


Energy Rating

Green Building Council of Australia (GBCA) Green Star Rating

Green Star Rating: 5.5

Green Star Rating: 5.5

Green Star Rating: 5.5



Energy Rating

Green Building Council of Australia (GBCA) Green Star Rating

Green Star Rating: 5.5

Green Star Rating: 5.5

Green Star Rating: 5.5



North

North arrow pointing up

1	01.07.14	Submission for S75W	EG
2	07.06.14	Submission for S75W	EG

Revision Date Description

1	01.07.14	Submission for S75W	EG
2	07.06.14	Submission for S75W	EG

Revision Date Description

Site 3 - Australia Towers II  
Sydney Olympic Park  
Plan  
Ground Level

Scale: 1:100 @ A0

Drawn: [Name]

Project No: S11202

Status: S75W

Rev Date: 17/01/14 4:31:14 PM

Rev No: S11202-1100-000-GL[2]2

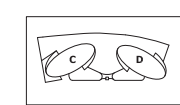
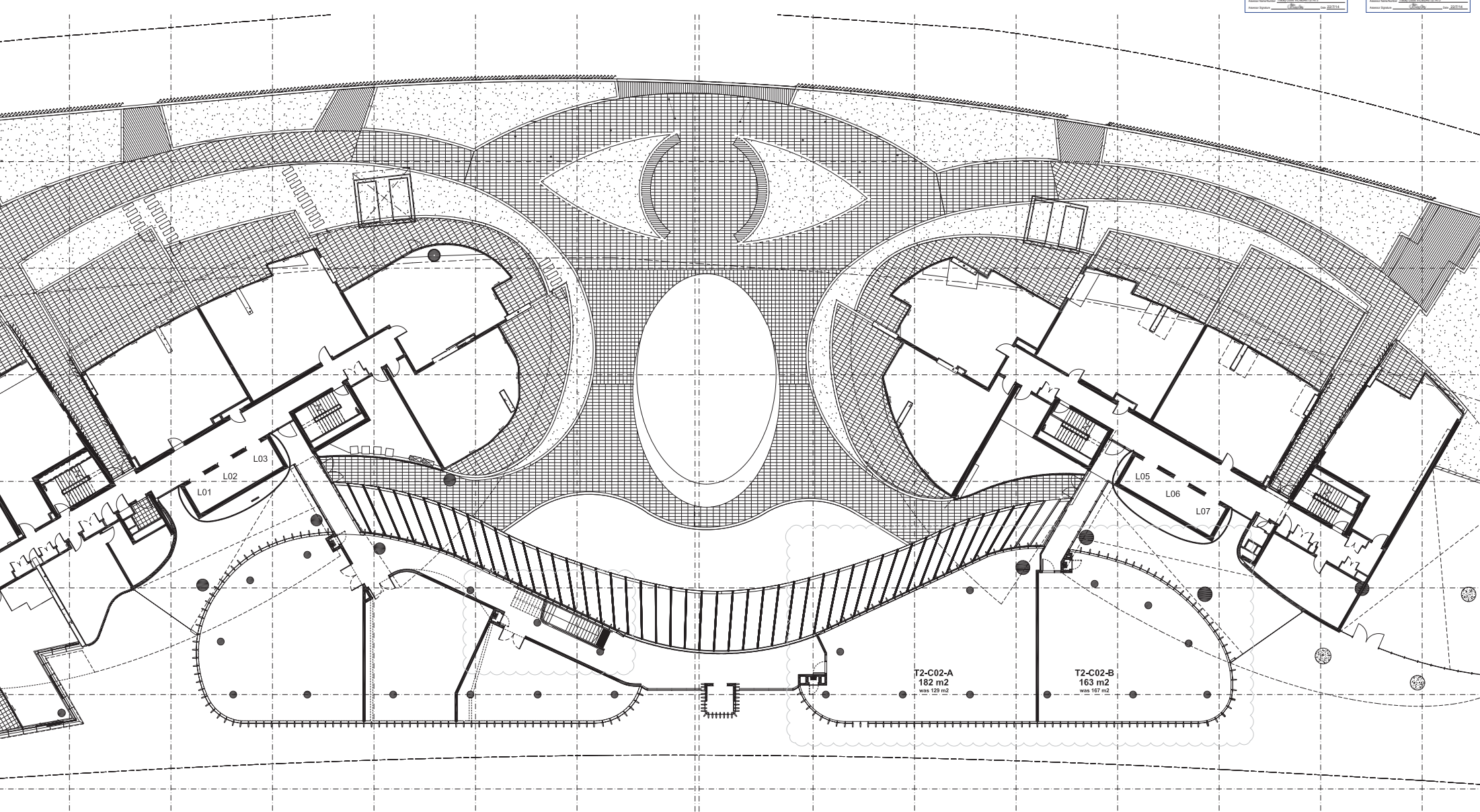
Rev Date: 17/01/14 4:31:14 PM

Medbourne 1 Robinson Street  
Sydney NSW 2000 Australia  
T: 02 9550 1000 F: 02 9550 1001  
www.bates-smart.com.au

Sydney 45 Robinson Street  
Sydney NSW 2000 Australia  
T: 02 9550 1000 F: 02 9550 1001  
www.bates-smart.com.au

Bates Smart Architects Pty Ltd ABN 68 004 740 000

**BATESSMART**



Note:  
 • Commencement related  
 • Status related

Revision	Date	Description	By	Check
2	01/07/14	Submission for S75W	EG	
1	07/06/14	Submission for S75W	EG	

Site 3 - Australia Towers II  
 Sydney Olympic Park  
 Plan  
 Level 01

Scale: 1:100 @ A0  
 Drawn: [Name]  
 Project No: S11202  
 Status: S75W  
 Rev Date: 17/01/14 4:30:28 PM  
 File No: S:\S11202\11202\_01\11202\_01\_P1\_01.dwg  
 Drawing No: A02-001-L1[2] 2

Medbourne 1 Midbourne Street  
 Sydney NSW 2000 Australia  
 T 61 2 9550 1200 F 61 2 9550 1200  
 email info@bates-smart.com.au  
 www.bates-smart.com.au

Bates Smart Architects Pty Ltd ABN 68 004 740 900

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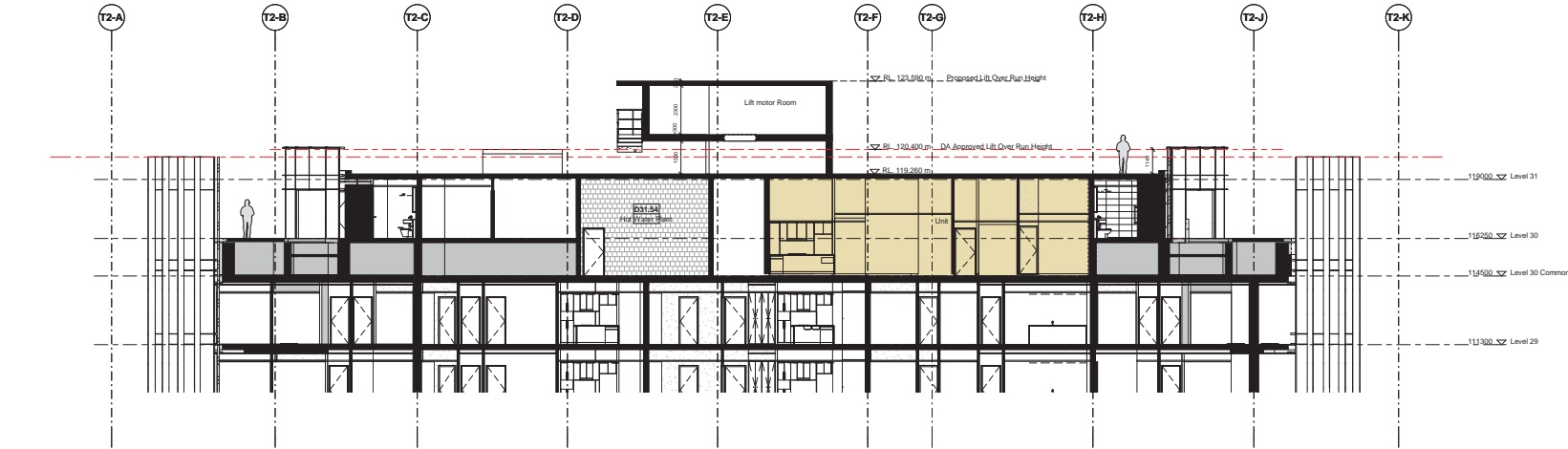




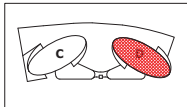




2 Tower D Lift Motor Room Section  
1:100



1 Tower D Lift Motor Room Section1  
1:100



## Site 3 - Australia Towers II Sydney Olympic Park

### Tower D - Roof Sections

Check all dimensions and site conditions prior to commencement of any work. The position or relative height of any structure, object, plant, structure or equipment and the proposed colour should not be at the discretion of the architect. Do not scale drawings - refer to figure dimensions only. Any discrepancies shall immediately be referred to the architect for clarification. All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Initial	Checked
2	27.05.14	Submission For S1109	JT	EC
1	23.05.14	Issue For Review	JT	EC

Scale	1:100	@ B1
Drawn	Author	Checked
Project no.	S11202	
Sheet	DA	
Plot Date	27/05/2014 3:40:28 PM	
Plot File	c:\temp\2462_Homebank_ARCH\2013_TAX.vrt	
Client Ref	SK-362	Revision
		2

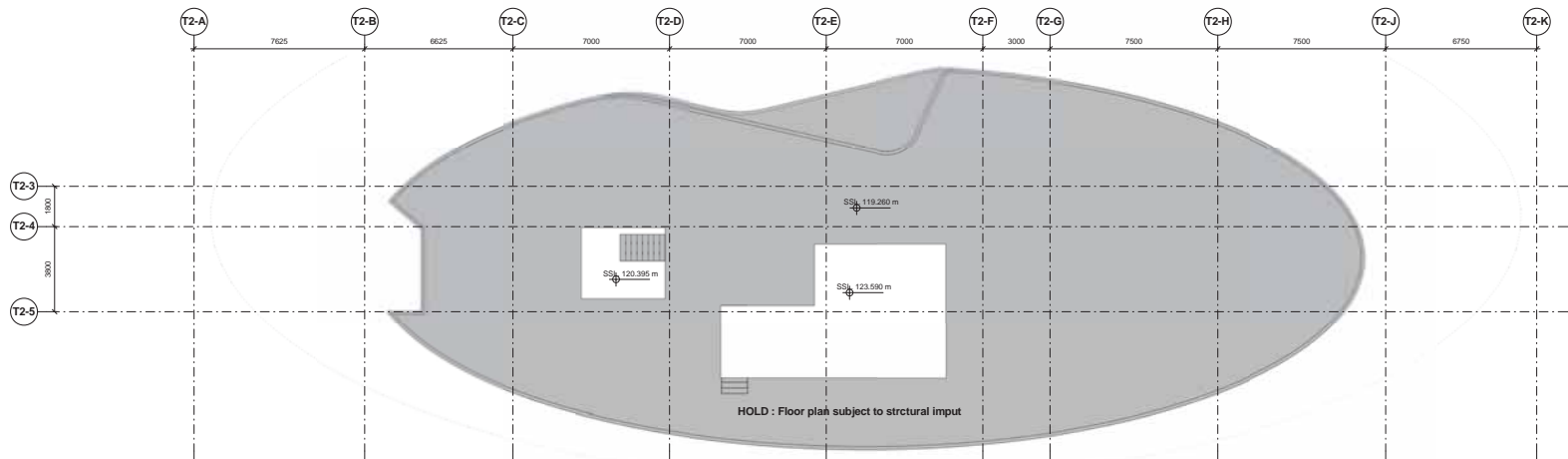
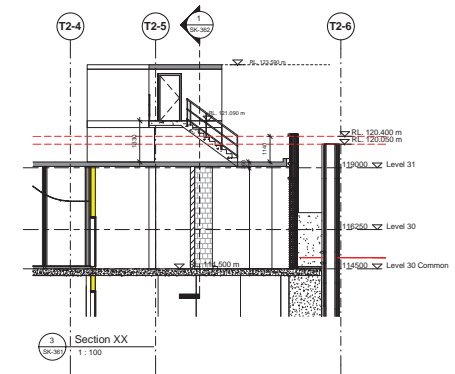
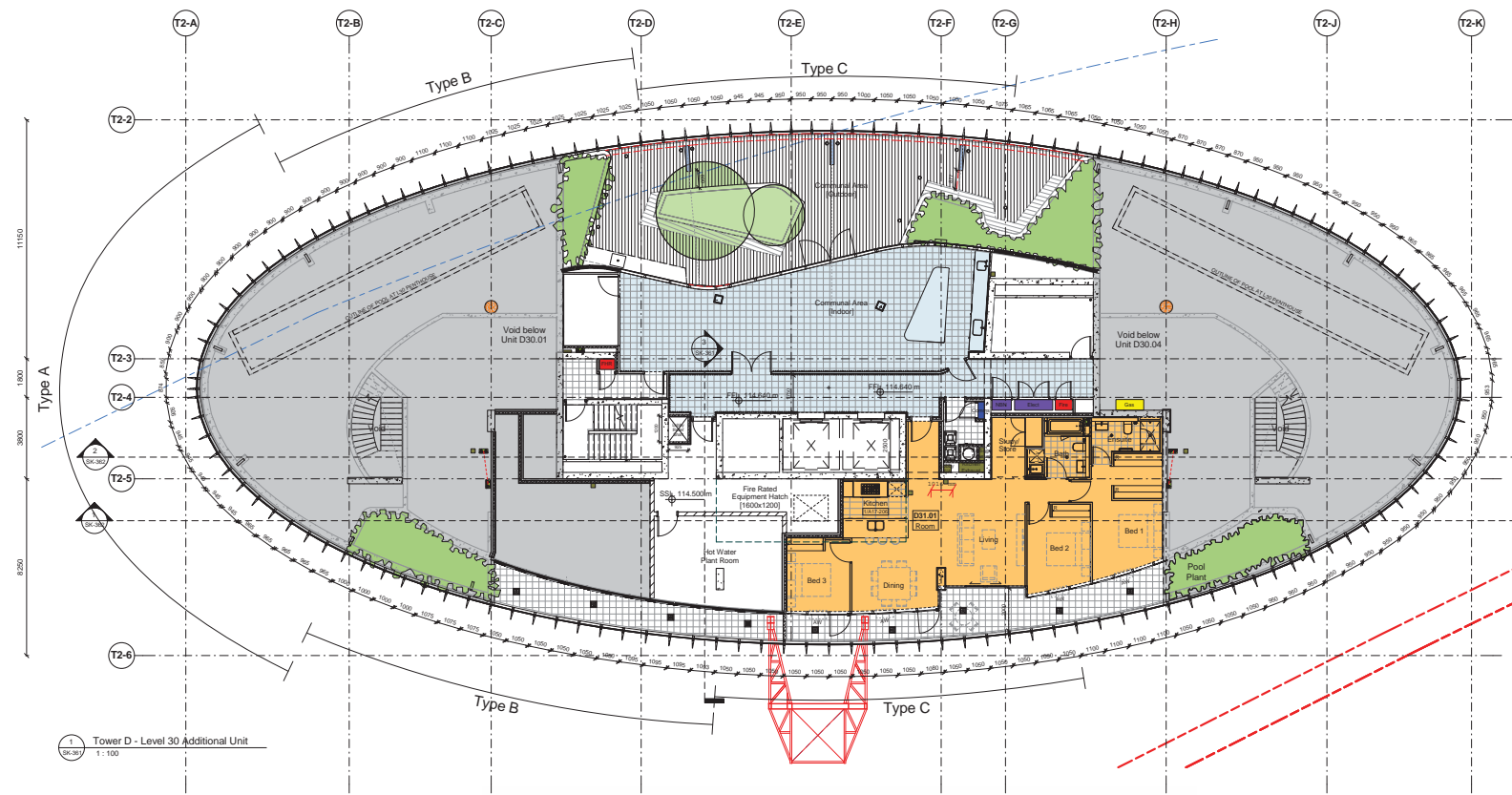
## NOT FOR CONSTRUCTION

**Sydney** 43 Blighmore Street  
Surry Hills NSW 2010 Australia  
T 02 8364 0500 F 02 8364 0199  
email syd@batesmart.com.au  
http://www.batesmart.com.au

**Bates Smart** Pty Ltd ABN 70 004 999 400

**Melbourne** 1 Nicholson Street  
Melbourne VIC 3000 Australia  
T 03 9594 4200 F 03 9594 6300  
email mel@batesmart.com.au  
http://www.batesmart.com.au

**BATESSMART**



**Energy Rating** Certificate Number: 14720001

Single dwelling rating: 5.5 stars

Multi-unit development (based on rating): 4.5 stars

Energy efficiency (based on rating): 1.7 stars

Relevant design features confirmed: ☐ Heat pump ☒ Solar water heating ☒ Solar hot water

Assessor Name/Number: [Signature] 220714

**Energy Rating** Certificate Number: 14720131

Single dwelling rating: 5.5 stars

Multi-unit development (based on rating): 4.5 stars

Energy efficiency (based on rating): 1.7 stars

Relevant design features confirmed: ☐ Heat pump ☒ Solar water heating ☒ Solar hot water

Assessor Name/Number: [Signature] 220714

**NOT FOR CONSTRUCTION**

Site 3 - Australia Towers II  
Sydney Olympic Park

Tower D - Level 30 - Additional Unit

Scale	1: 100	@ B1
Drawn	Author	Checked
Project no.	S11202	
Sheet	DA	
Plot Date	27/06/2014 3:40:08 PM	
Plot File	c:\temp\DA2_Homeless_ARCH_2013_TAX.vrt	
Drawn by	SK-361	5

**Sydney** 43 Bisham Street  
Surry Hills NSW 2010 Australia  
T 02 8364 0100 F 02 8364 0199  
email syd@batesmart.com.au  
http://www.batesmart.com.au

**Melbourne** 1 Nicholson Street  
Melbourne VIC 3000 Australia  
T 03 9594 4200 F 03 9594 4300  
email mel@batesmart.com.au  
http://www.batesmart.com.au

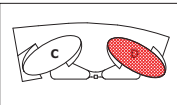
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Notes:

Revision	Date	Description	Initial	Checked
1	27.06.14	Submission For D200	JT	EC
2	27.06.14	Issue For Review	JT	EC
3	27.06.14	Issue For Review	JT	EC
4	27.06.14	Issue For Review	JT	EC
5	27.06.14	Issue For Review	JT	EC

Check all dimensions and site conditions prior to commencement of any work. The purchaser or relying party is responsible for any errors, omissions, or inaccuracies in the information provided. The architect is not responsible for any errors, omissions, or inaccuracies in the information provided. The architect is not responsible for any errors, omissions, or inaccuracies in the information provided.







