

Assessor Certificate

Multiple Dwellings

Certificate Version 6.1. Prior versions not valid after 1 March 2006

Issued in accordance with
BASIX Thermal Comfort Simulation Method.



Assessor			
Name:	David Baggs	Company:	Ecospecifier
Address:	PO Box 840 Wynnum 4178		
Phone:	(07) 3890 5752	Fax:	(07) 3890 8765
	Email: dbaggs@netspace.net.au		
Declaration of interest:	None		
Client			
Name:	Brian Mann	Company:	Robertson + Marks
Address:	Ground Floor 11-17 Buckingham Street Surry Hills 2010		
Phone:	(02) 9319 4388	Fax:	(02) 9319 7338
	Email: mail@marks.net.au		
Project			
Address:	41 Belmore Street Meadowbank 2114		
Applicant:	Robertson + Marks	LGA:	Ryde City Council
Assessment			
Date:	11/12/2011	File ref:	1-01
		Software:	BERS Pro
		Version:	V4.1
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:

Thermal Performance Spec: **Attached, Affixed to Page#:**
A 101 (Rev. 1 - 12/12/2011)

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

Shepherds Bay - Stage 1, Job 10068: A 101-115, 117, 118-123 (Rev. 1 - 12/12/2011)

Building Specifications: (Title, Ref.#, Revision, Issue date, etc)

Only specifications, detailed on Drawings identified above, have been referenced



ABSA Assessor Certificate		Assessor # 20047		Certificate # 33342523		Issued: 11/12/2011	
Thermal performance specifications						Page 1 of 6	
Unit number(s)	Certificate number	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions or Cross Ventilation Bonus	Sub Floor Insulation
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
1--01	33342523	98.0	4.9	35.5	20.7	No	
1--02	60877459	88.8	0.0	26.5	11.4	No	
1--03	96380659	95.5	0.0	15.1	16.3	No	
1--04	28068306	92.6	0.0	16.2	13.3	No	
1--05	50328648	88.8	0.0	22.6	13.5	No	
1--06	66502861	90.7	0.0	12.8	9.5	No	
1--07	97575531	91.4	0.0	20.3	8.0	No	
1--08	53632109	88.8	0.0	29.9	13.7	No	
1--09	96380659	95.5	0.0	14.9	17.1	No	
1--10	65793062	92.6	0.0	17.4	14.3	No	
1--11	52204396	88.8	0.0	30.8	13.4	No	
1--12	66502861	90.5	0.0	14.0	9.7	No	
1--13	23332063	55.3	0.0	10.9	17.4	No	

ABSA Assessor Certificate		Assessor # 20047		Certificate # 33342523		Issued: 11/12/2011	
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Unit number(s)	Certificate number	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions or Cross Ventilation Bonus	Sub Floor Insulation
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
1--14	53125138	104.4	0.0	19.7	20.7	No	
1--15	22155170	59.4	0.0	12.9	11.6	No	
1--16	65097149	59.4	0.0	10.4	11.4	No	
1--17	10182431	77.9	0.0	18.5	7.8	No	
1--18	64625715	86.2	0.0	16.5	9.9	No	
1--19	16782204	86.2	0.0	15.5	10.5	No	
1--20	99751399	56.3	0.0	5.5	17.1	No	
1--21	78765732	89.8	0.0	12.9	11.1	No	
1--22	55820967	55.9	0.0	5.6	13.3	No	
1--23	23021862	104.4	0.0	23.2	15.5	No	
1--24	32878124	78.4	0.0	14.9	7.3	No	
1--25	64023563	89.0	0.0	29.8	11.7	No	
1--26	75442791	87.5	0.0	41.8	16.6	No	
1--27	90251229	92.4	0.0	43.3	13.8	No	
1--28	75810557	93.7	0.0	24.0	16.0	No	
1--29	49430091	87.5	0.0	27.7	11.3	No	
1--30	16370004	90.5	0.0	17.7	8.7	No	
1--31	83734737	90.7	0.0	17.6	8.2	No	
1--32	35300245	87.5	0.0	22.0	12.0	No	
1--33	62926702	92.4	0.0	24.5	10.2	No	
1--34	48042314	122.9	5.4	38.6	21.1	No	
2--01	33342523	98.0	4.9	35.5	20.7	No	
2--02	60877459	88.8	0.0	26.5	11.4	No	
2--03	96380659	95.5	0.0	14.8	16.7	No	
2--04	28068306	92.6	0.0	16.2	13.3	No	
2--05	56270934	88.8	0.0	19.9	14.6	No	
2--06	66502861	90.7	0.0	12.7	9.5	No	
2--07	94420118	91.4	0.0	30.1	10.4	No	
2--08	83512726	88.8	0.0	37.0	18.6	No	
2--09	54539861	95.5	0.0	22.7	22.4	No	
2--10	65793062	92.6	0.0	17.4	14.3	No	
2--11	63241427	88.8	0.0	29.2	13.4	No	
2--12	66502861	90.5	0.0	13.9	9.5	No	
2--13	23332063	55.3	0.0	10.9	17.4	No	
2--14	15854918	104.4	0.0	20.9	23.7	No	
2--15	27154168	59.4	0.0	13.0	10.8	No	
2--16	54716526	59.4	0.0	15.9	14.0	No	
2--17	24188707	77.9	0.0	24.6	9.6	No	
2--18	1072555	86.2	0.0	19.9	13.3	No	
2--19	1072555	86.2	0.0	19.9	14.3	No	
2--20	99751399	56.3	0.0	5.8	15.9	No	
2--21	78765732	89.8	0.0	12.9	11.1	No	
2--22	18686875	55.9	0.0	6.0	11.4	No	
2--23	98212755	104.4	0.0	24.7	14.0	No	
2--24	32374096	79.1	2.6	20.4	15.5	No	
2--25	54077325	89.2	5.7	42.7	16.7	No	

