

NatHERS Thermal Performance Certificate

Multi-unit Residential Thermal Performance Certificate

Issued in accordance with **BASIX** Thermal Comfort Simulation Method.

Assessor Details

Name:	Tom Beckerling	Company:	Cundall	HERS Assessor number #:	100271
Address:	Level 1, 48 Alfred St, Milsons Point 2061			BDAV Assessor Number	BDAV 14/1654
Phone:	08 9421 3704	Fax:	08 8232 0282	Email:	t.beckerling@cundall.com.au
Declaration of interest:	Design advice				
Client:	Holdmark				
Name:	Wilkin Ho	Company:	Holdmark		
Address:	2/2-4 Giffnock Ave, Macquarie Park NSW 2113				
Phone:	(02) 9889 5540	Fax:	(02) 9888 5829	Email:	WWho@holdmark.com.au
Project	6-16 Atchison Street				
Address:	6-16 Atchison Street, St Leonards NSW 2065				
Applicant:	Holdmark			LGA:	Willoughby Council

Assessor Number
BDAV 14/1654

BASIX Certificate number:
16540013

Issued:
12/05/2014

CUNDALL

Thermal Performance Specifications

These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents

<u>Building Element</u>	<u>Construction</u>	<u>Thermal Properties</u>
Overhangs & shading	As per plans	-
External Wall	Concrete block + insulation, plasterboard internal finish	R2.0 Insulation
Internal Walls	Party walls: Plasterboard on fibre cement Other internal walls: Plasterboard on studs	-
Exposed roof areas	Concrete + insulation, plasterboard internal finish - Exposed roof areas medium absorptance	R2.5 Insulation
Internal Floor	Concrete, timber/ceramic tiles	-
Window	Aluminium frame, single clear glazing	U 4.79 SHGC 0.61
Window	Bifold doors to wintergardens	U 6.81 SHGC 0.74



Energy Rating

Certificate Number **16540013**

☐ single-dwelling rating

5.4 stars

☒ multi-unit development (attach listing of ratings)
If selected, data specified is the average across the entire development

heating **34.4** MJ/m²

cooling **26.7** MJ/m²

Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/Number **Tom Beckerling VIC/BDAV/14/1654**

Assessor Signature  Date **12/05/2014**

Unit number(s)	Simulated. Loads, area adjusted (MJ/M ² /y)		Floor area (M ²)		Star Rating
	Heat	Cool (Sens & Lat)	Cond.	Uncond.	
601	11.6	22.8	49.4	0.0	7.3
602	13.8	26.2	72.6	0.0	6.9
603	44.7	27.1	53.9	0.0	4.7
605	41.2	34.9	70.5	0.0	4.4
606	40.0	26.3	53.3	0.0	4.9
607	35.1	25.0	52.8	0.0	5.4
608	46.6	29.8	76.5	0.0	4.4
609	26.2	33.5	52.1	0.0	5.4
610	37.1	24.1	7.3	5.4	4.9
611	7.9	51.1	39.4	0.0	5.4
701	11.6	22.8	49.4	0.0	7.3
702	13.8	26.2	72.6	0.0	6.9
703	44.7	27.1	53.9	0.0	4.7
705	41.2	34.9	70.5	0.0	4.4
706	40.0	26.3	53.3	0.0	4.9
707	35.1	25.0	52.8	0.0	5.4
708	46.6	29.8	76.5	0.0	4.4
709	27.9	33.0	50.8	0.0	5.3
710	32.4	30.7	68.6	0.0	5.2
711	7.1	38.5	50.4	0.0	6.4
801	13.4	20.7	49.4	0.0	7.3
802	11.6	21.1	72.6	0.0	7.4
803	49.1	26.6	53.9	0.0	4.4
805	45.6	31.3	70.5	0.0	4.4
806	47.9	23.4	53.3	0.0	4.7
807	39.2	23.0	52.8	0.0	5.2
808	50.4	24.5	76.5	0.0	4.5
809	30.2	27.7	50.8	0.0	5.4
810	36.0	28.5	68.6	0.0	5.1
811	9.6	37.2	50.4	0.0	6.3
901	13.4	20.7	49.4	0.0	7.3
902	11.6	21.1	72.6	0.0	7.4
903	49.1	26.6	53.9	0.0	4.4
905	45.6	31.3	70.5	0.0	4.4
906	47.9	23.4	53.3	0.0	4.7
907	39.2	23.0	52.8	0.0	5.2