# LEGEND - ELECTRICAL & SERVICES

- A Single GPO, generally mounted 500mm AFFL to ceilingline. Refer to notes below
- B Double GPO, generally mounted 500mm AFFL to ceilingline. Refer to notes below
- AB, devices GPO above benchtop, mounting height varies, refer to primary and section drawings for exact location
- CT, devices GPO to ceiling, mounted 500mm AFFL to ceilingline
- DB, devices GPO to combined ceiling/masonry, mounted 500mm AFFL to ceilingline
- DW, devices GPO to dishwasher, mounted 500mm AFFL to ceilingline
- E, devices Waterproof GPO to bathroom, mounting height TBC
- EX, devices GPO to range hood/mount hood, mounting height to suit
- FR, devices GPO to fridge, mounted 500mm AFFL to ceilingline
- MR, devices GPO to microwave, mounting height varies, refer to primary drawings for exact location
- OV, devices GPO to oven, mounted 500mm AFFL to ceilingline
- Telephone outlet, generally mounted 500mm AFFL to ceilingline, with the exception when mounted adjacent IC, see below
- Intercom, mounted 500mm AFFL to ceilingline
- TV, mounted 500mm AFFL to ceilingline
- TV outlet, mounted 500mm AFFL to ceilingline
- Hole Cook, mounting height TBC, Chrome finish
- Gas bypass, mounting height TBC, Chrome finish

Note:  
 GA plans to be read in conjunction with services consultants drawings, PPR document, MDAC report, wet area and primary detailed drawings and A15-180 & A15-181 drawings  
 Placement of services within adaptable units to be in accordance with MDAC report and A15-180 & A15-181 drawings  
 Services required for AC TBC  
 When outlets are located within wardrobe primary, wet areas and kitchen contractor is to refer to A15 and A17 series drawings for exact location for mounting

# LEGEND - FLOOR FINISHES

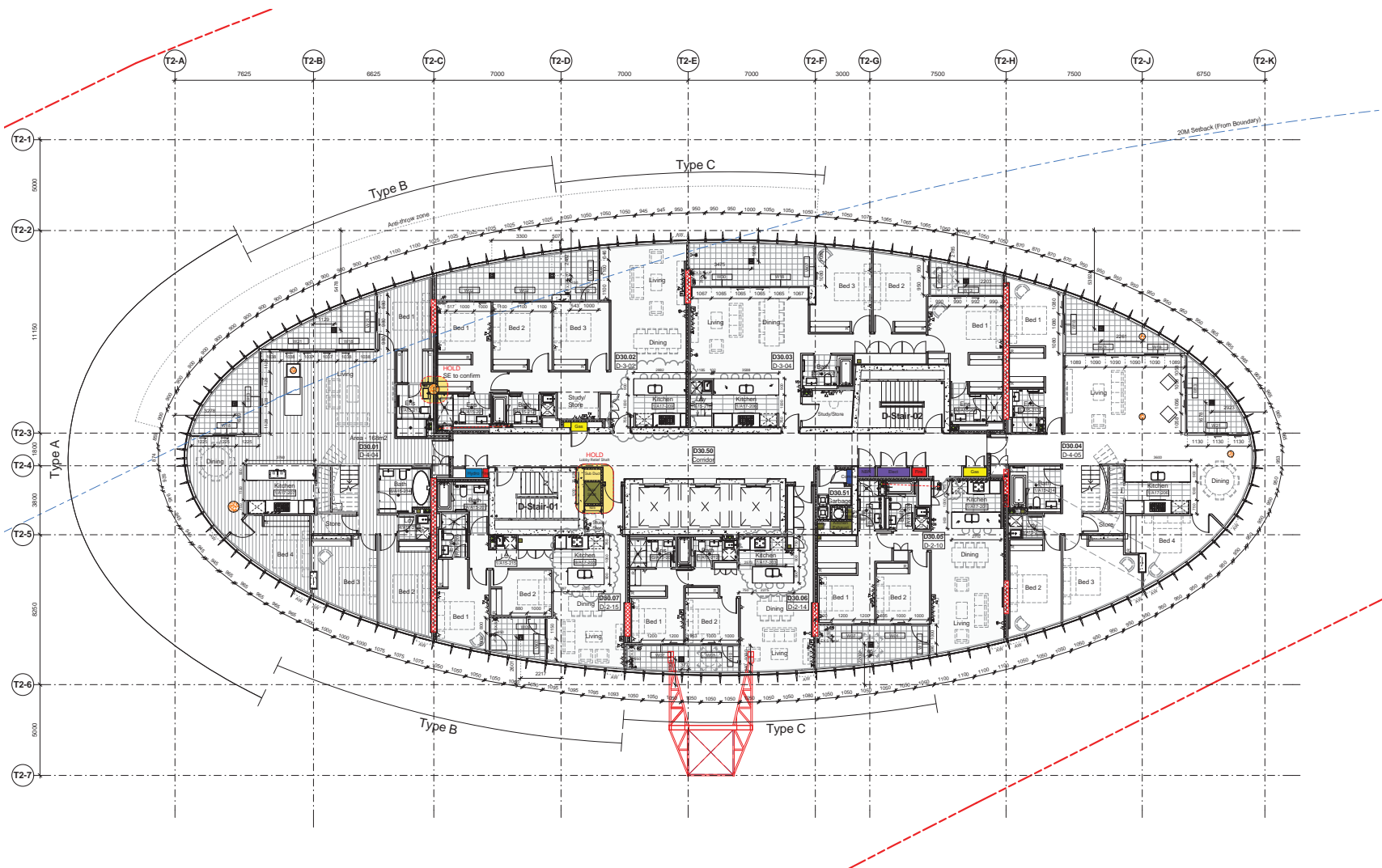
- CP-01 General carpet finish to units. Floor finish to continue into robes and storage cupboards
- TL-02 Tile to bathroom
- TL-03 Tile to kitchen, robe former, wet areas
- TL-04 Tile to wet areas. Floor finish to continue beneath laundry primary/washing machine and where storage cupboards are located within wet areas

Note:  
 Refer to finishes schedule produced by Ecosse for exact finishes to units  
 Allow for stone thresholds at entrance and wet area door thresholds  
 P-F-01 Stone finish to wet areas with underlayment  
 Finishes to kitchen TBC  
 Refer to drawings A15-180 and A15-181 for additional finish requirements for adaptable units

# GENERAL NOTES

- Note:  
 Refer to drawing series A17 for typical store and wardrobe layouts
- Top line devices unit number, bottom line devices unit type (including tower and number of beds)
- Top line devices room type, bottom line devices drawing reference for wet area / primary
- Stone thresholds to wet areas to be constructed as per details on sheets A15-115 & B415-115
- Permittee apartments to have the addition to shower as per detail A15-115

GA plans to be read in conjunction with services consultants drawings, PPR document, MDAC report, wet area and primary detailed drawings and A15-180 & A15-181 drawings  
 Placement of services within adaptable units to be in accordance with MDAC report and A15-180 & A15-181 drawings  
 Services required for AC TBC  
 When outlets are located within wardrobe primary, wet areas and kitchen contractor is to refer to A15 and A17 series drawings for exact location for mounting



For all Tower D Wall Type, refer to Wall Schedule  
 For all Tower D Window Type, refer to Window Schedule  
 For all Adaptable Units, refer to drawings

A28.001, A28.002, A28.003  
 A22.001, A22.002  
 A15.18x

## Notes:

- Kitchen types revised.
- Kitchen risks deleted as shown, services previously on nbs relocated as required.
- Dimensions added.

Site 3 - Australia Towers II  
 Sydney Olympic Park

GA Plan - D - Level 29

Scale	1 : 100	@ B1
Drawn	DL	Checked MD
Project no.	S11202	
Sheet		
Plot Date	7/07/2014 7:46:33 PM	
Plot File	c:\temp\2014\Arch\ARCH_2013_TAX.v1	
Drawing no.	A03-229	Revision 10

Sydney 43 Blighmore Street  
 Sydney NSW 2010 Australia  
 T 02 8364 0200 F 02 8364 0399  
 email syd@bates-smart.com.au  
 http://www.bates-smart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

## Parkview Group

DA Application for:

### Australia Towers II – Tower C

To be built at:

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127

## BASIX Assessment

Issue No.	Description	Author	Date
No. 01	Assessment & certification	TC/TMC	07/06/13
	<i>Note this report replaces the original Basix and ABSA thermal simulation completed by Windtec</i>		
No. 02	Updated thermal comfort scores	TC/TMC	10/07/13
No. 03	Low-e glazing removed	TC/TMC	17/07/13
No. 04	Traditional sliding windows and door changed to double glazing	TC/TMC	05/09/13
No. 05	Additional units added	MF	22/07/14



This report has been prepared by Efficient Living Pty Ltd on behalf of our client Parkview Group. Efficient Living prepares all reports in accordance with Basix thermal comfort protocol and is backed by professional indemnity insurance. This report takes into account our client's instructions and preferred building inclusions.



PREPARED FOR :	PREPARED BY :
<p>Parkview Construction Pty Ltd Suite 3, 2 Wentworth Park Rd GLEBE NSW 2037</p> <p><b>Contact :</b> Phone : (02) 9506 1500 Fax : (02) 9506 1599</p>	<p>Efficient Living 13/13 Lagoon St, Narrabeen NSW, 2101</p> <p><b>Email:</b> tracey@efficientliving.com.au Phone : (02) 9970 6181 Fax : (02) 9970 6181</p>

<b>COVER SHEET</b>
<b>TABLE OF CONTENTS</b>
<b>ANALYSIS</b>  WATER USAGE  THERMAL COMFORT  ENERGY USAGE
<b>INCLUSIONS</b>
<b>THERMAL COMFORT RESULTS</b>
<b>BERS ASSESSOR CERTIFICATE</b>
<b>BERS MODEL SPECIFICATION</b> (Note: Proxies used in this table, refer to inclusions summary for accurate specification)
<b>BASIX CERTIFICATE</b>





## **INTRODUCTION**

Efficient Living has investigated the estimated thermal comfort of the proposed development to be built at 1-7 Australia Avenue, Sydney Olympic Park.

Heating and cooling loads for the development have been determined using BERS thermal simulation software. The report is based on the architectural drawings provided by Parkview Group. For further details, refer to the inclusions summary and thermal comfort results.

## **ANALYSIS**

The BASIX assessment is divided into three sections, each independently measuring the efficiency of the development. These are Water, Thermal Comfort and Energy.

BASIX requires a minimum target of 40% for the Water section. A BERS pass or fail is required for the thermal comfort section and a minimum required target of 20% for the energy section.

### **WATER**

The proposed development has achieved the BASIX Water target of 40%.

The water usage of the development is calculated based on the number and efficiency of permanent fixtures and appliances such as: taps, showerheads and toilets, the dish washer and clothes washing machine.

The size of the rain tank and number of connections has a huge impact on your water score as does the area of gardens and lawns and whether or not low-water plant species are incorporated.

### **THERMAL COMFORT**

Thermal Comfort targets are set by the department of planning in the form of heating and cooling caps. The buildings thermal physics is measured using BERS thermal performance assessment tools. This equates an expected level of energy consumption to heat and cool each dwelling per annum expressed in MJ (mega joules) per square meter of floor area.

Each unit has individual heating and cooling caps and a weighted average heating and cooling load for the whole development. The weighted average caps are a lot harder to achieve than the individual unit caps.

### **ENERGY**

The proposed development has achieved the energy target of 20% to pass this section.

The energy usage of the development is calculated based on the efficiency of fixed appliances that will be used. This includes the air conditioning system, hot water system, lighting, exhaust fans and the cook top, oven, and clothes drying facilities.

## BASIX Inclusions – Australia Tower C

Australia Tower C has reached the targets as set for new dwellings in NSW.

The inclusions as outlined in the table below have been incorporated in each unit to allow them to reach their environmental sustainability targets.

<b>Construction general</b>	
Glazing	<p>Curtain walls:</p> <p>Fixed pane with three awning panels (vision panel 3007): U-value 4.7 &amp; SHGC 0.52</p> <p>Large fixed panel (vision panel 3005): U-value 3.7 &amp; SHGC 0.61</p> <p>Small fixed panel (vision panel 3200): U-value 4.5 &amp; SHGC 0.56</p> <p>Traditional sliding windows and doors:</p> <p>U-value 4.81 &amp; SHGC 0.41</p>
Roof / ceiling insulation	<p>Roof: Concrete slab – medium colour</p> <p>Plasterboard ceiling – R2.0 insulation to top floor units and</p> <p>R2.0 to those areas with exposed balcony over.</p> <p>No insulation to other units</p>
Wall / floor insulation	<p>External Wall: Spandrel panel – R1.7 total construction</p> <p>Small sections of 250mm Hebel, un-insulated as per plans</p> <p>Internal walls within units: Plasterboard on studs - no insulation</p> <p>Inter-tenancy walls: 250mm hebel - no insulation</p> <p>Floor: Concrete – R1.0 insulation to subfloor unit C24.09</p> <p>No insulation to other units</p>
<b>BASIX Water inclusions – Score 48/40</b>	
Fixtures (within units)	<p>Showerheads: 3 star (&gt;7.5 but &lt;=9.0 L/min) High flow</p> <p>Toilets: 3 star</p> <p>Kitchen taps: 3 star</p> <p>Bathroom taps: 3 star</p>
Common area fixtures	<p>Showerheads: 3 star (&gt;7.5 but &lt;=9.0 L/min) High flow</p> <p>Toilets: 3 star</p> <p>Bathroom taps: 3 star</p>
Appliances (within units)	<p>Dishwashers: 2 Star</p>
Reticulated alternative water supply	<p>Connected to: Irrigation of landscaping &amp; all toilets</p>

BASIX Energy inclusions – Score Pass 21/20	
Central hot water system	Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers
Lift motors	All lifts to have gearless traction with VVVF motor.
Appliances & other efficiency measures (within units)	Gas cooktop & electric oven Dishwashers: 2.5 star Clothes dryer: 2.0 star
Heating & cooling (within units)	All units to have individual single phase reverse cycle air conditioning: Heating: 1 Phase air-conditioning – 2.5 Stars (new rating) Cooling: 1 Phase air-conditioning – 2.5 Stars (new rating)
Artificial lighting (within units)	Fluorescent or LED lighting, to be provided throughout
Ventilation systems (within units)	Bathroom ventilation: Individual fan, ducted to roof or façade – interlocked to light Laundry ventilation: Individual fan, ducted to roof or façade – interlocked to light Kitchen ventilation: Individual fan, recirculating – manual switch on/off
Artificial lighting (within common areas)	Car park area: fluorescent – zoned switching with motion sensor Lifts: compact fluorescent – connected to lift call button Storage: fluorescent – manual on / manual off Switch room: fluorescent – manual on / manual off Garbage rooms: fluorescent – motion sensors Fan room: fluorescent – manual on / manual off Plant room: fluorescent – manual on / manual off Mail room: compact fluorescent - manual on / manual off Ground floor lobbies: compact fluorescent – zoned switching with motion sensor Hallways: compact fluorescent – zoned switching with motion sensor
Ventilation systems (within common areas)	Car park area: Supply air only to the top 2.5 levels of car park. Supply and exhaust air to the rest of the car park areas – carbon monoxide monitor + VSD fan Storage: ventilation supply only – interlocked to light Switch room: no mechanical ventilation Garbage rooms: ventilation exhaust only – no efficiency measures Fan room: no mechanical ventilation Plant room: no mechanical ventilation Mail room: ventilation supply only – continuous Ground floor lobbies: ventilation supply only – continuous Hallways: ventilation supply only – continuous





# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

Parkview Group

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 1 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
02.01	2	100	0	33	22	5.5	0	0	None	
02.02	4	133	0	18	12	7.5	0	0	None	
02.03	2	79	5	27	13	6.5	1	0	None	
02.04	2	89	0	24	11	7.0	0	0	None	
02.05	2	83	0	25	14	6.5	0	0	None	
02.06	2	78	0	48	20	4.5	0	0	None	
02.07	2	64	0	58	17	4.0	0	0	None	
02.08	2	83	0	55	21	4.0	0	0	None	
03.01	2	100	0	31	22	5.5	0	0	None	
03.02	4	133	0	16	12	7.5	0	0	None	
03.03	2	79	5	15	14	7.5	1	0	None	
03.04	1	51	9	27	30	5.5	1	0	None	
03.05	1	59	0	39	25	5.0	0	0	None	
03.06	1	53	0	38	26	5.0	0	0	None	
03.07	1	49	0	36	17	5.5	0	0	None	
03.08	2	81	0	43	15	5.0	0	1	None	
03.09	1	58	0	56	15	4.5	0	0	None	
03.10	2	79	5	64	12	4.0	1	0	None	
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04.02	4	133	0	18	10	7.5	0	0	None	
04.03	2	79	5	17	11	7.5	1	0	None	
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04.05	1	59	0	16	23	6.5	0	0	None	
04.06	1	53	0	19	25	6.5	0	0	None	
04.07	1	49	0	20	15	7.5	0	0	None	
04.08	2	81	0	37	13	6.0	0	1	None	
04.09	1	58	0	42	12	5.5	0	0	None	
04.10	2	79	5	33	11	6.5	1	0	None	
04.11	2	73	0	49	9	5.0	0	0	None	
04.12	2	80	0	28	10	7.0	0	0	None	
04.13	2	83	0	56	16	4.5	0	0	None	



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Thermal performance specifications									Page 2 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
05.01	2	100	0	34	16	6.0	0	0	None	
05.02	4	133	0	18	10	7.5	0	0	None	
05.03	2	79	5	17	11	7.5	1	0	None	
05.04	1	51	9	25	23	6.0	1	0	None	
05.05	1	59	0	17	20	7.0	0	0	None	
05.06	1	53	0	20	22	6.5	0	0	None	
05.07	1	49	0	20	15	7.5	0	0	None	
05.08	2	81	0	37	13	6.0	0	1	None	
05.09	1	58	0	42	12	5.5	0	0	None	
05.10	2	79	5	33	11	6.5	1	0	None	
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05.12	2	80	0	28	10	7.0	0	0	None	
05.13	2	83	0	56	16	4.5	0	0	None	
06.01	2	100	0	34	16	6.0	0	0	None	
06.02	4	133	0	18	10	7.5	0	0	None	
06.03	2	79	5	17	11	7.5	1	0	None	
06.04	1	51	9	25	23	6.0	1	0	None	
06.05	1	59	0	17	20	7.0	0	0	None	
06.06	1	53	0	20	22	6.5	0	0	None	
06.07	1	49	0	20	15	7.5	0	0	None	
06.08	2	81	0	37	13	6.0	0	1	None	
06.09	1	58	0	42	12	5.5	0	0	None	
06.10	2	79	5	33	11	6.5	1	0	None	
06.11	2	73	0	49	9	5.0	0	0	None	
06.12	2	80	0	28	10	7.0	0	0	None	
06.13	2	83	0	56	16	4.5	0	0	None	
07.01	2	100	0	34	16	6.0	0	0	None	
07.02	4	133	0	18	10	7.5	0	0	None	
07.03	2	79	5	17	11	7.5	1	0	None	
07.04	1	51	9	25	23	6.0	1	0	None	
07.05	1	59	0	17	20	7.0	0	0	None	
07.06	1	53	0	20	22	6.5	0	0	None	
07.07	1	49	0	20	15	7.5	0	0	None	



# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

Parkview Group

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 3 of 9	
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		Con.	Uncon.	Heat	Cool (Sens & Lat)					
07.08	2	81	0	37	13	6.0	0	1	None	
07.09	1	58	0	42	12	5.5	0	0	None	
07.10	2	79	5	33	11	6.5	1	0	None	
07.11	2	73	0	49	9	5.0	0	0	None	
07.12	2	80	0	28	10	7.0	0	0	None	
07.13	2	83	0	56	16	4.5	0	0	None	
08.01	2	100	0	34	16	6.0	0	0	None	
08.02	4	133	0	18	10	7.5	0	0	None	
08.03	2	79	5	17	11	7.5	1	0	None	
08.04	1	51	9	25	23	6.0	1	0	None	
08.05	1	59	0	17	20	7.0	0	0	None	
08.06	1	53	0	20	22	6.5	0	0	None	
08.07	1	49	0	20	15	7.5	0	0	None	
08.08	2	81	0	37	13	6.0	0	1	None	
08.09	1	58	0	42	12	5.5	0	0	None	
08.10	2	79	5	33	11	6.5	1	0	None	
08.11	2	73	0	49	9	5.0	0	0	None	
08.12	2	80	0	28	10	7.0	0	0	None	
08.13	2	83	0	56	16	4.5	0	0	None	
09.01	2	100	0	34	15	6.0	0	0	None	
09.02	4	133	0	18	10	7.5	0	0	None	
09.03	2	79	5	17	11	7.5	1	0	None	
09.04	1	51	9	25	23	6.0	1	0	None	
09.05	1	59	0	17	20	7.0	0	0	None	
09.06	1	53	0	20	22	6.5	0	0	None	
09.07	1	49	0	21	14	7.0	0	0	None	
09.08	2	81	0	38	12	6.0	0	1	None	
09.09	1	58	0	44	11	5.5	0	0	None	
09.10	2	79	5	35	11	6.0	1	0	None	
09.11	2	73	0	51	9	5.0	0	0	None	
09.12	2	80	0	29	10	7.0	0	0	None	
09.13	2	83	0	57	16	4.5	0	0	None	
10.01	2	100	0	34	15	6.0	0	0	None	
10.02	4	133	0	18	10	7.5	0	0	None	
10.03	2	79	5	17	11	7.5	1	0	None	





# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

Parkview Group

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 4 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
10.04	1	51	9	26	21	6.0	1	0	None	
10.05	1	59	0	18	19	7.0	0	0	None	
10.06	1	53	0	21	21	6.5	0	0	None	
10.07	1	49	0	21	14	7.0	0	0	None	
10.08	2	81	0	38	12	6.0	0	1	None	
10.09	1	58	0	44	11	5.5	0	0	None	
10.10	2	79	5	35	11	6.0	1	0	None	
10.11	2	73	0	51	9	5.0	0	0	None	
10.12	2	80	0	29	10	7.0	0	0	None	
10.13	2	83	0	57	16	4.5	0	0	None	
11.01	2	100	0	34	15	6.0	0	0	None	
11.02	4	133	0	18	10	7.5	0	0	None	
11.03	2	79	5	17	11	7.5	1	0	None	
11.04	1	51	9	26	21	6.0	1	0	None	
11.05	1	59	0	18	19	7.0	0	0	None	
11.06	1	53	0	21	21	6.5	0	0	None	
11.07	1	49	0	21	14	7.0	0	0	None	
11.08	2	81	0	38	12	6.0	0	1	None	
11.09	1	58	0	44	11	5.5	0	0	None	
11.10	2	79	5	35	11	6.0	1	0	None	
11.11	2	73	0	51	9	5.0	0	0	None	
11.12	2	80	0	29	10	7.0	0	0	None	
11.13	2	83	0	57	16	4.5	0	0	None	
12.01	2	100	0	42	15	5.5	0	0	None	
12.02	4	133	0	23	10	7.0	0	0	None	
12.03	2	79	5	19	11	7.5	1	0	None	
12.04	1	51	9	26	21	6.0	1	0	None	
12.05	1	59	0	18	19	7.0	0	0	None	
12.06	1	53	0	21	21	6.5	0	0	None	
12.07	1	49	0	21	14	7.0	0	0	None	
12.08	2	81	0	38	12	6.0	0	1	None	
12.09	1	58	0	44	11	5.5	0	0	None	
12.10	2	79	5	35	11	6.0	1	0	None	
12.11	2	73	0	51	9	5.0	0	0	None	
12.12	2	80	0	29	10	7.0	0	0	None	



# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
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Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 5 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
12.13	2	83	0	60	16	4.0	0	0	None	
13.01	3	123	0	21	22	6.5	0	0	None	
13.02	1	68	0	15	9	8.0	0	0	None	
13.03	2	72	5	18	9	7.5	1	0	None	
13.04	1	51	9	26	21	6.0	1	0	None	
13.05	1	59	0	18	19	7.0	0	0	None	
13.06	1	53	0	21	21	6.5	0	0	None	
13.07	1	49	0	24	14	7.0	0	0	None	
13.08	3	81	0	35	12	6.0	0	1	None	
13.09	2	79	5	35	11	6.0	1	0	None	
13.10	2	73	0	51	9	5.0	0	0	None	
13.11	2	80	0	29	10	7.0	0	0	None	
14.01	1	65	0	47	24	4.5	0	1	None	
14.02	1	68	0	15	9	8.0	0	0	None	
14.03	2	72	5	18	9	7.5	1	0	None	
14.04	1	51	9	26	21	6.0	1	0	None	
14.05	1	59	0	18	19	7.0	0	0	None	
14.06	1	53	0	21	21	6.5	0	0	None	
14.07	3	100	0	32	14	6.0	0	0	None	
14.08	2	86	0	50	13	5.0	0	0	None	
14.09	2	79	5	38	10	6.0	1	0	None	
14.10	2	73	0	52	9	5.0	0	0	None	
14.11	2	80	0	30	10	6.5	0	0	None	
14.12	1	51	0	46	15	5.0	0	0	None	
15.01	1	65	0	39	24	5.0	0	1	None	
15.02	1	68	0	15	9	8.0	0	0	None	
15.03	2	72	5	18	9	7.5	1	0	None	
15.04	1	51	9	27	20	6.0	1	0	None	
15.05	1	59	0	18	18	7.0	0	0	None	
15.06	1	53	0	22	20	6.5	0	0	None	
15.07	3	100	0	27	13	6.5	0	0	None	
15.08	2	86	0	40	14	5.5	0	0	None	
15.09	2	79	5	38	10	6.0	1	0	None	
15.10	2	73	0	52	9	5.0	0	0	None	
15.11	2	80	0	30	10	6.5	0	0	None	



# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

Parkview Group

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 6 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
15.12	1	51	0	25	15	6.5	0	0	None	
16.01	1	65	0	39	24	5.0	0	1	None	
16.02	1	68	0	15	9	8.0	0	0	None	
16.03	2	72	5	18	9	7.5	1	0	None	
16.04	1	51	9	27	20	6.0	1	0	None	
16.05	1	59	0	18	18	7.0	0	0	None	
16.06	1	53	0	22	20	6.5	0	0	None	
16.07	3	100	0	27	13	6.5	0	0	None	
16.08	2	86	0	40	14	5.5	0	0	None	
16.09	2	79	5	38	10	6.0	1	0	None	
16.10	2	73	0	52	9	5.0	0	0	None	
16.11	2	80	0	30	10	6.5	0	0	None	
16.12	1	51	0	25	15	6.5	0	0	None	
17.01	1	65	0	39	24	5.0	0	1	None	
17.02	1	68	0	15	9	8.0	0	0	None	
17.03	2	72	5	18	9	7.5	1	0	None	
17.04	1	51	9	27	20	6.0	1	0	None	
17.05	1	59	0	18	18	7.0	0	0	None	
17.06	1	53	0	22	20	6.5	0	0	None	
17.07	3	100	0	27	13	6.5	0	0	None	
17.08	2	86	0	40	14	5.5	0	0	None	
17.09	2	79	5	38	10	6.0	1	0	None	
17.10	2	73	0	52	9	5.0	0	0	None	
17.11	2	80	0	30	10	6.5	0	0	None	
17.12	1	51	0	25	15	6.5	0	0	None	
18.01	1	65	0	39	24	5.0	0	1	None	
18.02	1	68	0	15	9	8.0	0	0	None	
18.03	2	72	5	18	9	7.5	1	0	None	
18.04	1	51	9	27	20	6.0	1	0	None	
18.05	1	59	0	18	18	7.0	0	0	None	
18.06	1	53	0	22	20	6.5	0	0	None	
18.07	3	100	0	27	13	6.5	0	0	None	
18.08	2	86	0	40	14	5.5	0	0	None	
18.09	2	79	5	38	10	6.0	1	0	None	
18.10	2	73	0	52	9	5.0	0	0	None	



# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 7 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
18.11	2	80	0	30	10	6.5	0	0	None	
18.12	1	51	0	25	15	6.5	0	0	None	
19.01	1	65	0	39	24	5.0	0	1	None	
19.02	1	68	0	16	8	8.0	0	0	None	
19.03	2	72	5	18	9	7.5	1	0	None	
19.04	1	51	9	27	20	6.0	1	0	None	
19.05	1	59	0	18	18	7.0	0	0	None	
19.06	1	53	0	22	20	6.5	0	0	None	
19.07	3	100	0	27	13	6.5	0	0	None	
19.08	2	86	0	40	14	5.5	0	0	None	
19.09	2	79	5	39	10	6.0	1	0	None	
19.10	2	73	0	53	9	5.0	0	0	None	
19.11	2	80	0	30	10	6.5	0	0	None	
19.12	1	51	0	25	15	6.5	0	0	None	
20.01	1	65	0	39	23	5.0	0	1	None	
20.02	1	68	0	16	8	8.0	0	0	None	
20.03	2	72	5	18	9	7.5	1	0	None	
20.04	1	51	9	27	20	6.0	1	0	None	
20.05	1	59	0	19	18	7.0	0	0	None	
20.06	1	53	0	22	19	6.5	0	0	None	
20.07	3	100	0	28	13	6.5	0	0	None	
20.08	2	86	0	41	14	5.5	0	0	None	
20.09	2	79	5	39	10	6.0	1	0	None	
20.10	2	73	0	53	9	5.0	0	0	None	
20.11	2	80	0	29	10	7.0	0	0	None	
20.12	1	51	0	25	15	6.5	0	0	None	
21.01	1	65	0	39	23	5.0	0	1	None	
21.02	1	68	0	16	8	8.0	0	0	None	
21.03	2	72	5	18	9	7.5	1	0	None	
21.04	1	51	9	27	20	6.0	1	0	None	
21.05	1	59	0	19	18	7.0	0	0	None	
21.06	1	53	0	22	19	6.5	0	0	None	
21.07	3	100	0	28	13	6.5	0	0	None	
21.08	2	86	0	41	14	5.5	0	0	None	
21.09	2	79	5	39	10	6.0	1	0	None	





# Thermal Comfort Results

## Tower C

1-7 Australia Avenue, Sydney Olympic Park,  
NSW 2127

Parkview Group

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 8 of 9	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades	
		Con.	Uncon.	Heat	Cool (Sens & Lat)					
21.10	2	73	0	53	9	5.0	0	0	None	
21.11	2	80	0	29	10	7.0	0	0	None	
21.12	1	51	0	25	15	6.5	0	0	None	
22.01	1	65	0	39	23	5.0	0	1	None	
22.02	1	68	0	16	8	8.0	0	0	None	
22.03	2	72	5	18	9	7.5	1	0	None	
22.04	1	51	9	27	20	6.0	1	0	None	
22.05	1	59	0	19	18	7.0	0	0	None	
22.06	1	53	0	22	19	6.5	0	0	None	
22.07	3	100	0	28	13	6.5	0	0	None	
22.08	2	86	0	41	14	5.5	0	0	None	
22.09	2	79	5	39	10	6.0	1	0	None	
22.10	2	73	0	53	9	5.0	0	0	None	
22.11	2	80	0	29	10	7.0	0	0	None	
22.12	1	51	0	25	15	6.5	0	0	None	
23.01	1	65	0	42	23	5.0	0	1	None	
23.02	1	68	0	20	9	7.5	0	0	None	
23.03	2	72	5	22	9	7.5	1	0	None	
23.04	1	51	9	27	20	6.0	1	0	None	
23.05	1	59	0	19	18	7.0	0	0	None	
23.06	1	53	0	22	19	6.5	0	0	None	
23.07	3	100	0	28	13	6.5	0	0	None	
23.08	2	86	0	44	13	5.5	0	0	None	
23.09	2	79	5	42	10	5.5	1	0	None	
23.10	2	73	0	53	9	5.0	0	0	None	
23.11	2	80	0	29	10	7.0	0	0	None	
23.12	1	51	0	25	15	6.5	0	0	None	
24.01	2	103	0	44	26	4.5	0	1	None	
24.02	2	117	0	11	11	8.0	0	1	None	
24.03	2	72	0	48	15	5.0	0	1	None	
24.04	1	59	0	22	14	7.0	0	0	None	
24.05	1	59	0	22	14	7.0	0	0	None	
24.06	1	53	0	25	17	6.5	0	0	None	
24.07	1	55	0	45	18	5.0	0	0	None	
24.08	2	104	0	50	17	4.5	0	0	None	