ABSA Assessor Certificate		Assessor # 20047		Certificate # 33342523		Issued: 11/12/2011	
Thermal performance specifications						Page 3 of 6	
Unit number(s)	Certificate number	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions or Cross Ventilation Bonus	Sub Floor Insulation
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
2--26	75810557	93.7	0.0	24.0	16.0	No	
2--27	35300245	87.5	0.0	23.5	11.9	No	
2--28	16370004	90.7	0.0	15.6	8.7	No	
2--29	83734737	90.7	0.0	15.7	8.3	No	
2--30	42705658	87.5	0.0	19.6	12.3	No	
2--31	62926702	92.4	0.0	24.5	10.2	No	
2--32	43832057	122.9	5.4	35.0	21.1	No	
3--01	33342523	98.0	4.9	35.5	20.7	No	
3--02	43746843	88.8	0.0	24.1	12.1	No	
3--03	96380659	95.5	0.0	15.1	16.3	No	
3--04	28068306	92.6	0.0	16.2	13.3	No	
3--05	42683235	88.8	0.0	20.7	16.3	No	
3--06	51962246	85.7	5.0	27.9	16.6	No	
3--07	73910989	91.3	0.0	39.3	35.5	No	
3--08	65793062	92.6	0.0	17.4	14.3	No	
3--09	63241427	88.8	0.0	29.2	13.4	No	
3--10	66502861	90.5	0.0	13.9	9.5	No	
3--11	23332063	55.3	0.0	10.9	17.4	No	
3--12	82107629	104.4	0.0	20.0	16.9	No	
3--13	63066318	55.8	0.0	12.1	10.2	No	
3--14	56784589	95.6	0.0	44.0	28.7	No	
3--15	16048050	56.3	0.0	23.2	24.1	No	
3--16	71916888	55.9	0.0	7.5	14.2	No	
3--17	25421777	104.4	0.0	26.2	14.9	No	
3--18	32374096	79.1	2.6	20.4	15.5	No	
3--19	14815471	89.8	0.0	33.0	22.6	No	
3--20	45497293	89.2	5.7	38.3	18.7	No	
3--21	75810557	93.7	0.0	24.0	16.0	No	
3--22	74311711	87.5	0.0	18.4	14.0	No	
3--23	61473429	90.7	0.0	14.1	8.8	No	
3--24	92422529	90.7	0.0	14.4	8.4	No	
3--25	74311711	87.5	0.0	17.2	14.1	No	
3--26	94777723	92.4	0.0	26.2	10.5	No	
3--27	62429049	122.9	5.4	48.7	27.4	No	
4--01	25419072	98.0	4.9	59.2	48.8	No	
4--02	95827796	88.8	0.0	39.6	51.7	No	
4--03	92112680	95.5	0.0	26.2	22.4	No	
4--04	54282437	92.6	0.0	27.3	18.0	No	
4--05	30598405	88.8	0.0	38.9	40.9	No	
4--06	83623850	85.7	5.0	30.2	18.4	No	
4--07	73910989	91.3	0.0	39.3	35.5	No	
4--08	65793062	92.6	0.0	17.4	14.3	No	
4--09	63241427	88.8	0.0	29.2	13.4	No	
4--10	66502861	90.5	0.0	13.9	9.5	No	
4--11	23332063	55.3	0.0	10.9	17.4	No	
4--12	82107629	104.4	0.0	20.0	16.9	No	