908	50.4	24.5	76.5	0.0	4.5
909	30.2	27.7	50.8	0.0	5.4
910	36.0	28.5	68.6	0.0	5.1
911	9.6	37.2	50.4	0.0	6.3
1001	13.4	20.7	49.4	0.0	7.3
1002	11.6	21.1	72.6	0.0	7.4
1003	49.1	26.6	53.9	0.0	4.4
1005	45.6	31.3	70.5	0.0	4.4
1006	47.9	23.4	53.3	0.0	4.7
1007	39.2	23.0	52.8	0.0	5.2
1008	50.4	24.5	76.5	0.0	4.5
1009	30.2	27.7	50.8	0.0	5.4
1010	36.0	28.5	68.6	0.0	5.1
1011	9.6	37.2	50.4	0.0	6.3
1101	13.4	20.7	49.4	0.0	7.3
1102	11.6	21.1	72.6	0.0	7.4
1103	49.1	26.6	53.9	0.0	4.4
1105	45.6	31.3	70.5	0.0	4.4
1106	47.9	23.4	53.3	0.0	4.7
1107	39.2	23.0	52.8	0.0	5.2
1108	50.4	24.5	76.5	0.0	4.5
1109	30.2	27.7	50.8	0.0	5.4
1110	36.0	28.5	68.6	0.0	5.1
1111	9.6	37.2	50.4	0.0	6.3
1201	13.4	20.7	49.4	0.0	7.3
1202	11.6	21.1	72.6	0.0	7.4
1203	49.1	26.6	53.9	0.0	4.4
1205	45.6	31.3	70.5	0.0	4.4
1206	47.9	23.4	53.3	0.0	4.7
1207	39.2	23.0	52.8	0.0	5.2
1208	50.4	24.5	76.5	0.0	4.5
1209	30.2	27.7	50.8	0.0	5.4
1210	36.0	28.5	68.6	0.0	5.1
1211	9.6	37.2	50.4	0.0	6.3
1301	13.4	20.7	49.4	0.0	7.3
1302	11.6	21.1	72.6	0.0	7.4
1303	49.1	26.6	53.9	0.0	4.4
1305	45.6	31.3	70.5	0.0	4.4
1306	47.9	23.4	53.3	0.0	4.7
1307	39.2	23.0	52.8	0.0	5.2
1308	50.4	24.5	76.5	0.0	4.5
1309	30.2	27.7	50.8	0.0	5.4
1310	36.0	28.5	68.6	0.0	5.1
1311	9.6	37.2	50.4	0.0	6.3
1501	13.4	20.7	49.4	0.0	7.3
1502	11.6	21.1	72.6	0.0	7.4
1503	49.1	26.6	53.9	0.0	4.4
1505	45.6	31.3	70.5	0.0	4.4
1506	47.9	23.4	53.3	0.0	4.7
1507	39.2	23.0	52.8	0.0	5.2
1508	50.4	24.5	76.5	0.0	4.5
1509	30.2	27.7	50.8	0.0	5.4
1510	36.0	28.5	68.6	0.0	5.1
1511	9.6	37.2	50.4	0.0	6.3
1601	13.4	20.7	49.4	0.0	7.3
1602	11.6	21.1	72.6	0.0	7.4