**Thermal Comfort Results**  
**Tower C**  
**1-7 Australia Avenue, Sydney Olympic Park,**  
**NSW 2127**

**Parkview Group**

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



Certificate # 14730135					Issued: 22/07/2014		Accreditation #		VIC/BDAV/12/1473
Thermal performance specifications									Page 9 of 9
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
24.09	2	78	0	56	10	5.0	0	1	R1.0 to exposed floor
24.10	2	72	0	40	32	4.5	0	0	None
24.11	2	80	0	31	10	6.5	0	0	None
25.01	2	103	0	56	28	4.0	0	1	None
25.02	2	72	0	27	17	6.5	0	1	None
25.03	1	59	0	31	14	6.5	0	0	None
25.04	1	59	0	32	14	6.0	0	0	None
25.05	1	53	0	33	17	6.0	0	0	None
25.06	3	158	0	51	18	4.5	0	0	None
25.08	3	109	0	46	15	5.0	0	0	None
25.09	2	85	0	24	16	6.5	0	0	None



# NatHERS Certificate

## New Dwelling



**5.5 Stars**

### Simulation Software

Software Name BERS Pro 4.2  
Software Version Release 110811/A  
Engine Version CHENATH V2.13

### Simulation Details

Project Name H-100 unit C02.01 Level 1\_1  
Date 6/7/2013  
Location HOMEBUSH BAY PC 2127  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 99.63 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 21.7 MJ/m<sup>2</sup>  
Adjusted Heating 32.9 MJ/m<sup>2</sup>  
Adjusted Total 54.5 MJ/m<sup>2</sup>

### Dwelling Address



DP Number 1134933  
Unit Number  
Lot Number 2  
House Number  
Street Name 1-7 Australia Avenue  
Development Name Australia Towers II - Tower C  
Suburb Sydney Olympic Park NSW 2127


### Client Details

Name Parkview Construction Pty Ltd  
Phone (02) 9506 1500 Fax (02) 9506 1599  
Email Jessica.Vranjes@pview.com.au  
Postal Address Suite 3, 2 Wentworth Park Rd, Glebe, NSW 2037  
Street Details Suite 3, 2 Wentworth Park Rd, Glebe, NSW 2037

### Assessor Details

Name Tracey Cools  
Phone 02 9970 6181 Fax 02 9944 0293  
Email admin@efficientliving.com.au  
Postal Address  
Street Details 13/13 Lagoon Street, Narrabeen NSW 2101

		<b>Energy Rating</b>		Certificate Number <u>14730135</u>	
<input type="checkbox"/>	single-dwelling rating			<u>6.0</u> stars	
<input checked="" type="checkbox"/>	multi-unit development (attach listing of ratings)			heating	<u>32</u> MJ/m <sup>2</sup>
<small>If selected, data specified is the average across the entire development</small>				cooling	<u>14</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without		
Assessor Name/Number		<u>Tracey Cools VIC/BDAV/12/1473</u>			
Assessor Signature				Date <u>22/7/14</u>	

Signed by the Assessor..........Date 22 / 7 / 2014.....

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.  
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project H-100 unit C02.01 Level 1 Run 1  
HOMEBUSH BAY PC 2127 Lat -33.90 Long 151.10 Climate File climat56.TXT

Summary  
Conditioned Area 99.6 m²  
Unconditioned Area 0.0 m²  
Total Floor Area 99.6 m²  
Total Glazed Area 60.9 m²  
Total External Solid door Area 2.1 m²  
Glass to Floor Area 61.1 %  
Gross External Wall Area 159.8 m²  
Net External Wall Area 96.9 m²

Window  
43.6 m² STG-05-060a Stegbar Uval 4.81 SHGC 0.41  
Glass 4mm Green/6mm Air Gap/4mm Clear  
Frame Stegbar: Aluminium Sliding Door - Double Glazed  
17.3 m² STG-05-009a Stegbar Uval 3.76 SHGC 0.61  
Glass 3mm Clear/6mm Air Gap/4mm Clear  
Frame Stegbar: Aluminium Awning Window - Double Glazed


External Wall  
11.0 m² Autoclaved Aerated Concrete No Insulation  
10.7 m² Metal Clad Cavity Panel Bulk Insulation R 1.4  
75.2 m² Autoclaved Aerated Concrete to neighbour No Insulation

Internal Wall  
68.0 m² Cavity Panel 70mm gap No Insulation

External Floor  
24.9 m² Concrete Slab, Unit Below Carpet 10mm No Insulation  
14.8 m² Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
60.0 m² Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation

External Ceiling  
99.6 m² Plasterboard No Insulation Apartment above

Roof (Horizontal area)  
99.6 m² Concrete No Insulation, Only an Air Gap 0° slope Skillion roof



Energy Rating

Certificate Number 14730135

☐ single-dwelling rating

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

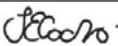
heating 6.0 stars

cooling 32 MJ/m²

14 MJ/m²

Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/Number Tracey Cools VIC/BDAV/12/1473

Assessor Signature  Date 22/7/14

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Multi Dwelling

Certificate number: 448488M\_04

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 448488M\_03 lodged with the consent authority or certifier on 09 September 2013 with application 13/120920-5.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Director-General

Date of issue: Tuesday, 22 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning &  
Infrastructure

### Project summary

Project name	Australia Towers II - Tower C_04
Street address	1-7 Australia Avenue Sydney Olympic Park 2127
Local Government Area	Auburn Council
Plan type and plan number	deposited 1134933
Lot no.	2
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	288
No. of multi-dwelling houses	0
No. of single dwelling houses	0

### Project score

Water	✓ 48	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 21	Target 20

Water score comprises:

- Sydney Olympic Park Authority reticulated alternative water: 12.4
- Other water efficiency commitments: 35.6

### Certificate Prepared by

Name / Company Name: Efficient Living

ABN (if applicable): 82 116 346 082



# Description of project

## Project address

Project name	Australia Towers II - Tower C_04
Street address	1-7 Australia Avenue Sydney Olympic Park 2127
Local Government Area	Auburn Council
Plan type and plan number	deposited 1134933
Lot no.	2
Section no.	-

## Project type

No. of residential flat buildings	1
No. of units in residential flat buildings	288
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m <sup>2</sup> )	10480
Roof area (m <sup>2</sup> )	1040
Non-residential floor area (m <sup>2</sup> )	1334
Residential car spaces	329
Non-residential car spaces	45

## Common area landscape

Common area lawn (m <sup>2</sup> )	832
Common area garden (m <sup>2</sup> )	602
Area of indigenous or low water use species (m <sup>2</sup> )	0

## Assessor details

Assessor number	BDAV/12/1473
Certificate number	14730135
Climate zone	56

## Project score

Water	✓ 48	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 21	Target 20

Water score comprises:

- Sydney Olympic Park Authority reticulated alternative water: 12.4
- Other water efficiency commitments: 35.6

## Description of project

The tables below describe the dwellings and common areas within the project

### Residential flat buildings - Tower C, 288 dwellings, 25 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.01	2	100.0	0.0	0	0
02.05	2	83.0	0.0	0	0
03.01	2	100.0	0.0	0	0
03.05	1	59.0	0.0	0	0
03.09	1	58.0	0.0	0	0
03.13	2	83.0	0.0	0	0
04.04	1	51.0	9.0	0	0
04.08	2	81.0	0.0	0	0
04.12	2	80.0	0.0	0	0
05.03	2	79.0	5.0	0	0
05.07	1	49.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.02	4 or more bedrooms	133.0	0.0	0	0
02.06	2	78.0	0.0	0	0
03.02	4 or more bedrooms	133.0	0.0	0	0
03.06	1	53.0	0.0	0	0
03.10	2	79.0	5.0	0	0
04.01	2	100.0	0.0	0	0
04.05	1	59.0	0.0	0	0
04.09	1	58.0	0.0	0	0
04.13	2	83.0	0.0	0	0
05.04	1	51.0	9.0	0	0
05.08	2	81.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.03	2	79.0	5.0	0	0
02.07	2	64.0	0.0	0	0
03.03	2	79.0	5.0	0	0
03.07	1	49.0	0.0	0	0
03.11	2	73.0	0.0	0	0
04.02	4 or more bedrooms	133.0	0.0	0	0
04.06	1	53.0	0.0	0	0
04.10	2	79.0	5.0	0	0
05.01	2	100.0	0.0	0	0
05.05	1	59.0	0.0	0	0
05.09	1	58.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.04	2	89.0	0.0	0	0
02.08	2	83.0	0.0	0	0
03.04	1	51.0	9.0	0	0
03.08	2	81.0	0.0	0	0
03.12	2	80.0	0.0	0	0
04.03	2	79.0	5.0	0	0
04.07	1	49.0	0.0	0	0
04.11	2	73.0	0.0	0	0
05.02	4 or more bedrooms	133.0	0.0	0	0
05.06	1	53.0	0.0	0	0
05.10	2	79.0	5.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
05.11	2	73.0	0.0	0	0
06.02	4 or more bedrooms	133.0	0.0	0	0
06.06	1	53.0	0.0	0	0
06.10	2	79.0	5.0	0	0
07.01	2	100.0	0.0	0	0
07.05	1	59.0	0.0	0	0
07.09	1	58.0	0.0	0	0
07.13	2	83.0	0.0	0	0
08.04	1	51.0	9.0	0	0
08.08	2	81.0	0.0	0	0
08.12	2	80.0	0.0	0	0
09.03	2	79.0	5.0	0	0
09.07	1	49.0	0.0	0	0
09.11	2	73.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
05.12	2	80.0	0.0	0	0
06.03	2	79.0	5.0	0	0
06.07	1	49.0	0.0	0	0
06.11	2	73.0	0.0	0	0
07.02	4 or more bedrooms	133.0	0.0	0	0
07.06	1	53.0	0.0	0	0
07.10	2	79.0	5.0	0	0
08.01	2	100.0	0.0	0	0
08.05	1	59.0	0.0	0	0
08.09	1	58.0	0.0	0	0
08.13	2	83.0	0.0	0	0
09.04	1	51.0	9.0	0	0
09.08	2	81.0	0.0	0	0
09.12	2	80.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
05.13	2	83.0	0.0	0	0
06.04	1	51.0	9.0	0	0
06.08	2	81.0	0.0	0	0
06.12	2	80.0	0.0	0	0
07.03	2	79.0	5.0	0	0
07.07	1	49.0	0.0	0	0
07.11	2	73.0	0.0	0	0
08.02	4 or more bedrooms	133.0	0.0	0	0
08.06	1	53.0	0.0	0	0
08.10	2	79.0	5.0	0	0
09.01	2	100.0	0.0	0	0
09.05	1	59.0	0.0	0	0
09.09	1	58.0	0.0	0	0
09.13	2	83.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
06.01	2	100.0	0.0	0	0
06.05	1	59.0	0.0	0	0
06.09	1	58.0	0.0	0	0
06.13	2	83.0	0.0	0	0
07.04	1	51.0	9.0	0	0
07.08	2	81.0	0.0	0	0
07.12	2	80.0	0.0	0	0
08.03	2	79.0	5.0	0	0
08.07	1	49.0	0.0	0	0
08.11	2	73.0	0.0	0	0
09.02	4 or more bedrooms	133.0	0.0	0	0
09.06	1	53.0	0.0	0	0
09.10	2	79.0	5.0	0	0
10.01	2	100.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
10.02	4 or more bedrooms	113.0	0.0	0	0
10.06	1	53.0	0.0	0	0
10.10	2	79.0	5.0	0	0
11.01	2	100.0	0.0	0	0
11.05	1	59.0	0.0	0	0
11.09	1	58.0	0.0	0	0
11.13	2	83.0	0.0	0	0
12.04	1	51.0	9.0	0	0
12.08	2	89.0	0.0	0	0
12.12	2	80.0	0.0	0	0
13.03	2	72.0	5.0	0	0
13.07	1	49.0	0.0	0	0
13.11	2	80.0	0.0	0	0
14.04	1	51.0	9.0	0	0
14.08	2	86.0	0.0	0	0
14.12	1	51.0	0.0	0	0
15.04	1	51.0	9.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
10.03	3	79.0	5.0	0	0
10.07	1	49.0	0.0	0	0
10.11	2	73.0	0.0	0	0
11.02	4 or more bedrooms	133.0	0.0	0	0
11.06	1	53.0	0.0	0	0
11.10	2	79.0	5.0	0	0
12.01	2	100.0	0.0	0	0
12.05	1	59.0	0.0	0	0
12.09	1	58.0	0.0	0	0
12.13	2	83.0	0.0	0	0
13.04	1	51.0	9.0	0	0
13.08	3	81.0	0.0	0	0
14.01	1	65.0	0.0	0	0
14.05	1	59.0	0.0	0	0
14.09	2	79.0	5.0	0	0
15.01	1	65.0	0.0	0	0
15.05	1	59.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
10.04	1	151.0	9.0	0	0
10.08	2	81.0	0.0	0	0
10.12	2	80.0	0.0	0	0
11.03	2	79.0	5.0	0	0
11.07	1	49.0	0.0	0	0
11.11	2	73.0	0.0	0	0
12.02	4 or more bedrooms	133.0	0.0	0	0
12.06	1	53.0	0.0	0	0
12.10	2	79.0	5.0	0	0
13.01	3	123.0	0.0	0	0
13.05	1	59.0	0.0	0	0
13.09	2	79.0	5.0	0	0
14.02	1	68.0	0.0	0	0
14.06	1	53.0	0.0	0	0
14.10	2	73.0	0.0	0	0
15.02	1	68.0	0.0	0	0
15.06	1	53.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
10.05	1	159.0	0.0	0	0
10.09	1	58.0	0.0	0	0
10.13	2	83.0	0.0	0	0
11.04	1	51.0	9.0	0	0
11.08	2	81.0	0.0	0	0
11.12	2	80.0	0.0	0	0
12.03	2	79.0	5.0	0	0
12.07	1	49.0	0.0	0	0
12.11	2	73.0	0.0	0	0
13.02	1	68.0	0.0	0	0
13.06	1	53.0	0.0	0	0
13.10	2	73.0	0.0	0	0
14.03	2	72.0	5.0	0	0
14.07	3	100.0	0.0	0	0
14.11	2	80.0	0.0	0	0
15.03	2	72.0	5.0	0	0
15.07	3	100.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
15.08	2	86.0	0.0	0	0
15.12	1	51.0	0.0	0	0
16.04	1	51.0	9.0	0	0
16.08	2	86.0	0.0	0	0
16.12	1	51.0	0.0	0	0
17.04	1	51.0	9.0	0	0
17.08	2	86.0	0.0	0	0
17.12	1	51.0	0.0	0	0
18.04	1	51.0	9.0	0	0
18.08	2	86.0	0.0	0	0
18.12	1	51.0	0.0	0	0
19.04	1	51.0	9.0	0	0
19.08	2	86.0	0.0	0	0
19.12	1	51.0	0.0	0	0
20.04	1	51.0	9.0	0	0
20.08	2	86.0	0.0	0	0
20.12	1	51.0	0.0	0	0
21.04	1	51.0	9.0	0	0
21.08	2	86.0	0.0	0	0
21.12	1	51.0	0.0	0	0
22.04	1	51.0	9.0	0	0
22.08	2	86.0	0.0	0	0
22.12	1	51.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
15.09	2	79.0	5.0	0	0
16.01	1	65.0	0.0	0	0
16.05	1	59.0	0.0	0	0
16.09	2	79.0	5.0	0	0
17.01	1	65.0	0.0	0	0
17.05	1	59.0	0.0	0	0
17.09	2	79.0	5.0	0	0
18.01	1	65.0	0.0	0	0
18.05	1	59.0	0.0	0	0
18.09	2	79.0	5.0	0	0
19.01	1	65.0	0.0	0	0
19.05	1	59.0	0.0	0	0
19.09	2	79.0	5.0	0	0
20.01	1	65.0	0.0	0	0
20.05	1	59.0	0.0	0	0
20.09	2	79.0	5.0	0	0
21.01	1	65.0	0.0	0	0
21.05	1	59.0	0.0	0	0
21.09	2	79.0	5.0	0	0
22.01	1	65.0	0.0	0	0
22.05	1	59.0	0.0	0	0
22.09	2	79.0	5.0	0	0
23.01	1	65.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
15.10	2	73.0	0.0	0	0
16.02	1	68.0	0.0	0	0
16.06	1	53.0	0.0	0	0
16.10	2	73.0	0.0	0	0
17.02	1	68.0	0.0	0	0
17.06	1	53.0	0.0	0	0
17.10	2	73.0	0.0	0	0
18.02	1	68.0	0.0	0	0
18.06	1	53.0	0.0	0	0
18.10	2	73.0	0.0	0	0
19.02	1	68.0	0.0	0	0
19.06	1	53.0	0.0	0	0
19.10	2	73.0	0.0	0	0
20.02	1	68.0	0.0	0	0
20.06	1	53.0	0.0	0	0
20.10	2	73.0	0.0	0	0
21.02	1	68.0	0.0	0	0
21.06	1	53.0	0.0	0	0
21.10	2	73.0	0.0	0	0
22.02	1	68.0	0.0	0	0
22.06	1	53.0	0.0	0	0
22.10	2	73.0	0.0	0	0
23.02	1	68.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
15.11	2	80.0	0.0	0	0
16.03	2	72.0	5.0	0	0
16.07	3	100.0	0.0	0	0
16.11	2	80.0	0.0	0	0
17.03	2	72.0	5.0	0	0
17.07	3	100.0	0.0	0	0
17.11	2	80.0	0.0	0	0
18.03	2	72.0	5.0	0	0
18.07	3	100.0	0.0	0	0
18.11	2	80.0	0.0	0	0
19.03	2	72.0	5.0	0	0
19.07	3	100.0	0.0	0	0
19.11	2	80.0	0.0	0	0
20.03	2	72.0	5.0	0	0
20.07	3	100.0	0.0	0	0
20.11	2	80.0	0.0	0	0
21.03	2	72.0	5.0	0	0
21.07	3	100.0	0.0	0	0
21.11	2	80.0	0.0	0	0
22.03	2	72.0	5.0	0	0
22.07	3	100.0	0.0	0	0
22.11	2	80.0	0.0	0	0
23.03	2	72.0	5.0	0	0



Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
23.04	1	51.0	9.0	0	0
23.08	2	86.0	0.0	0	0
23.12	1	51.0	0.0	0	0
24.04	1	59.0	0.0	0	0
24.08	2	104.0	0.0	0	0
25.01	2	103.0	0.0	0	0
25.05	1	53.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
23.05	1	59.0	0.0	0	0
23.09	2	79.0	5.0	0	0
24.01	2	103.0	0.0	0	0
24.05	1	59.0	0.0	0	0
24.09	2	78.0	0.0	0	0
25.02	2	72.0	0.0	0	0
25.06	3	158.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
23.06	1	53.0	0.0	0	0
23.10	2	73.0	0.0	0	0
24.02	2	117.0	0.0	0	0
24.06	1	53.0	0.0	0	0
24.10	2	72.0	0.0	0	0
25.03	1	59.0	0.0	0	0
25.08	3	109.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
23.07	3	100.0	0.0	0	0
23.11	2	80.0	0.0	0	0
24.03	2	72.0	0.0	0	0
24.07	1	55.0	0.0	0	0
24.11	2	80.0	0.0	0	0
25.04	1	59.0	0.0	0	0
25.09	2	85.0	0.0	0	0

## Description of project

The tables below describe the dwellings and common areas within the project

### Common areas of unit building - Tower C

Common area	Floor area (m²)
Car park ground to basement 2	7602
Lift car (No. 2)	-
Switch Room	39
Plant room	384
Hallway level 1 to 24	1700

Common area	Floor area (m²)
Car park basement 3 & 4	5704
Lift car (No. 3)	-
Garbage room	289
Mail Room	44

Common area	Floor area (m²)
Lift car (No. 1)	-
Storage	1336
Fan Room	297
Ground floor & basement lobby	403

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Tower C

### (a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 2. Commitments for multi-dwelling houses

## 3. Commitments for single dwelling houses

## 4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

### 1. Commitments for Residential flat buildings - Tower C

#### (a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
25.08, 25.09	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	-	-	2 star	-	-	-	-	-	-	-



	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
10.02, 10.03, 10.04, 10.05, 10.06, 10.07, 10.08, 10.09, 10.10, 10.11, 10.12, 10.13, 11.01, 11.02, 11.03, 11.04, 11.05, 11.06, 11.07, 11.08, 11.09, 11.10, 11.11, 11.12, 11.13, 12.01, 12.02, 12.03, 12.04, 12.05, 12.06, 12.07, 12.08, 12.09, 12.10, 12.11, 12.12, 12.13, 13.01, 13.02,	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	no	-	2 star	-	-	-	-	-	-	-

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11, 14.01, 14.02, 14.03, 14.04, 14.05, 14.06, 14.07, 14.08, 14.09, 14.10, 14.11, 14.12, 15.01, 15.02, 15.03, 15.04, 15.05, 15.06, 15.07, 15.08, 15.09, 15.10, 15.11, 15.12, 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
16.08, 16.09, 16.10, 16.11, 16.12, 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 17.12, 18.01, 18.02, 18.03														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
02.01, 02.02, 02.03, 02.04, 02.05, 02.06, 02.07, 02.08, 03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, 03.08, 03.09, 03.10, 03.11, 03.12, 03.13, 04.01, 04.02, 04.03, 04.04, 04.05, 04.06, 04.07, 04.08, 04.09, 04.10, 04.11, 04.12, 04.13, 05.01, 05.02, 05.03, 05.04, 05.05, 05.06,	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	no	-	2 star	-	-	-	-	-	-	-

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
05.07, 05.08, 05.09, 05.10, 05.11, 05.12, 05.13, 06.01, 06.02, 06.03, 06.04, 06.05, 06.06, 06.07, 06.08, 06.09, 06.10, 06.11, 06.12, 06.13, 07.01, 07.02, 07.03, 07.04, 07.05, 07.06, 07.07, 07.08, 07.09, 07.10, 07.11, 07.12, 07.13, 08.01, 08.02, 08.03, 08.04, 08.05, 08.06, 08.07,														



	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
08.08, 08.09, 08.10, 08.11, 08.12, 08.13, 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08, 09.09, 09.10, 09.11, 09.12, 09.13, 10.01, 18.04, 18.05, 18.06, 18.07, 18.08, 18.09, 18.10, 18.11, 18.12, 19.01, 19.02, 19.03, 19.04, 19.05, 19.06, 19.07, 19.08, 19.09, 19.10, 19.11,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
19.12, 20.01, 20.02, 20.03, 20.04, 20.05, 20.06, 20.07, 20.08, 20.09, 20.10, 20.11, 20.12, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07, 21.08, 21.09, 21.10, 21.11, 21.12, 22.01, 22.02, 22.03, 22.04, 22.05, 22.06, 22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 23.01, 23.02, 23.03,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
23.04, 23.05, 23.06, 23.07, 23.08, 23.09, 23.10, 23.11, 23.12, 24.01, 24.02, 24.03, 24.04, 24.05, 24.06, 24.07, 24.08, 24.09, 24.10, 24.11, 25.01, 25.02, 25.03, 25.04, 25.05, 25.06														

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
25.08, 25.09	reticulated alternative water supply	-	See central systems	yes	yes	-	-	-
All other dwellings	reticulated alternative water supply	-	See central systems	yes	yes	no	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
25.08, 25.09	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
02.01, 02.02, 02.03, 02.04, 02.05, 02.06, 02.07, 02.08, 03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, 03.08, 03.09, 03.10, 03.11, 03.12, 03.13, 04.01, 04.02, 04.03, 04.04, 04.05, 04.06, 04.07, 04.08, 04.09, 04.10, 04.11, 04.12, 04.13, 05.01, 05.02, 05.03, 05.04, 05.05, 05.06, 05.07,	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
05.08, 05.09, 05.10, 05.11, 05.12, 05.13, 06.01, 06.02, 06.03, 06.04, 06.05, 06.06, 06.07, 06.08, 06.09, 06.10, 06.11, 06.12, 06.13, 07.01, 07.02, 07.03, 07.04, 07.05, 07.06, 07.07, 07.08, 07.09, 07.10, 07.11, 07.12, 07.13, 08.01, 08.02, 08.03, 08.04, 08.05, 08.06, 08.07, 08.08, 08.09,							



	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
08.10, 08.11, 08.12, 08.13, 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08, 09.09, 09.10, 09.11, 09.12, 09.13, 10.01, 10.02, 10.03, 10.04, 10.05, 10.06, 10.07, 10.08, 10.09, 10.10, 10.11, 10.12, 10.13, 11.01, 11.02, 11.03, 11.04, 11.05, 11.06, 11.07, 11.08, 11.09, 11.10, 11.11,							

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
11.12, 11.13, 12.01, 12.02, 12.03, 12.04, 12.05, 12.06, 12.07, 12.08, 12.09, 12.10, 12.11, 12.12, 12.13, 13.01, 13.02, 13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11, 14.01, 14.02, 14.03, 14.04, 14.05, 14.06, 14.07, 14.08, 14.09, 14.10, 14.11, 14.12, 15.01, 15.02, 15.03,							

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
15.04, 15.05, 15.06, 15.07, 15.08, 15.09, 15.10, 15.11, 15.12, 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07, 16.08, 16.09, 16.10, 16.11, 16.12, 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 17.12, 18.01, 18.02, 18.03, 18.04, 18.05, 18.06, 18.07, 18.08,							

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
18.09, 18.10, 18.11, 18.12, 19.01, 19.02, 19.03, 19.04, 19.05, 19.06, 19.07, 19.08, 19.09, 19.10, 19.11, 19.12, 20.01, 20.02, 20.03, 20.04, 20.05, 20.06, 20.07, 20.08, 20.09, 20.10, 20.11, 20.12, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07, 21.08, 21.09, 21.10, 21.11, 21.12, 22.01,							

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
22.02, 22.03, 22.04, 22.05, 22.06, 22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 23.01, 23.02, 23.03, 23.04, 23.05, 23.06, 23.07, 23.08, 23.09, 23.10, 23.11, 23.12, 24.01, 24.02, 24.03, 24.04, 24.05, 24.06, 24.07, 24.08, 24.09, 24.10, 24.11, 25.01, 25.02, 25.03, 25.04, 25.05, 25.06							

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
25.08	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	3	2	yes	yes	yes	yes	0	no
25.09	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	2	yes	yes	yes	yes	0	no
10.03, 11.03, 12.03	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	0	1	yes	yes	yes	yes	1	no
10.08, 11.08, 12.08, 13.08	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	0	1	yes	yes	yes	yes	0	yes
14.01, 15.01, 16.01, 17.01, 18.02, 19.01, 20.01, 21.01, 22.01, 23.01	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1	1	yes	yes	yes	yes	0	yes

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
02.02, 03.02, 04.02, 05.02, 06.02, 07.02, 08.02, 09.02, 10.02, 11.02, 12.02	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	4	1	yes	yes	yes	yes	0	no
13.01, 14.07, 15.07, 16.07, 17.07, 18.07, 19.07, 20.07, 21.07, 22.07, 23.07	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	3	1	yes	yes	yes	yes	0	no
03.08, 04.08, 05.08, 06.08, 07.08, 09.08, 24.01, 24.02, 24.03, 24.09, 25.01, 25.02	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	0	yes



Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.04, 04.04, 05.04, 06.04, 07.04, 08.05, 09.05, 10.04, 11.04, 12.04, 13.04, 14.04, 15.04, 16.04, 17.04, 18.04, 19.04, 20.04, 21.04, 22.04, 23.04	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1	1	yes	yes	yes	yes	1	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
02.03, 03.03, 04.03, 04.10, 05.03, 05.10, 06.03, 06.10, 07.03, 07.10, 08.03, 08.10, 09.03, 09.10, 10.10, 11.10, 12.10, 13.03, 13.09, 14.03, 14.09, 15.03, 15.09, 16.03, 16.09, 17.03, 17.09, 18.03, 18.09, 19.03, 19.09, 20.03, 20.09, 21.03, 21.09, 22.03, 22.09, 23.03, 23.09	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	1	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
02.01, 02.04, 02.05, 02.06, 02.07, 02.08, 03.01, 03.10, 03.11, 03.12, 03.13, 04.01, 04.11, 04.12, 04.13, 05.01, 05.11, 05.12, 05.13, 06.01, 06.11, 06.12, 06.13, 07.01, 07.11, 07.12, 07.13, 08.01, 08.08, 08.11, 08.12, 08.13, 09.01, 09.11, 09.12, 09.13, 10.01, 10.11, 10.12,	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	0	no

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
10.13, 11.01, 11.11, 11.12, 11.13, 12.01, 12.11, 12.12, 12.13, 13.10, 13.11, 14.08, 14.10, 14.11, 15.08, 15.10, 15.11, 16.08, 16.10, 16.11, 17.08, 17.10, 17.11, 18.08, 18.10, 18.11, 19.08, 19.10, 19.11, 20.08, 20.10, 20.11, 21.08, 21.10, 21.11, 22.08, 22.10, 22.11, 23.08,												

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
23.10, 23.11, 24.08, 24.10, 24.11												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.05, 03.06, 03.07, 03.09, 04.05, 04.06, 04.07, 04.09, 05.05, 05.06, 05.07, 05.09, 06.05, 06.06, 06.07, 06.09, 07.05, 07.06, 07.07, 07.09, 08.04, 08.06, 08.07, 08.09, 09.04, 09.06, 09.07, 09.09, 10.05, 10.06, 10.07, 10.09, 11.05, 11.06, 11.07, 11.09, 12.05, 12.06, 12.07,	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1	1	yes	yes	yes	yes	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
12.09, 13.02, 13.05, 13.06, 13.07, 14.02, 14.05, 14.06, 14.12, 15.02, 15.05, 15.06, 15.12, 16.02, 16.05, 16.06, 16.12, 17.02, 17.05, 17.06, 17.12, 18.01, 18.05, 18.06, 18.12, 19.02, 19.05, 19.06, 19.12, 20.02, 20.05, 20.06, 20.12, 21.02, 21.05, 21.06, 21.12, 22.02, 22.05,												



Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
22.06, 22.12, 23.02, 23.05, 23.06, 23.12, 24.04, 24.05, 24.06, 24.07, 25.03, 25.04, 25.05, 25.06												

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
25.08, 25.09	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 star	no	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
02.01, 02.02, 02.03, 02.04, 02.05, 02.06, 02.07, 02.08, 03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, 03.08, 03.09, 03.10, 03.11, 03.12, 03.13, 04.01, 04.02, 04.03, 04.04, 04.05, 04.06, 04.07, 04.08, 04.09, 04.10, 04.11, 04.12, 04.13, 05.01, 05.02, 05.03, 05.04,	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 star	no	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
05.05, 05.06, 05.07, 05.08, 05.09, 05.10, 05.11, 05.12, 05.13, 06.01, 06.02, 06.03, 06.04, 06.05, 06.06, 06.07, 06.08, 06.09, 06.10, 06.11, 06.12, 06.13, 07.01, 07.02, 07.03, 07.04, 07.05, 07.06, 07.07, 07.08, 07.09, 07.10, 07.11, 07.12, 07.13, 08.01, 08.02, 08.03,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
08.04, 08.05, 08.06, 08.07, 08.08, 08.09, 08.10, 08.11, 08.12, 08.13, 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08, 09.09, 09.10, 09.11, 09.12, 09.13, 10.01, 10.02, 10.03, 10.04, 10.05, 10.06, 10.07, 10.08, 10.09, 10.10, 10.11, 10.12, 10.13, 11.01, 11.02,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
11.03, 11.04, 11.05, 11.06, 11.07, 11.08, 11.09, 11.10, 11.11, 11.12, 11.13, 12.01, 12.02, 12.03, 12.04, 12.05, 12.06, 12.07, 12.08, 12.09, 12.10, 12.11, 12.12, 12.13, 13.01, 13.02, 13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11, 14.01, 14.02, 14.03,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
14.04, 14.05, 14.06, 14.07, 14.08, 14.09, 14.10, 14.11, 14.12, 15.01, 15.02, 15.03, 15.04, 15.05, 15.06, 15.07, 15.08, 15.09, 15.10, 15.11, 15.12, 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07, 16.08, 16.09, 16.10, 16.11, 16.12, 17.01, 17.02, 17.03, 17.04, 17.05,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 17.12, 18.01, 18.02, 18.03, 18.04, 18.05, 18.06, 18.07, 18.08, 18.09, 18.10, 18.11, 18.12, 19.01, 19.02, 19.03, 19.04, 19.05, 19.06, 19.07, 19.08, 19.09, 19.10, 19.11, 19.12, 20.01, 20.02, 20.03, 20.04, 20.05, 20.06, 20.07,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
20.08, 20.09, 20.10, 20.11, 20.12, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07, 21.08, 21.09, 21.10, 21.11, 21.12, 22.01, 22.02, 22.03, 22.04, 22.05, 22.06, 22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 23.01, 23.02, 23.03, 23.04, 23.05, 23.06, 23.07, 23.08, 23.09,												



	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
23.10, 23.11, 23.12, 24.01, 24.02, 24.03, 24.04, 24.05, 24.06, 24.07, 24.08, 24.09, 24.10, 24.11, 25.01, 25.02, 25.03, 25.04, 25.05, 25.06												

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.			