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		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
4--13	63066318	55.8	0.0	12.1	10.2	No	
4--14	63800779	95.6	0.0	42.5	29.5	No	
4--15	92606229	56.3	0.0	21.9	26.3	No	
4--16	71916888	55.9	0.0	7.5	14.2	No	
4--17	25421777	104.4	0.0	26.2	14.9	No	
4--18	32374096	79.1	2.6	19.3	16.4	No	
4--19	14815471	89.8	0.0	32.9	21.3	No	
4--20	14815471	89.2	5.7	33.3	21.3	No	
4--21	70481367	87.5	0.0	17.1	12.3	No	
4--22	85592937	93.7	0.0	34.4	18.3	No	
4--23	94247055	90.7	0.0	24.4	10.6	No	
4--24	32266653	90.7	0.0	24.1	11.4	No	
4--25	93619037	87.5	0.0	28.0	18.8	No	
4--26	67683311	126.0	4.7	46.9	53.3	No	
5--01	73910989	91.3	0.0	39.3	35.5	No	
5--02	65793062	92.6	0.0	17.4	14.3	No	
5--03	42260328	88.8	0.0	26.4	15.7	No	
5--04	66502861	90.5	0.0	13.9	9.5	No	
5--05	23332063	55.3	0.0	10.9	17.4	No	
5--06	98738012	104.4	0.0	19.9	17.9	No	
5--07	93532619	55.8	0.0	13.8	11.0	No	
5--08	63800779	95.6	0.0	43.4	30.9	No	
5--09	80981889	56.3	0.0	21.4	27.7	No	
5--10	71916888	55.9	0.0	7.5	14.2	No	
5--11	25421777	104.4	0.0	26.2	14.9	No	
5--12	32374096	79.1	2.6	19.3	16.4	No	
5--13	14815471	89.8	0.0	32.0	23.9	No	
5--14	59386728	67.2	11.8	40.3	26.1	No	
5--15	96793518	81.8	10.4	36.3	23.8	No	
5--16	26110892	95.6	5.4	44.1	45.4	No	
6--01	69573912	91.3	0.0	48.5	40.4	No	
6--02	59664063	92.6	0.0	29.3	19.2	No	
6--03	51429295	88.8	0.0	35.5	21.4	No	
6--04	66502861	90.5	0.0	13.9	9.5	No	
6--05	23332063	55.3	0.0	10.9	17.4	No	
6--06	98738012	104.4	0.0	19.9	17.9	No	
6--07	93532619	55.8	0.0	13.8	11.0	No	
6--08	27739501	95.6	0.0	41.7	32.7	No	
6--09	99137450	56.3	0.0	25.3	45.4	No	
6--10	88674080	55.9	0.0	16.5	50.4	No	
6--11	76354215	104.4	0.0	22.7	25.5	No	
6--12	68103330	79.1	2.6	18.4	47.5	No	
6--13	43125201	89.8	0.0	32.6	30.1	No	
7--01	64251757	88.4	0.0	38.3	37.0	No	
7--02	28614783	94.9	0.0	27.8	42.9	No	
7--03	23332063	55.3	0.0	10.9	17.4	No	