1603	49.1	26.6	53.9	0.0	4.4
1605	45.6	31.3	70.5	0.0	4.4
1606	47.9	23.4	53.3	0.0	4.7
1607	39.2	23.0	52.8	0.0	5.2
1608	50.4	24.5	76.5	0.0	4.5
1609	30.2	27.7	50.8	0.0	5.4
1610	36.0	28.5	68.6	0.0	5.1
1611	9.6	37.2	50.4	0.0	6.3
1701	13.4	20.7	49.4	0.0	7.3
1702	11.6	21.1	72.6	0.0	7.4
1703	49.1	26.6	53.9	0.0	4.4
1705	45.6	31.3	70.5	0.0	4.4
1706	47.9	23.4	53.3	0.0	4.7
1707	39.2	23.0	52.8	0.0	5.2
1708	50.4	24.5	76.5	0.0	4.5
1709	30.2	27.7	50.8	0.0	5.4
1710	36.0	28.5	68.6	0.0	5.1
1711	9.6	37.2	50.4	0.0	6.3
1801	13.4	20.7	49.4	0.0	7.3
1802	11.6	21.1	72.6	0.0	7.4
1803	49.1	26.6	53.9	0.0	4.4
1805	45.6	31.3	70.5	0.0	4.4
1806	47.9	23.4	53.3	0.0	4.7
1807	39.2	23.0	52.8	0.0	5.2
1808	50.4	24.5	76.5	0.0	4.5
1809	30.2	27.7	50.8	0.0	5.4
1810	36.0	28.5	68.6	0.0	5.1
1811	9.6	37.2	50.4	0.0	6.3
1901	13.4	20.7	49.4	0.0	7.3
1902	11.6	21.1	72.6	0.0	7.4
1903	49.1	26.6	53.9	0.0	4.4
1905	45.6	31.3	70.5	0.0	4.4
1906	47.9	23.4	53.3	0.0	4.7
1907	39.2	23.0	52.8	0.0	5.2
1908	50.4	24.5	76.5	0.0	4.5
1909	30.2	27.7	50.8	0.0	5.4
1910	36.0	28.5	68.6	0.0	5.1
1911	9.6	37.2	50.4	0.0	6.3
2001	13.4	20.7	49.4	0.0	7.3
2002	11.6	21.1	72.6	0.0	7.4
2003	49.1	26.6	53.9	0.0	4.4
2005	45.6	31.3	70.5	0.0	4.4
2006	47.9	23.4	53.3	0.0	4.7
2007	39.2	23.0	52.8	0.0	5.2
2008	50.4	24.5	76.5	0.0	4.5
2009	30.2	27.7	50.8	0.0	5.4
2010	36.0	28.5	68.6	0.0	5.1
2011	9.6	37.2	50.4	0.0	6.3
2101	13.4	20.7	49.4	0.0	7.3
2102	11.6	21.1	72.6	0.0	7.4
2103	49.1	26.6	53.9	0.0	4.4
2105	45.6	31.3	70.5	0.0	4.4
2106	47.9	23.4	53.3	0.0	4.7
2107	39.2	23.0	52.8	0.0	5.2
2108	50.4	24.5	76.5	0.0	4.5
2109	30.2	27.7	50.8	0.0	5.4