<b>(iii) Thermal Comfort</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must:  (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	<b>Thermal loads</b>	
<b>Dwelling no.</b>	<b>Area adjusted heating load (in mJ/m²/yr)</b>	<b>Area adjusted cooling load (in mJ/m²/yr)</b>
02.01	33	22
02.02	18	12
02.04	24	11
02.05	25	14
02.06	48	20
02.07	58	17
02.08	55	21
03.01	31	22
03.02	16	12
03.03	15	14
03.04	27	30
03.05	39	25
03.06	38	26

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
03.07	36	17
03.08	43	15
03.09	56	15
03.10	64	12
03.11	45	12
03.12	40	12
03.13	52	20
04.04	24	24
04.05	16	23
04.06	19	25
08.07	20	25
12.01	42	15
12.02	23	10
12.03	19	11
12.13	60	16
13.01	21	22
13.02	15	19
13.07	24	14
13.08	35	12
14.01	47	24
14.08	50	13
14.12	46	15
15.01	39	29
21.02	16	18
23.01	42	23
23.02	20	9
23.03	22	9

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
23.08	44	13
23.09	42	10
24.01	44	26
24.02	11	11
24.03	48	15
24.05	22	14
24.06	25	17
24.07	45	18
24.08	50	17
24.09	56	10
24.10	40	32
24.11	31	10
25.01	56	28
25.02	27	17
25.03	31	14
25.05	33	17
25.06	51	18
25.08	46	15
25.09	24	16
14.07, 25.04	32	14
09.01, 10.01, 11.01	34	15
09.13, 10.13, 11.13	57	16
19.02, 20.02, 22.02	16	8
20.01, 21.01, 22.01	39	23
20.05, 22.05, 23.05	19	18
20.08, 21.08, 22.08	41	14
04.07, 05.07, 06.07, 07.07	20	15

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
09.07, 10.07, 11.07, 12.07	21	14
09.08, 10.08, 11.08, 12.08	38	12
09.09, 10.09, 11.09, 12.09	44	11
16.01, 17.01, 18.01, 19.01	39	24
19.09, 20.09, 21.09, 22.09	39	10
20.07, 21.07, 22.07, 23.07	28	13
04.01, 05.01, 06.01, 07.01, 08.01	34	16
04.08, 05.08, 06.08, 07.08, 08.08	37	13
04.09, 05.09, 06.09, 07.09, 08.09	42	12
04.10, 05.10, 06.10, 07.10, 08.10	33	11
04.11, 05.11, 06.11, 07.11, 08.11	49	9
04.13, 05.13, 06.13, 07.13, 08.13	56	16
05.04, 06.04, 07.04, 08.04, 09.04	25	23
05.05, 06.05, 07.05, 08.05, 09.05	17	20
05.06, 06.06, 07.06, 08.06, 09.06	20	22
09.10, 10.10, 11.10, 12.10, 13.09	35	11
09.11, 10.11, 11.11, 12.11, 13.10	51	9
10.04, 11.04, 12.04, 13.04, 14.04	26	21
10.06, 11.06, 12.06, 13.06, 14.06	21	21
14.02, 15.02, 16.02, 17.02, 18.02	15	9
14.09, 15.09, 16.09, 17.09, 18.09	38	10
14.10, 15.10, 16.10, 17.10, 18.10	52	9
15.05, 16.05, 17.05, 18.05, 19.05	18	18
15.06, 16.06, 17.06, 18.06, 19.06	22	20
15.08, 16.08, 17.08, 18.08, 19.08	40	14
19.10, 20.10, 21.10, 22.10, 23.10	53	9
20.06, 21.06, 22.06, 23.06, 24.04	22	19

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
02.03, 15.07, 16.07, 17.07, 18.07, 19.07	27	13
04.12, 05.12, 06.12, 07.12, 08.12, 11.12	28	10
10.05, 11.05, 12.05, 13.05, 14.05, 21.05	18	19
14.11, 15.11, 16.11, 17.11, 18.11, 19.11	30	10
04.02, 05.02, 06.02, 07.02, 08.02, 09.02, 10.02, 11.02	18	10
04.03, 05.03, 06.03, 07.03, 08.03, 09.03, 10.03, 11.03	17	11
09.12, 10.12, 12.12, 13.11, 20.11, 21.11, 22.11, 23.11	29	10
15.04, 16.04, 17.04, 18.04, 19.04, 20.04, 21.04, 22.04, 23.04	27	20
15.12, 16.12, 17.12, 18.12, 19.12, 20.12, 21.12, 22.12, 23.12	25	15
All other dwellings	18	9

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	3 star (> 7.5 but ≤ 9 L/min)	3 star	3 star	no common laundry facility

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park ground to basement 2	ventilation supply only	carbon monoxide monitor + VSD fan	fluorescent	zoned switching with motion sensor	No
Car park basement 3 & 4	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	zoned switching with motion sensor	No
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No. 2)	-	-	light-emitting diode	connected to lift call button	No
Lift car (No. 3)	-	-	light-emitting diode	connected to lift call button	No
Storage	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Switch Room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Garbage room	ventilation exhaust only	-	fluorescent	motion sensors	No
Fan Room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Plant room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Mail Room	ventilation supply only	none ie. continuous	compact fluorescent	manual on / manual off	No
Ground floor & basement lobby	ventilation supply only	none ie. continuous	compact fluorescent	zoned switching with motion sensor	No
Hallway level 1 to 24	ventilation supply only	none ie. continuous	compact fluorescent	zoned switching with motion sensor	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)
Lift (No. 1)	gearless traction with V V V F motor	Number of levels (including basement): 29
Lift (No. 2)	gearless traction with V V V F motor	Number of levels (including basement): 29
Lift (No. 3)	gearless traction with V V V F motor	Number of levels (including basement): 29



#### 4. Commitments for common areas and central systems/facilities for the development (non-building specific)

##### (b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Reticulated alternative water supply	-	Installation of plumbing to make provision for connection to Sydney Olympic Park Authority reticulated alternative water supply.	- irrigation of 1434 square metres of common landscaped area on the site - car washing in 0 car washing bays on the site

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

## Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

## Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

## Parkview Group

DA Application for:

### Australia Towers II – Tower D

To be built at:

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127

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## BASIX Assessment

Issue No.	Description	Author	Date
No. 01	Draft assessment	TC/TMC	14/08/13
	Note this report replaces the original Basix and ABSA thermal simulation completed by Windtec		
No. 02	BASIX certification	TC/TMC	16/08/13
No. 03	Additional unit to top floor	MF	22/07/14



This report has been prepared by Efficient Living Pty Ltd on behalf of our client Parkview Group. Efficient Living prepares all reports in accordance with Basix thermal comfort protocol and is backed by professional indemnity insurance. This report takes into account our client's instructions and preferred building inclusions.

PREPARED FOR :	PREPARED BY :
<p>Parkview Construction Pty Ltd Suite 3, 2 Wentworth Park Rd GLEBE NSW 2037</p> <p><b>Contact :</b> Phone : (02) 9506 1500 Fax : (02) 9506 1599</p>	<p>Efficient Living 13/13 Lagoon St, Narrabeen NSW, 2101</p> <p><b>Email:</b> tracey@efficientliving.com.au Phone : (02) 9970 6181 Fax : (02) 9970 6181</p>

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<b>THERMAL COMFORT RESULTS</b>
<b>BERS ASSESSOR CERTIFICATE</b>
<b>BERS MODEL SPECIFICATION</b> (Note: Proxies used in this table, refer to inclusions summary for accurate specification)
<b>BASIX CERTIFICATE</b>



## **INTRODUCTION**

Efficient Living has investigated the estimated thermal comfort of the proposed development to be built at 1-7 Australia Avenue, Sydney Olympic Park.

Heating and cooling loads for the development have been determined using BERS thermal simulation software. The report is based on the architectural drawings provided by Parkview Group. For further details, refer to the inclusions summary and thermal comfort results.

## **ANALYSIS**

The BASIX assessment is divided into three sections, each independently measuring the efficiency of the development. These are Water, Thermal Comfort and Energy.

BASIX requires a minimum target of 40% for the Water section. A BERS pass or fail is required for the thermal comfort section and a minimum required target of 20% for the energy section.

### **WATER**

The proposed development has achieved the BASIX Water target of 40%.

The water usage of the development is calculated based on the number and efficiency of permanent fixtures and appliances such as: taps, showerheads and toilets, the dish washer and clothes washing machine.

The size of the rain tank and number of connections has a huge impact on your water score as does the area of gardens and lawns and whether or not low-water plant species are incorporated.

### **THERMAL COMFORT**

Thermal Comfort targets are set by the department of planning in the form of heating and cooling caps. The buildings thermal physics is measured using BERS thermal performance assessment tools. This equates an expected level of energy consumption to heat and cool each dwelling per annum expressed in MJ (mega joules) per square meter of floor area.

Each unit has individual heating and cooling caps and a weighted average heating and cooling load for the whole development. The weighted average caps are a lot harder to achieve than the individual unit caps.

### **ENERGY**

The proposed development has achieved the energy target of 20% to pass this section.

The energy usage of the development is calculated based on the efficiency of fixed appliances that will be used. This includes the air conditioning system, hot water system, lighting, exhaust fans and the cook top, oven, and clothes drying facilities.

## BASIX Inclusions – Australia Tower D

Australia Tower D has reached the targets as set for new dwellings in NSW.

The inclusions as outlined in the table below have been incorporated in each unit to allow them to reach their environmental sustainability targets.

<b>Construction general</b>	
Glazing	<p>Curtain walls:</p> <p>Fixed pane with three awning panels (vision panel 3007): U-value 4.7 &amp; SHGC 0.52</p> <p>Large fixed panel (vision panel 3005): U-value 3.7 &amp; SHGC 0.61</p> <p>Small fixed panel (vision panel 3200): U-value 4.5 &amp; SHGC 0.56</p> <p>Traditional sliding windows and doors:</p> <p>U-value 6.95 &amp; SHGC 0.72</p>
Roof / ceiling insulation	<p>Roof: Concrete slab – medium colour</p> <p>Plasterboard ceiling – R2.0 insulation to top floor units and</p> <p>R2.0 to those areas with exposed balcony over.</p> <p>No insulation to other units</p>
Wall / floor insulation	<p>External Wall: Spandrel panel – R1.7 total construction</p> <p>Small sections of 250mm Hebel, un-insulated as per plans</p> <p>Internal walls within units: Plasterboard on studs - no insulation</p> <p>Inter-tenancy walls: 250mm hebel - no insulation</p> <p>Floor: Concrete – R1.0 insulation to subfloor unit D03.11</p> <p>No insulation to other units</p>
<b>BASIX Water inclusions – Score 48/40</b>	
Fixtures (within units)	<p>Showerheads: 3 star (&gt;7.5 but &lt;=9.0 L/min) High flow</p> <p>Toilets: 3 star</p> <p>Kitchen taps: 3 star</p> <p>Bathroom taps: 3 star</p>
Common area fixtures	<p>Showerheads: 3 star (&gt;7.5 but &lt;=9.0 L/min) High flow</p> <p>Toilets: 3 star</p> <p>Bathroom taps: 3 star</p>
Appliances (within units)	Dishwashers: 2 Star
Reticulated alternative water supply	Connected to: Irrigation of landscaping & all toilets
Private pool	36kL pool to unit D30.01 & D30.04 with a pool cover

BASIX Energy inclusions – Score Pass 20/20	
Central hot water system	Central gas-fired boiler with R1.0 (~38mm) insulation to ringmain and supply risers
Lift motors	All lifts to have gearless traction with VVVF motor.
Appliances & other efficiency measures (within units)	Gas cooktop & electric oven Dishwashers: 3.5 star Clothes dryer: 2.0 star
Private pool	Gas heating to pool with a pool timer – unit D30.01 & D30.04
Heating & cooling (within units)	All units to have individual single phase reverse cycle air conditioning: Heating: 1 Phase air-conditioning – 2.5 Stars (new rating) Cooling: 1 Phase air-conditioning – 2.5 Stars (new rating)
Artificial lighting (within units)	Fluorescent or LED lighting, to be provided throughout
Ventilation systems (within units)	Bathroom ventilation: Individual fan, ducted to roof or façade – interlocked to light Laundry ventilation: Individual fan, ducted to roof or façade – interlocked to light Kitchen ventilation: Individual fan, recirculating – manual switch on/off
Artificial lighting (within common areas)	Car park area: fluorescent – zoned switching with motion sensor Lifts: compact fluorescent – connected to lift call button Garbage rooms: fluorescent – motion sensors Communal space: compact fluorescent – zoned switching with motion sensor Plant or service room: fluorescent – manual on / manual off Meter room: fluorescent – manual on / manual off Switch room: fluorescent – manual on / manual off Storage: fluorescent – manual on / manual off Mail room: compact fluorescent - manual on / manual off Change rooms/WC: compact fluorescent – zoned switching with motion sensor Ground floor lobbies: compact fluorescent – zoned switching with motion sensor Hallways: compact fluorescent – zoned switching with motion sensor
Ventilation systems (within common areas)	Car park area: Supply and exhaust air to ground, basement 1 & 2. Ventilation supply only to basement 3 & 4 – carbon monoxide monitor + VSD fan Garbage rooms: ventilation exhaust only – no efficiency measures Communal space: ventilation supply only – time clock or BMS controlled Plant or Service room: no mechanical ventilation Meter Room: no mechanical ventilation Switch room: no mechanical ventilation Storage: ventilation supply only – interlocked to light Mail room: ventilation supply only – continuous Change rooms/WC: ventilation supply only – time clock or BMS control Ground floor lobbies: ventilation supply only – continuous Hallways: ventilation supply only – continuous





# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

Certificate # 14730500				Issued: 22/07/13		Accreditation # VIC/BDAV/12/1473			
Thermal performance specifications									Page 1 of 13
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D02.01	2	64	0	61	22	4.0	0	No	None
D02.02	2	75	0	49	21	4.5	0	No	None
D02.03	2	81	0	33	25	5.0	0	No	None
D02.04	2	86	0	55	18	4.5	0	No	None
D02.05	2	73	5	48	13	5.0	0	No	None
D03.01	2	86	0	39	19	5.0	0	No	None
D03.02	3	106	0	38	19	5.5	0	No	None
D03.03	1	52	0	46	26	4.5	0	No	None
D03.04	1	58	0	52	23	4.5	0	No	None
D03.05	1	50	7	46	25	4.5	1	No	None
D03.06	2	73	5	33	14	6.0	1	No	None
D03.07	1	58	0	58	20	4.0	0	No	None
D03.08	2	77	6	46	28	4.5	0	No	None
D03.09	1	52	0	66	30	3.5	0	No	None
D03.10	2	79	0	60	20	4.0	0	No	None
D03.11	2	69	0	62	18	4.0	0	No	R1.0 insulation to open floor
D03.12	2	74	5	66	15	4.0	0	No	None
D04.01	2	86	0	24	15	6.5	0	No	None
D04.02	3	106	0	21	17	7.0	0	No	None
D04.03	1	52	0	29	23	5.5	0	No	None
D04.04	1	58	0	32	20	5.5	0	No	None
D04.05	1	50	7	46	21	4.5	1	No	None
D04.06	2	73	5	36	12	6.0	1	No	None
D04.07	1	58	0	52	17	4.5	0	No	None
D04.08	2	83	0	38	20	5.5	0	No	None
D04.09	1	52	0	35	23	5.5	0	No	None
D04.10	2	79	0	28	18	6.0	0	No	None
D04.11	2	69	0	59	15	4.5	0	No	None
D04.12	2	74	5	36	13	6.0	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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Certificate # 14730500				Issued: 22/07/13		Accreditation #		VIC/BDAV/12/1473	
Thermal performance specifications									Page 2 of 13
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D05.01	2	86	0	24	15	6.5	0	No	None
D05.02	3	106	0	21	17	7.0	0	No	None
D05.03	1	52	0	29	23	5.5	0	No	None
D05.04	1	58	0	32	20	5.5	0	No	None
D05.05	1	50	7	46	21	4.5	1	No	None
D05.06	2	73	5	36	12	6.0	1	No	None
D05.07	1	58	0	52	17	4.5	0	No	None
D05.08	2	83	0	38	20	5.5	0	No	None
D05.09	1	52	0	35	23	5.5	0	No	None
D05.10	2	79	0	28	18	6.0	0	No	None
D05.11	2	69	0	59	15	4.5	0	No	None
D05.12	2	74	5	36	13	6.0	0	No	None
D06.01	2	86	0	24	15	6.5	0	No	None
D06.02	3	106	0	21	17	7.0	0	No	None
D06.03	1	52	0	29	23	5.5	0	No	None
D06.04	1	58	0	32	20	5.5	0	No	None
D06.05	1	50	7	46	21	4.5	1	No	None
D06.06	2	73	5	36	12	6.0	1	No	None
D06.07	1	58	0	52	17	4.5	0	No	None
D06.08	2	83	0	38	20	5.5	0	No	None
D06.09	1	52	0	35	23	5.5	0	No	None
D06.10	2	79	0	28	18	6.0	0	No	None
D06.11	2	69	0	59	15	4.5	0	No	None
D06.12	2	74	5	36	13	6.0	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