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Unit number(s)	Certificate number	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions or Cross Ventilation Bonus	Sub Floor Insulation
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
7--04	98738012	104.4	0.0	19.9	17.9	No	
7--05	93532619	55.8	0.0	13.8	11.0	No	
7--06	23178684	95.6	0.0	39.8	38.0	No	
8--01	64251757	88.4	0.0	38.3	37.0	No	
8--02	28614783	94.9	0.0	27.8	42.9	No	
8--03	23332063	55.3	0.0	10.9	17.4	No	
8--04	73625608	104.4	0.0	21.3	16.3	No	
8--05	47824450	55.8	0.0	11.4	10.0	No	
8--06	43366702	95.6	0.0	39.8	38.0	No	
9--01	64251757	88.4	0.0	38.3	37.0	No	
9--02	28614783	94.9	0.0	27.8	42.9	No	
9--03	23332063	55.3	0.0	10.9	17.4	No	
9--04	20189824	104.4	0.0	21.3	16.3	No	
9--05	47824450	55.8	0.0	11.4	10.0	No	
9--06	43366702	95.6	0.0	39.8	38.0	No	
10--01	64251757	88.4	0.0	38.3	37.0	No	
10--02	28614783	94.9	0.0	27.8	42.9	No	
10--03	23332063	55.3	0.0	10.9	17.4	No	
10--04	20189824	104.4	0.0	21.3	16.3	No	
10--05	47824450	55.8	0.0	11.4	10.0	No	
10--06	43366702	95.6	0.0	39.8	38.0	No	
11--01	35856575	88.4	0.0	57.5	55.0	No	
11--02	37891510	94.9	0.0	38.5	52.3	No	
11--03	40900315	55.3	0.0	20.2	22.1	No	
11--04	70087021	104.4	0.0	34.2	20.4	No	
11--05	61540594	55.8	0.0	16.9	12.9	No	
11--06	79259248	95.6	0.0	28.1	59.0	No	
GF-01	33342523	98.0	4.9	36.0	20.5	No	
GF-02	60877459	88.8	0.0	26.5	11.4	No	
GF-03	96380659	95.5	0.0	15.1	16.3	No	
GF-04	16423282	92.6	0.0	15.9	12.9	No	
GF-05	94299368	88.8	0.0	24.6	14.6	No	
GF-06	66502861	90.7	0.0	13.1	9.3	No	
GF-07	97575531	91.4	0.0	20.7	8.0	No	
GF-08	91949594	88.8	0.0	32.4	12.9	No	
GF-09	96380659	95.5	0.0	14.9	17.1	No	
GF-10	1072555	92.6	0.0	25.2	13.7	No	
GF-11	52204396	88.8	0.0	33.0	12.6	No	
GF-12	66502861	90.5	0.0	14.2	9.7	No	
GF-13	44339266	55.3	0.0	58.3	14.0	No	
GF-14	49964305	104.4	0.0	65.3	16.7	No	
GF-15	58235508	59.4	0.0	64.1	10.6	No	
GF-16	57157047	88.8	0.0	66.0	9.7	No	
GF--17	81825736	94.0	0.0	42.3	7.7	No	R1 floor except beds
GF-18	98943589	71.3	0.0	53.4	13.5	No	
GF-19	96464599	89.8	0.0	36.8	9.9	No	R1 floor except beds

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Unit number(s)	Certificate number	Floor area (M ²)		Predict. loads (MJ/M ² /y)		Concessions or Cross Ventilation Bonus	Sub Floor Insulation
		Cond.	Uncond.	Heat	Cool (Sens & Lat)		
GF-20	93908203	55.9	0.0	44.3	12.2	No	
GF-21	23692453	106.8	0.0	50.1	14.8	No	
GF-22	56495343	68.2	0.0	37.0	8.1	No	R1 floor except beds
GF-23	31692993	89.0	0.0	19.6	8.6	No	
GF-24	45638956	87.5	0.0	35.2	16.5	No	
GF-25	46131381	92.4	0.0	34.6	11.1	No	
GF-26	57592398	93.7	0.0	25.1	17.5	No	
GF-27	52755861	87.5	0.0	37.9	16.9	No	
GF-28	16370004	90.5	0.0	19.5	8.7	No	
GF-29	83734737	90.7	0.0	18.0	8.1	No	
GF-30	98934816	87.5	0.0	25.7	18.4	No	
GF-31	19411052	92.4	0.0	25.5	11.1	No	
GF-32	48042314	122.9	5.4	40.1	20.7	No	
LG-01	75756075	98.0	4.9	36.9	18.8	No	
LG-02	60877459	88.8	0.0	27.5	11.2	No	
LG-03	36827356	95.5	0.0	14.1	17.5	No	
LG-04	24382761	92.6	0.0	23.5	13.5	No	
LG-05	79430913	88.8	0.0	24.8	13.3	No	
LG-06	24813907	90.7	0.0	14.5	7.5	No	
LG-07	23594125	91.4	0.0	47.6	7.0	No	R1 floor except beds
LG-08	60813782	88.8	0.0	58.6	12.0	No	R1 floor except beds
LG-09	32631828	95.5	0.0	58.7	15.3	No	
LG-10	50657567	59.8	0.0	64.5	14.3	No	
LG-11	83297215	88.8	0.0	57.4	12.3	No	R1 floor except beds
LG-12	53896147	87.7	0.0	47.8	9.1	No	R1 floor except beds
LG-13	60214449	89.0	0.0	53.8	6.3	No	R1 floor except beds
LG-14	37912966	87.5	0.0	55.8	9.0	No	R1 floor except beds
LG-15	45102333	59.8	0.0	43.0	12.3	No	R1 floor except beds
LG-16	99644377	93.7	0.0	50.5	14.0	No	R1 floor except beds
LG-17	73098428	87.5	0.0	54.6	9.7	No	R1 floor except beds
LG-18	60410901	90.5	0.0	44.9	7.4	No	R1 floor except beds
LG-19	14866044	90.7	0.0	19.2	8.3	No	
LG-20	50024857	92.4	0.0	34.6	10.3	No	
LG-21	42901030	87.5	0.0	25.3	11.4	No	
LG-22	96102972	122.9	5.4	42.2	18.3	No	
UB-01	21629561	98.0	4.9	57.9	18.5	No	R1 floor except beds
UB-02	83297215	88.8	0.0	56.8	11.9	No	R1 floor except beds
UB-03	32631828	95.5	0.0	60.6	14.9	No	
UB-04	50657567	59.8	0.0	65.5	14.2	No	
UB-05	28988320	88.8	0.0	55.7	10.2	No	R1 floor except beds
UB-06	63070534	88.3	0.0	49.7	8.2	No	R1 floor except beds
UB-07	80283227	90.7	0.0	55.7	7.8	No	R1 floor except beds
UB-08	93012123	87.5	0.0	53.5	12.6	No	R1 floor except beds
UB-09	29631306	59.8	0.0	45.0	13.5	No	R1 floor except beds
UB-10	57796965	122.9	5.4	64.4	19.3	No	R1 floor except beds