2110	36.0	28.5	68.6	0.0	5.1
2111	9.6	37.2	50.4	0.0	6.3
2201	13.7	20.2	49.4	0.0	7.4
2202	11.8	20.9	72.6	0.0	7.4
2203	49.5	26.5	53.9	0.0	4.4
2205	45.9	31.2	70.5	0.0	4.4
2206	48.4	22.6	53.3	0.0	4.7
2207	49.0	26.1	128.5	0.0	4.4
2209	30.6	26.7	50.8	0.0	5.5
2210	36.4	28.2	68.6	0.0	5.1
2211	9.8	37.1	50.4	0.0	6.3
2301	13.7	20.2	49.4	0.0	7.4
2302	11.8	20.9	72.6	0.0	7.4
2303	49.5	26.5	53.9	0.0	4.4
2305	50.4	24.1	124.7	0.0	4.5
2307	49.0	26.1	128.5	0.0	4.4
2309	30.6	26.7	50.8	0.0	5.5
2310	36.4	28.2	68.6	0.0	5.1
2311	9.8	37.1	50.4	0.0	6.3
2501	13.7	20.2	49.4	0.0	7.4
2502	11.8	20.9	72.6	0.0	7.4
2503	49.5	26.5	53.9	0.0	4.4
2505	45.9	31.2	70.5	0.0	4.4
2506	48.4	22.6	53.3	0.0	4.7
2507	39.6	23.0	52.8	0.0	5.2
2508	50.8	24.3	76.5	0.0	4.4
2509	30.6	26.7	50.8	0.0	5.5
2510	36.4	28.2	68.6	0.0	5.1
2511	9.8	37.1	50.4	0.0	6.3
2601	13.7	20.2	49.4	0.0	7.4
2602	11.8	20.9	72.6	0.0	7.4
2603	49.5	26.5	53.9	0.0	4.4
2605	45.9	31.2	70.5	0.0	4.4
2606	48.4	22.6	53.3	0.0	4.7
2607	39.6	23.0	52.8	0.0	5.2
2608	50.8	24.3	76.5	0.0	4.4
2609	30.6	26.7	50.8	0.0	5.5
2610	36.4	28.2	68.6	0.0	5.1
2611	9.8	37.1	50.4	0.0	6.3
2701	13.7	20.2	49.4	0.0	7.4
2702	11.8	20.9	72.6	0.0	7.4
2703	49.5	26.5	53.9	0.0	4.4
2705	45.9	31.2	70.5	0.0	4.4
2706	48.4	22.6	53.3	0.0	4.7
2707	39.6	23.0	52.8	0.0	5.2
2708	50.8	24.3	76.5	0.0	4.4
2709	30.6	26.7	50.8	0.0	5.5
2710	36.4	28.2	68.6	0.0	5.1
2711	9.8	37.1	50.4	0.0	6.3
2801	13.7	20.2	49.4	0.0	7.4
2802	11.8	20.9	72.6	0.0	7.4
2803	49.5	26.5	53.9	0.0	4.4
2805	45.9	31.2	70.5	0.0	4.4
2806	48.4	22.6	53.3	0.0	4.7
2807	39.6	23.0	52.8	0.0	5.2
2808	50.8	24.3	76.5	0.0	4.4

2809	30.6	26.7	50.8	0.0	5.5
2810	36.4	28.2	68.6	0.0	5.1
2811	9.8	37.1	50.4	0.0	6.3
2901	13.7	20.2	49.4	0.0	7.4
2902	11.8	20.9	72.6	0.0	7.4
2903	49.5	26.5	53.9	0.0	4.4
2905	45.9	31.2	70.5	0.0	4.4
2906	48.4	22.6	53.3	0.0	4.7
2907	39.6	23.0	52.8	0.0	5.2
2908	50.8	24.3	76.5	0.0	4.4
2909	30.6	26.7	50.8	0.0	5.5
2910	36.4	28.2	68.6	0.0	5.1
2911	9.8	37.1	50.4	0.0	6.3
3001	13.7	20.2	49.4	0.0	7.4
3002	11.8	20.9	72.6	0.0	7.4
3003	49.5	26.5	53.9	0.0	4.4
3005	45.9	31.2	70.5	0.0	4.4
3006	48.4	22.6	53.3	0.0	4.7
3007	39.6	23.0	52.8	0.0	5.2
3008	50.8	24.3	76.5	0.0	4.4
3009	30.6	26.7	50.8	0.0	5.5
3010	36.4	28.2	68.6	0.0	5.1
3011	9.8	37.1	50.4	0.0	6.3
3101	24.1	19.8	49.4	0.0	6.6
3102	27.0	20.6	72.6	0.0	6.3
3103	57.4	29.5	53.9	0.0	4.0
3105	52.5	40.3	70.5	0.0	3.9
3106	57.4	24.6	53.3	0.0	4.2
3107	49.5	23.6	52.8	0.0	4.6
3108	60.2	30.7	76.5	0.0	3.9
3109	39.8	35.8	50.8	0.0	4.4
3110	48.9	28.5	68.6	0.0	4.4
3111	23.0	43.7	50.4	0.0	4.9
AVERAGE (Area weighted)	34.4	26.7			5.4