour: 0.475 <absorptance< 0.70<="" td=""></absorptance<>
Internal walls	Plasterboard	
Party walls	Concrete fixed plasterboard	Insulation: None
	Concrete, fixed plasterboard	Common corridors
	Concrete, fixed plasterboard	Insulation: None
	concrete, fixed plasterboard	Neighbour
	Concrete	Insulation: None
	concrete	Fire stairs & lifts
		Total Window System Properties U-value 4.3 & SHGC 0.53 for
	Type 1	sliding doors, sliding & fixed windows
	(Typical Single glazed clear	And
Windows	glass with aluminium frame)	Total Window System Properties U-value 4.3 & SHGC 0.47 fo
		bifold doors, awning & casement windows
		Balcony windows: <b>30%, 45% (i.e. sliding)</b>
	Window Operability	Bedroom windows: <b>10%</b> (BCA D2.24)
		All other non-balcony windows: <b>0% (i.e. fixed)</b>
		Balcony windows: 60% opacity
	Shading device	Non-balcony windows: 60% opacity
Skylight	N/A	
		Insulation: None
Roof	Concrete	Dark colour: Absorptance> 0.70
Ceilings	Plasterboard	Insulation: See Table 3
	Concrete	Insulation: See Table 3
-		Tiles: Wet areas only
Floors		Carpet: Bedrooms only
		Timber: Elsewhere
Common corridors naturally ventilated		No
Recessed downlights assessed		No
Exhaust fans (kitchens, bathrooms, laundry)		All assumed to be sealed
		ove & U-value can be greater than or equal to the value stated
above		

## Table 2: BERS Pro Thermal Loads – Stage A

Unit No.	Additional Treatments Required	Heating Load (MJ/m².yr)	Cooling Load (MJ/m <sup>2.</sup> yr)	Stars	Pass/Fail
505	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16), South Bedroom 2 window to have at least 10% ventilation opening, South Bedroom 3 window to have at least 10% ventilation opening	16.5	60.0	6.5	Pass
506	R1.0 Bulk Floor Insulation to exposed floors only (total floor system R-value of R1.2), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R-value Rt1.16)	51.0	31.0	6.3	Pass
604	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R2.5 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt2.66), East Study window to have at least 20% ventilation opening, South Bedroom 3 window to have at least 10%	23.7	54.6	6.4	Pass

Unit No.	Additional Treatments Required
	ventilation opening, East Bedroom 4 window to have at least
	10% ventilation opening,

## Table 3: BERS Pro Thermal Loads – Stage B

Unit No.	Additional Treatments Required	Heating Load (MJ/m².yr)	Cooling Load (MJ/m²·yr)	Stars	Pass/Fail
101	R1.5 Bulk Floor Insulation to carpark & exposed areas only (total floor system R-value of Rt1.88), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	31.8	18.4	7.7	Pass
102	R1.5 Bulk Floor Insulation to carpark (total floor system R-value of Rt1.88), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, North Bedroom 1 window to have at least 10% ventilation opening	4.3	19.8	8.9	Pass
103	R1.5 Bulk Floor Insulation to carpark (total floor system R-value of Rt1.88), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	57.0	30.8	5.9	Pass
104	R1.5 Bulk Floor Insulation to carpark (total floor system R-value of Rt1.88), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	42.6	26.2	6.9	Pass
105	R1.5 Bulk Floor Insulation to carpark (total floor system R-value of Rt1.88), R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	50.6	23.9	6.6	Pass
201	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	15.7	21.1	8.4	Pass
202	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, North Bedroom 1 window to have at least 10% ventilation opening	0.8	22.0	9.0	Pass
203	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	41.0	33.6	6.6	Pass
204	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	21.9	31.2	7.6	Pass
205	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	26.6	26.5	7.6	Pass
301	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	17.0	19.5	8.4	Pass
302	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, North Bedroom 1 window to have at least 10% ventilation opening	1.1	21.0	9.1	Pass
303	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	46.4	31.4	6.4	Pass
304	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	30.1	28.6	7.3	Pass
305	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	39.7	27.4	6.9	Pass
401	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows	16.3	17.8	8.4	Pass
402	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, North Bedroom 1 window to have at least 10% ventilation opening	1.3	18.8	9.2	Pass
403	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, South Bedroom 1, 2 & 3 windows to have at least 10% ventilation opening	26.1	30.4	7.4	Pass



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	Heating Load (MJ/m².yr)	Cooling Load (MJ/m <sup>2.</sup> yr)	Stars	Pass/Fail
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Unit No.	Additional Treatments Required	Heating Load (MJ/m².yr)	Cooling Load (MJ/m <sup>2.</sup> yr)	Stars	Pass/Fail
404	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, South Bedroom 1, 2 windows to have at least 10% ventilation opening	29.0	22.5	7.7	Pass
501	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	21.6	19.3	8.2	Pass
502	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	5.4	20.1	8.9	Pass
503	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	31.2	32.6	7.1	Pass
504	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R1.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt1.16)	41.9	25.0	6.9	Pass
601	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R2.5 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt2.66)	48.5	30.8	6.4	Pass
602	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R2.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt2.16)	16.4	40.1	7.4	Pass
603	R2.0 Bulk External Wall Insulation with vapour barrier (total wall system R-value of Rt2.52), Type 1 windows, R2.0 Bulk Ceiling Insulation to exposed areas only (total ceiling/roof system R- value Rt2.16)	39.7	44.3	6.1	Pass