### 1-7 Australia Avenue, Sydney Olympic Park, NSW 2127



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#### Thermal performance specifications

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D07.01	2	86	0	26	13	7.0	0	No	None
D07.02	3	106	0	22	15	7.0	0	No	None
D07.03	1	52	0	32	21	5.5	0	No	None
D07.04	1	58	0	35	18	5.5	0	No	None
D07.05	1	50	7	49	19	4.5	1	No	None
D07.06	2	73	5	38	11	6.0	1	No	None
D07.07	1	58	0	55	16	4.5	0	No	None
D07.08	2	83	0	40	17	5.5	0	No	None
D07.09	1	52	0	37	20	5.5	0	No	None
D07.10	2	79	0	30	17	6.0	0	No	None
D07.11	2	69	0	62	13	4.0	0	No	None
D07.12	2	74	5	38	13	5.5	0	No	None
D08.01	2	86	0	26	13	7.0	0	No	None
D08.02	3	106	0	22	15	7.0	0	No	None
D08.03	1	52	0	32	21	5.5	0	No	None
D08.04	1	58	0	35	18	5.5	0	No	None
D08.05	1	50	7	49	19	4.5	1	No	None
D08.06	2	73	5	38	11	6.0	1	No	None
D08.07	1	58	0	55	16	4.5	0	No	None
D08.08	2	83	0	40	17	5.5	0	No	None
D08.09	1	52	0	37	20	5.5	0	No	None
D08.10	2	79	0	30	17	6.0	0	No	None
D08.11	2	69	0	62	13	4.0	0	No	None
D08.12	2	74	5	38	13	5.5	0	No	None



# Thermal Comfort Results

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Thermal performance specifications								Page 4 of 13	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D09.01	2	86	0	26	13	7.0	0	No	None
D09.02	3	106	0	22	15	7.0	0	No	None
D09.03	1	52	0	32	21	5.5	0	No	None
D09.04	1	58	0	35	18	5.5	0	No	None
D09.05	1	50	7	49	19	4.5	1	No	None
D09.06	2	73	5	38	11	6.0	1	No	None
D09.07	1	58	0	55	16	4.5	0	No	None
D09.08	2	83	0	40	17	5.5	0	No	None
D09.09	1	52	0	37	20	5.5	0	No	None
D09.10	2	79	0	30	17	6.0	0	No	None
D09.11	2	69	0	62	13	4.0	0	No	None
D09.12	2	74	5	38	13	5.5	0	No	None
D10.01	2	86	0	26	13	7.0	0	No	None
D10.02	3	106	0	22	15	7.0	0	No	None
D10.03	1	52	0	32	21	5.5	0	No	None
D10.04	1	58	0	35	18	5.5	0	No	None
D10.05	1	50	7	49	19	4.5	1	No	None
D10.06	2	73	5	38	11	6.0	1	No	None
D10.07	1	58	0	55	16	4.5	0	No	None
D10.08	2	83	0	40	17	5.5	0	No	None
D10.09	1	52	0	37	20	5.5	0	No	None
D10.10	2	79	0	30	17	6.0	0	No	None
D10.11	2	69	0	62	13	4.0	0	No	None
D10.12	2	74	5	38	13	5.5	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

### 1-7 Australia Avenue, Sydney Olympic Park, NSW 2127



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#### Thermal performance specifications

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D11.01	2	86	0	28	14	6.5	0	No	None
D11.02	3	106	0	23	21	6.5	0	No	None
D11.03	1	52	0	31	17	6.0	0	No	None
D11.04	1	58	0	37	15	5.5	0	No	None
D11.05	1	50	7	49	21	4.5	1	No	None
D11.06	2	73	5	39	12	5.5	1	No	None
D11.07	1	58	0	54	13	4.5	0	No	None
D11.08	2	83	0	42	17	5.0	0	No	None
D11.09	1	52	0	37	17	5.5	0	No	None
D11.10	2	79	0	32	19	5.5	0	No	None
D11.11	2	69	0	65	15	4.0	0	No	None
D11.12	2	74	5	39	14	5.5	0	No	None
D12.01	2	86	0	28	14	6.5	0	No	None
D12.02	3	106	0	23	21	6.5	0	No	None
D12.03	1	52	0	31	17	6.0	0	No	None
D12.04	1	58	0	37	15	5.5	0	No	None
D12.05	1	50	7	49	21	4.5	1	No	None
D12.06	2	73	5	39	12	5.5	1	No	None
D12.07	1	58	0	54	13	4.5	0	No	None
D12.08	2	83	0	42	17	5.0	0	No	None
D12.09	1	52	0	37	17	5.5	0	No	None
D12.10	2	79	0	32	19	5.5	0	No	None
D12.11	2	69	0	65	15	4.0	0	No	None
D12.12	2	74	5	39	14	5.5	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

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#### Thermal performance specifications

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D13.01	2	86	0	28	14	6.5	0	No	None
D13.02	3	106	0	23	21	6.5	0	No	None
D13.03	1	52	0	31	17	6.0	0	No	None
D13.04	1	58	0	37	15	5.5	0	No	None
D13.05	1	50	7	49	21	4.5	1	No	None
D13.06	2	73	5	39	12	5.5	1	No	None
D13.07	1	58	0	54	13	4.5	0	No	None
D13.08	2	83	0	42	17	5.0	0	No	None
D13.09	1	52	0	37	17	5.5	0	No	None
D13.10	2	79	0	32	19	5.5	0	No	None
D13.11	2	69	0	65	15	4.0	0	No	None
D13.12	2	74	5	39	14	5.5	0	No	None
D14.01	2	86	0	28	14	6.5	0	No	None
D14.02	3	106	0	23	21	6.5	0	No	None
D14.03	1	52	0	31	17	6.0	0	No	None
D14.04	1	58	0	37	15	5.5	0	No	None
D14.05	1	50	7	49	21	4.5	1	No	None
D14.06	2	73	5	39	12	5.5	1	No	None
D14.07	1	58	0	54	13	4.5	0	No	None
D14.08	2	83	0	42	17	5.0	0	No	None
D14.09	1	52	0	37	17	5.5	0	No	None
D14.10	2	79	0	32	19	5.5	0	No	None
D14.11	2	69	0	65	15	4.0	0	No	None
D14.12	2	74	5	39	14	5.5	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

### 1-7 Australia Avenue, Sydney Olympic Park, NSW 2127



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#### Thermal performance specifications

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D15.01	2	86	0	28	13	6.5	0	No	None
D15.02	3	106	0	24	20	6.5	0	No	None
D15.03	1	52	0	33	16	6.0	0	No	None
D15.04	1	58	0	38	15	5.5	0	No	None
D15.05	1	50	7	51	19	4.5	1	No	None
D15.06	2	73	5	40	12	5.5	1	No	None
D15.07	1	58	0	56	13	4.5	0	No	None
D15.08	2	83	0	43	16	5.0	0	No	None
D15.09	1	52	0	38	17	5.5	0	No	None
D15.10	2	79	0	33	19	5.5	0	No	None
D15.11	2	69	0	66	14	4.0	0	No	None
D15.12	2	74	5	40	13	5.5	0	No	None
D16.01	2	86	0	28	13	6.5	0	No	None
D16.02	3	106	0	24	20	6.5	0	No	None
D16.03	1	52	0	33	16	6.0	0	No	None
D16.04	1	58	0	38	15	5.5	0	No	None
D16.05	1	50	7	51	19	4.5	1	No	None
D16.06	2	73	5	40	12	5.5	1	No	None
D16.07	1	58	0	56	13	4.5	0	No	None
D16.08	2	83	0	43	16	5.0	0	No	None
D16.09	1	52	0	38	17	5.5	0	No	None
D16.10	2	79	0	33	19	5.5	0	No	None
D16.11	2	69	0	66	14	4.0	0	No	None
D16.12	2	74	5	40	13	5.5	0	No	None



**Thermal Comfort Results**

**Australia Towers II – Tower D**

**1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127**



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

**Certificate # 14730500**      **Issued: 22/07/13**      **Accreditation # VIC/BDAV/12/1473**

**Thermal performance specifications**

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D17.01	2	86	0	28	13	6.5	0	No	None
D17.02	3	106	0	24	20	6.5	0	No	None
D17.03	1	52	0	33	16	6.0	0	No	None
D17.04	1	58	0	38	15	5.5	0	No	None
D17.05	1	50	7	51	19	4.5	1	No	None
D17.06	2	73	5	40	12	5.5	1	No	None
D17.07	1	58	0	56	13	4.5	0	No	None
D17.08	2	83	0	43	16	5.0	0	No	None
D17.09	1	52	0	38	17	5.5	0	No	None
D17.10	2	79	0	33	19	5.5	0	No	None
D17.11	2	69	0	66	14	4.0	0	No	None
D17.12	2	74	5	40	13	5.5	0	No	None
D18.01	2	86	0	28	13	6.5	0	No	None
D18.02	3	106	0	24	20	6.5	0	No	None
D18.03	1	52	0	33	16	6.0	0	No	None
D18.04	1	58	0	38	15	5.5	0	No	None
D18.05	1	50	7	51	19	4.5	1	No	None
D18.06	2	73	5	40	12	5.5	1	No	None
D18.07	1	58	0	56	13	4.5	0	No	None
D18.08	2	83	0	43	16	5.0	0	No	None
D18.09	1	52	0	38	17	5.5	0	No	None
D18.10	2	79	0	33	19	5.5	0	No	None
D18.11	2	69	0	66	14	4.0	0	No	None
D18.12	2	74	5	40	13	5.5	0	No	None





# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

Certificate # 14730500 Issued: 22/07/13 Accreditation # VIC/BDAV/12/1473

### Thermal performance specifications

Page 9 of 13

Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D19.01	2	86	0	28	13	6.5	0	No	None
D19.02	3	106	0	24	20	6.5	0	No	None
D19.03	1	52	0	33	16	6.0	0	No	None
D19.04	1	58	0	38	15	5.5	0	No	None
D19.05	1	50	7	51	19	4.5	1	No	None
D19.06	2	73	5	40	12	5.5	1	No	None
D19.07	1	58	0	56	13	4.5	0	No	None
D19.08	2	83	0	43	16	5.0	0	No	None
D19.09	1	52	0	38	17	5.5	0	No	None
D19.10	2	79	0	33	19	5.5	0	No	None
D19.11	2	69	0	66	14	4.0	0	No	None
D19.12	2	74	5	40	13	5.5	0	No	None
D20.01	2	86	0	28	12	6.5	0	No	None
D20.02	3	106	0	25	18	6.5	0	No	None
D20.03	1	52	0	34	17	5.5	0	No	None
D20.04	1	58	0	38	16	5.5	0	No	None
D20.05	1	50	7	52	19	4.5	1	No	None
D20.06	2	73	5	42	14	5.5	1	No	None
D20.07	1	58	0	57	13	4.5	0	No	None
D20.08	2	83	0	41	14	5.5	0	No	None
D20.09	1	52	0	40	19	5.0	0	No	None
D20.10	2	79	0	32	16	6.0	0	No	None
D20.11	2	69	0	66	14	4.0	0	No	None
D20.12	2	74	5	43	16	5.0	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

Certificate # 14730500 Issued: 22/07/13 Accreditation # VIC/BDAV/12/1473

### Thermal performance specifications

Page 10 of 13

Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D21.01	2	86	0	28	12	6.5	0	No	None
D21.02	3	106	0	25	18	6.5	0	No	None
D21.03	1	52	0	34	17	5.5	0	No	None
D21.04	1	58	0	38	16	5.5	0	No	None
D21.05	1	50	7	52	19	4.5	1	No	None
D21.06	2	73	5	42	14	5.5	1	No	None
D21.07	1	58	0	57	13	4.5	0	No	None
D21.08	2	83	0	41	14	5.5	0	No	None
D21.09	1	52	0	40	19	5.0	0	No	None
D21.10	2	79	0	32	16	6.0	0	No	None
D21.11	2	69	0	66	14	4.0	0	No	None
D21.12	2	74	5	43	16	5.0	0	No	None
D22.01	2	86	0	28	12	6.5	0	No	None
D22.02	3	106	0	25	18	6.5	0	No	None
D22.03	1	52	0	34	17	5.5	0	No	None
D22.04	1	58	0	38	16	5.5	0	No	None
D22.05	1	50	7	52	19	4.5	1	No	None
D22.06	2	73	5	42	14	5.5	1	No	None
D22.07	1	58	0	57	13	4.5	0	No	None
D22.08	2	83	0	41	14	5.5	0	No	None
D22.09	1	52	0	40	19	5.0	0	No	None
D22.10	2	79	0	32	16	6.0	0	No	None
D22.11	2	69	0	66	14	4.0	0	No	None
D22.12	2	74	5	43	16	5.0	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

<b>Certificate # 14730500</b>	<b>Issued: 22/07/13</b>	<b>Accreditation # VIC/BDAV/12/1473</b>
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### Thermal performance specifications

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Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D23.01	2	86	0	28	12	6.5	0	No	None
D23.02	3	106	0	25	18	6.5	0	No	None
D23.03	1	52	0	34	17	5.5	0	No	None
D23.04	1	58	0	38	16	5.5	0	No	None
D23.05	1	50	7	52	19	4.5	1	No	None
D23.06	2	73	5	42	14	5.5	1	No	None
D23.07	1	58	0	57	13	4.5	0	No	None
D23.08	2	83	0	41	14	5.5	0	No	None
D23.09	1	52	0	40	19	5.0	0	No	None
D23.10	2	79	0	32	16	6.0	0	No	None
D23.11	2	69	0	66	14	4.0	0	No	None
D23.12	2	74	5	43	16	5.0	0	No	None
D24.01	2	86	0	28	13	6.5	0	No	None
D24.02	3	106	0	24	14	7.0	0	No	None
D24.03	1	52	0	34	17	5.5	0	No	None
D24.04	1	58	0	38	16	5.5	0	No	None
D24.05	1	50	7	52	19	4.5	1	No	None
D24.06	2	73	5	42	14	5.5	1	No	None
D24.07	1	58	0	57	13	4.5	0	No	None
D24.08	3	142	0	41	18	5.0	0	Yes	None
D24.09	2	79	0	33	16	6.0	0	No	None
D24.10	2	70	0	65	13	4.0	0	No	None
D24.11	2	74	5	44	13	5.5	1	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

Certificate # 14730500 Issued: 22/07/13 Accreditation # VIC/BDAV/12/1473

### Thermal performance specifications

Page 12 of 13

Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D25.01	4	156	0	44	18	5.0	0	No	None
D25.03	1	52	0	40	21	5.0	0	No	None
D25.04	1	58	0	62	18	4.5	0	No	None
D25.05	1	50	7	63	18	4.0	1	No	None
D25.06	2	73	5	42	14	5.5	1	No	None
D25.07	1	58	0	57	13	4.5	0	No	None
D25.08	3	142	0	41	18	5.0	0	Yes	None
D25.09	2	79	0	33	16	6.0	0	No	None
D25.10	2	69	0	31	18	6.0	0	No	None
D25.11	2	80	0	58	16	4.5	0	No	None
D26.01	4	156	0	43	18	5.0	0	No	None
D26.03	2	84	0	58	21	4.0	0	No	None
D26.04	2	93	0	44	20	5.0	0	Yes	None
D26.05	2	73	5	42	14	5.5	1	No	None
D26.06	1	58	0	57	13	4.5	0	No	None
D26.07	3	142	0	41	18	5.0	0	Yes	None
D26.08	2	79	0	33	16	6.0	0	No	None
D26.09	2	69	0	31	18	6.0	0	No	None
D26.10	2	80	0	38	16	6.0	0	No	None
D27.01	4	156	0	43	18	5.0	0	No	None
D27.03	2	84	0	41	22	5.0	0	No	None
D27.04	2	93	0	38	21	5.0	0	Yes	None
D27.05	2	73	5	44	13	5.5	1	No	None
D27.06	1	58	0	61	13	4.5	0	No	None
D27.07	3	142	0	42	17	5.0	0	Yes	None
D27.08	2	79	0	33	16	6.0	0	No	None
D27.09	2	69	0	31	18	6.0	0	No	None
D27.10	2	80	0	38	16	6.0	0	No	None