Thermal Performance Specifications - BASIX THERMAL COMFORT - Simulation Method

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.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
GGG-05-013a		Single Low-E Clear	Aluminium	4.70	0.63		Throughout

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
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Any U and SHGC values specified on Certificates Issued after 1 May 2007 are according to NFRC. All values prior to this date are ANAC. Alternate products may be used if their U value is lower, and the SHGC value is less than 10% higher or lower

External Walls	Construction	Insulation	Colour - Solar absorptancy	Detail
Brick Veneer		R2.0	Light - SA <0.475	As per plans
Brick Veneer		R2.0	Medium - SA 0.475 - 0.7	As per plans
Brick Veneer		R2.0	Dark - SA > 0.7	As per plans
Concrete		R2.0	Medium - SA 0.475 - 0.7	Unit walls next to car park

Internal walls	Construction	Insulation	Detail
Plasterboard on Studs		None	Throughout
Plasterboard and Hebel 75mm		None	Common internal walls

Floors	Construction	Insulation	Covering	Detail
Concrete		None	Ceramic Tile or Carpet	As per plans
Concrete		R1.0	Ceramic Tile or Carpet	Some units above car park

R1 subfloor all except beds: GF-17,GF-19,GF-22,LG-07,LG-08,LG-11,LG-12,LG-13,LG-14,LG-15,LG-16,LG-17,LG-18,UB-01,UB-02,UB-05,UB-06,UB-07,UB-08,UB-09,UB-10

Ceilings	Construction	Insulation	Detail
Plasterboard		None	Throughout
Plasterboard		R3.0	Units below Terraces or Metal I

Roof	Construction	Insulation	Colour - Solar absorptancy	Detail
Tiled Concrete Terraces		None	Medium - SA 0.475 - 0.7	As per plans
Metal Deck		None	Medium - SA 0.475 - 0.7	As per plans
Concrete Roof		R3.0	Medium - SA 0.475 - 0.7	As per plans

Window cover	Internal (curtains)	External (awnings, shutters, etc)
Generic (Holland blinds)	Throughout	Louvres

Fixed Shading	Eaves (width - inc gutters, height above windows)	Verandahs, Pergolas (type, description)
	0	0 Varied - Balconies, sunhoods, 100% Opaque

Overshadowing	Overshadowing structures	Overshadowing trees
Yes		Yes

Orientation, Exposure, Ventilation and Infiltration

ABSA Assessor Stamp

Orientation of nominal north elevation 46
 Terrain category Suburban
 Roof Ventilation Unventilated
 Cross Ventilation Standard
 Subfloor Ventilation Open
 Living area open to entry: No
 Living areas separated by doors: No
 Stair open to heated areas: No
 Seals to windows and doors: Yes
 Exhaust fans without dampers: No
 Ventilated skylights: No
 Open fire or unflued gas heater: No
 Vented downlights: No
 Wall and ceiling vents: No