# Thermal Comfort Results

## Australia Towers II – Tower D

1-7 Australia Avenue,  
Sydney Olympic Park, NSW 2127



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

Certificate # 14730500				Issued: 22/07/13		Accreditation # VIC/BDAV/12/1473			
Thermal performance specifications								Page 13 of 13	
Unit number	Number of Bedrooms	Floor area (M <sup>2</sup> )		Predict. loads (MJ/M <sup>2</sup> /y)		Star Rating	Window in Bathroom	Window in Kitchen	Thermal Comfort Upgrades
		Con.	Uncon.	Heat	Cool (Sens & Lat)				
D28.01	4	165	0	52	19	4.5	0	Yes	None
D28.02	3	110	0	45	17	5.0	0	No	None
D28.03	3	125	0	58	15	4.5	0	No	None
D28.04	4	165	0	66	20	4.0	0	Yes	None
D28.05	2	79	0	38	18	5.5	0	No	None
D28.06	2	69	0	33	17	6.0	0	No	None
D28.07	2	80	0	38	16	6.0	0	No	None
D29.01	4	165	0	46	19	5.0	0	Yes	None
D29.02	3	110	0	40	16	5.5	0	No	None
D29.03	3	125	0	46	16	5.0	0	No	None
D29.04	4	165	0	66	20	4.0	0	Yes	None
D29.05	2	79	0	38	18	5.5	0	No	None
D29.06	2	69	0	33	17	6.0	0	No	None
D29.07	2	80	0	38	16	6.0	0	No	None
D30.01	4	232	4	39	31	4.5	1	No	None
D30.02	3	110	0	32	18	6.0	0	No	None
D30.03	3	125	0	51	16	4.5	0	No	None
D30.04	4	231	6	65	36	3.5	1	No	None
D30.05	2	79	0	40	18	5.5	0	No	None
D30.06	2	69	0	34	17	5.5	0	No	None
D30.07	2	80	0	40	16	6.0	0	No	None
D31.01	3	114	0	53	44	3.5	0	No	None



# NatHERS Certificate

## New Dwelling



**5.5 Stars**

### Simulation Software

Software Name BERS Pro 4.2  
Software Version Release 110811/A  
Engine Version CHENATH V2.13

### Simulation Details

Project Name K8-40 unit D05.03 Level 4 Mirror Mirror\_1  
Date 8/11/2013  
Location HOMEBUSH BAY PC 2127  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 52.37 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 22.6 MJ/m<sup>2</sup>  
Adjusted Heating 29.3 MJ/m<sup>2</sup>  
Adjusted Total 51.9 MJ/m<sup>2</sup>

### Dwelling Address


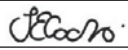
DP Number 1134933  
Unit Number  
Lot Number 2  
House Number  
Street Name 1-7 Australia Avenue  
Development Name Australia Towers II - Building D  
Suburb Sydney Olympic Park NSW 2127

### Client Details

Name Parkview Construction Pty Ltd  
Phone (02) 9506 1500 Fax (02) 9506 1599  
Email Jessica.Vranjes@pview.com.au  
Postal Address Suite 3, 2 Wentworth Park Rd, Glebe, NSW 2037  
Street Details Suite 3, 2 Wentworth Park Rd, Glebe, NSW 2037

### Assessor Details

Name Tracey Cools  
Phone 02 9970 6181 Fax 02 9944 0293  
Email admin@efficientliving.com.au  
Postal Address  
Street Details 13/13 Lagoon Street, Narrabeen NSW 2101

	<b>Energy Rating</b>	Certificate Number <u>14730500</u>
<input type="checkbox"/> single-dwelling rating		<u>5.5</u> stars
<input checked="" type="checkbox"/> multi-unit development (attach listing of ratings) <small>If selected, data specified is the average across the entire development</small>	heating <u>41</u> MJ/m <sup>2</sup>	cooling <u>17</u> MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without		
Assessor Name/Number <u>Tracey Cools VIC/BDAV/12/1473</u>		
Assessor Signature <u></u> Date <u>22/7/14</u>		

Signed by the Assessor..........Date...22./ 7 / 2014...

*Tilted roof windows with blinds cannot be modelled using this version of BERSPro.  
All windows are modelled with Holland Blinds for regulatory purposes.*

Building Element Details

Project K8-40 unit D05.03 Level 4 Mirror Mirror Run 1  
HOMEBUSH BAY PC 2127 Lat -33.90 Long 151.10 Climate File climat56.TXT

Summary

Conditioned Area	52.4 m²
Unconditioned Area	0.0 m²
Total Floor Area	52.4 m²
Total Glazed Area	23.4 m²
Total External Solid door Area	1.9 m²
Glass to Floor Area	44.6 %
Gross External Wall Area	86.5 m²
Net External Wall Area	61.2 m²

Window

14.6 m²	STG-05-055a	Stegbar	Uval	6.95	SHGC 0.72
		Glass	5mm Clear		
		Frame	Stegbar: Aluminium Sliding Door - Single Glazed		
2.1 m²	BRD-04-043a	Bradnam's Windows & Doors	Uval	4.78	SHGC 0.53
		Glass	3mm Clear/15mm Air Gap/4mm Clear		
		Frame	Bradnam's: Aluminium Bi-fold Door - Double Glazed		
6.6 m²	STG-05-009a	Stegbar	Uval	3.76	SHGC 0.61
		Glass	3mm Clear/6mm Air Gap/4mm Clear		
		Frame	Stegbar: Aluminium Awning Window - Double Glazed		

External Wall

4.2 m²	Metal Clad Cavity Panel	Bulk Insulation R 1.4
57.1 m²	Autoclaved Aerated Concrete to neighbour	No Insulation

Internal Wall

25.1 m²	Cavity Panel 70mm gap	No Insulation
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External Floor


9.7 m²	Concrete Slab, Unit Below	Carpet 10mm	No Insulation
6.1 m²	Concrete Slab, Unit Below	Ceramic Tiles 8mm	No Insulation
36.6 m²	Concrete Slab, Unit Below	80/20 Carpet 10mm/Ceramic	No Insulation

External Ceiling

52.4 m²	Plasterboard	No Insulation Apartment above
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Roof (Horizontal area)

52.4 m²	Concrete	No Insulation, Only an Air Gap	0° slope	Skillion roof
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**Energy Rating**

Certificate Number 14730500


☐ single-dwelling rating

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

heating 5.5 stars  
cooling 41 MJ/m²  
17 MJ/m²

Recessed downlights confirmation: ☐ Rated with ☒ Rated without

Assessor Name/Number Tracey Cools VIC/BDAV/12/1473

Assessor Signature  Date 22/7/14

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Multi Dwelling

Certificate number: 368640M\_05

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 29/06/2009 published by Planning & Infrastructure. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

This certificate is a revision of certificate number 368640M lodged with the consent authority or certifier on 06 July 2011 with application MP10\_0027.

It is the responsibility of the applicant to verify with the consent authority that the original, or any revised certificate, complies with the requirements of Schedule 1 Clause 2A, 4A or 6A of the Environmental Planning and Assessment Regulation 2000

Director-General

Date of issue: Tuesday, 22 July 2014

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning &  
Infrastructure

### Project summary

Project name	Australia Towers, Sydney Olympic Park_05
Street address	1 Australia Avenue Homebush Bay 2127
Local Government Area	Auburn Council
Plan type and plan number	deposited 1134933
Lot no.	2
Section no.	-
No. of residential flat buildings	1
No. of units in residential flat buildings	318
No. of multi-dwelling houses	0
No. of single dwelling houses	0

### Project score

Water	✓ 48	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 20	Target 20

Water score comprises:

- Sydney Olympic Park Authority reticulated alternative water: 12.5
- Other water efficiency commitments: 35.5

### Certificate Prepared by

Name / Company Name: Efficient Living

ABN (if applicable): 82 116 346 082



# Description of project

## Project address

Project name	Australia Towers, Sydney Olympic Park_05
Street address	1 Australia Avenue Homebush Bay 2127
Local Government Area	Auburn Council
Plan type and plan number	deposited 1134933
Lot no.	2
Section no.	-

## Project type

No. of residential flat buildings	1
No. of units in residential flat buildings	318
No. of multi-dwelling houses	0
No. of single dwelling houses	0

## Site details

Site area (m²)	10484
Roof area (m²)	590
Non-residential floor area (m²)	877
Residential car spaces	392
Non-residential car spaces	24

## Common area landscape

Common area lawn (m²)	1201
Common area garden (m²)	1155
Area of indigenous or low water use species (m²)	-

## Assessor details

Assessor number	BDAV/12/1473
Certificate number	14730500
Climate zone	56

## Project score

Water	✓ 48	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 20	Target 20

Water score comprises:

- Sydney Olympic Park Authority reticulated alternative water: 12.5
- Other water efficiency commitments: 35.5

## Description of project

The tables below describe the dwellings and common areas within the project

### Residential flat buildings - Tower D, 318 dwellings, 31 storeys above ground

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.01	2	64.0	0.0	0	0
02.05	2	73.0	5.0	0	0
03.04	1	58.0	0.0	0	0
03.08	2	77.0	6.0	0	0
03.12	2	74.0	5.0	0	0
04.04	1	58.0	0.0	0	0
04.08	2	83.0	0.0	0	0
04.12	2	74.0	5.0	0	0
05.04	1	58.0	0.0	0	0
05.08	2	83.0	0.0	0	0
05.12	2	74.0	5.0	0	0
06.04	1	58.0	0.0	0	0
06.08	2	83.0	0.0	0	0
06.12	2	74.0	5.0	0	0
07.04	1	58.0	0.0	0	0
07.08	2	83.0	0.0	0	0
07.12	2	74.0	5.0	0	0
08.04	1	58.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.02	2	75.0	0.0	0	0
03.01	2	86.0	0.0	0	0
03.05	1	50.0	7.0	0	0
03.09	1	52.0	0.0	0	0
04.01	2	86.0	0.0	0	0
04.05	1	50.0	7.0	0	0
04.09	1	52.0	0.0	0	0
05.01	2	86.0	0.0	0	0
05.05	1	50.0	7.0	0	0
05.09	1	52.0	0.0	0	0
06.01	2	86.0	0.0	0	0
06.05	1	50.0	7.0	0	0
06.09	1	52.0	0.0	0	0
07.01	2	86.0	0.0	0	0
07.05	1	50.0	7.0	0	0
07.09	1	52.0	0.0	0	0
08.01	2	86.0	0.0	0	0
08.05	1	50.0	7.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.03	2	81.0	0.0	0	0
03.02	3	106.0	0.0	0	0
03.06	2	73.0	5.0	0	0
03.10	2	79.0	0.0	0	0
04.02	3	106.0	0.0	0	0
04.06	2	73.0	5.0	0	0
04.10	2	79.0	0.0	0	0
05.02	3	106.0	0.0	0	0
05.06	2	73.0	5.0	0	0
05.10	2	79.0	0.0	0	0
06.02	3	106.0	0.0	0	0
06.06	2	73.0	5.0	0	0
06.10	2	79.0	0.0	0	0
07.02	3	106.0	0.0	0	0
07.06	2	73.0	5.0	0	0
07.10	2	79.0	0.0	0	0
08.02	3	106.0	0.0	0	0
08.06	2	73.0	5.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
02.04	2	86.0	0.0	0	0
03.03	1	52.0	0.0	0	0
03.07	1	58.0	0.0	0	0
03.11	2	69.0	0.0	0	0
04.03	1	52.0	0.0	0	0
04.07	1	58.0	0.0	0	0
04.11	2	69.0	0.0	0	0
05.03	1	52.0	0.0	0	0
05.07	1	58.0	0.0	0	0
05.11	2	69.0	0.0	0	0
06.03	1	52.0	0.0	0	0
06.07	1	58.0	0.0	0	0
06.11	2	69.0	0.0	0	0
07.03	1	52.0	0.0	0	0
07.07	1	58.0	0.0	0	0
07.11	2	69.0	0.0	0	0
08.03	1	52.0	0.0	0	0
08.07	1	58.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
08.08	2	83.0	0.0	0	0
08.12	2	74.0	5.0	0	0
09.04	1	58.0	0.0	0	0
09.08	2	83.0	0.0	0	0
09.12	2	74.0	5.0	0	0
10.04	1	58.0	0.0	0	0
10.08	2	83.0	0.0	0	0
10.12	2	74.0	5.0	0	0
11.04	1	58.0	0.0	0	0
11.08	2	83.0	0.0	0	0
11.12	2	74.0	5.0	0	0
12.04	1	58.0	0.0	0	0
12.08	2	83.0	0.0	0	0
12.12	2	74.0	5.0	0	0
13.04	1	58.0	0.0	0	0
13.08	2	83.0	0.0	0	0
13.12	2	74.0	5.0	0	0
14.04	1	58.0	0.0	0	0
14.08	2	83.0	0.0	0	0
14.12	2	74.0	5.0	0	0
15.04	1	58.0	0.0	0	0
15.08	2	83.0	0.0	0	0
15.12	2	74.0	5.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
08.09	1	52.0	0.0	0	0
09.01	2	86.0	6.0	0	0
09.05	1	50.0	7.0	0	0
09.09	1	52.0	0.0	0	0
10.01	2	86.0	0.0	0	0
10.05	1	50.0	7.0	0	0
10.09	1	52.0	0.0	0	0
11.01	2	86.0	0.0	0	0
11.05	1	50.0	7.0	0	0
11.09	1	52.0	0.0	0	0
12.01	2	86.0	0.0	0	0
12.05	1	58.0	7.0	0	0
12.09	1	52.0	0.0	0	0
13.01	2	86.0	0.0	0	0
13.05	1	50.0	7.0	0	0
13.09	1	52.0	0.0	0	0
14.01	2	86.0	0.0	0	0
14.05	1	50.0	7.0	0	0
14.09	1	52.0	0.0	0	0
15.01	2	86.0	0.0	0	0
15.05	1	50.0	7.0	0	0
15.09	1	52.0	0.0	0	0
16.01	2	86.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
08.10	2	79.0	0.0	0	0
09.02	3	106.0	0.0	0	0
09.06	2	73.0	5.0	0	0
09.10	2	79.0	0.0	0	0
10.02	3	106.0	0.0	0	0
10.06	2	73.0	5.0	0	0
10.10	2	79.0	0.0	0	0
11.02	3	106.0	0.0	0	0
11.06	2	73.0	5.0	0	0
11.10	2	79.0	0.0	0	0
12.02	3	106.0	0.0	0	0
12.06	2	73.0	5.0	0	0
12.10	2	79.0	0.0	0	0
13.02	3	106.0	0.0	0	0
13.06	2	73.0	5.0	0	0
13.10	2	79.0	0.0	0	0
14.02	3	106.0	0.0	0	0
14.06	2	73.0	5.0	0	0
14.10	2	79.0	0.0	0	0
15.02	3	106.0	0.0	0	0
15.06	2	73.0	5.0	0	0
15.10	2	79.0	0.0	0	0
16.02	3	106.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
08.11	2	69.0	0.0	0	0
09.03	1	52.0	0.0	0	0
09.07	1	58.0	0.0	0	0
09.11	2	69.0	0.0	0	0
10.03	1	52.0	0.0	0	0
10.07	1	58.0	0.0	0	0
10.11	2	69.0	0.0	0	0
11.03	1	52.0	0.0	0	0
11.07	1	58.0	0.0	0	0
11.11	2	69.0	0.0	0	0
12.03	1	52.0	0.0	0	0
12.07	1	58.0	0.0	0	0
12.11	2	69.0	0.0	0	0
13.03	1	52.0	0.0	0	0
13.07	1	58.0	0.0	0	0
13.11	2	69.0	0.0	0	0
14.03	1	52.0	0.0	0	0
14.07	1	58.0	0.0	0	0
14.11	2	69.0	0.0	0	0
15.03	1	52.0	0.0	0	0
15.07	1	58.0	0.0	0	0
15.11	2	69.0	0.0	0	0
16.03	1	52.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
16.04	1	58.0	0.0	0	0
16.08	2	83.0	0.0	0	0
16.12	2	74.0	5.0	0	0
17.04	1	58.0	0.0	0	0
17.08	2	83.0	0.0	0	0
17.12	2	74.0	5.0	0	0
18.04	1	58.0	0.0	0	0
18.08	2	83.0	0.0	0	0
18.12	2	74.0	5.0	0	0
19.04	1	58.0	0.0	0	0
19.08	2	83.0	0.0	0	0
19.12	2	74.0	5.0	0	0
20.04	1	58.0	0.0	0	0
20.08	2	83.0	0.0	0	0
20.12	2	74.0	5.0	0	0
21.04	1	58.0	0.0	0	0
21.08	2	83.0	0.0	0	0
21.12	2	74.0	5.0	0	0
22.04	1	58.0	0.0	0	0
22.08	2	83.0	0.0	0	0
22.12	2	74.0	5.0	0	0
23.04	1	58.0	0.0	0	0
23.08	2	83.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
16.05	1	50.0	7.0	0	0
16.09	1	52.0	0.0	0	0
17.01	2	86.0	0.0	0	0
17.05	1	50.0	7.0	0	0
17.09	1	52.0	0.0	0	0
18.01	2	86.0	0.0	0	0
18.05	1	50.0	7.0	0	0
18.09	1	52.0	0.0	0	0
19.01	2	86.0	0.0	0	0
19.05	1	50.0	7.0	0	0
19.09	1	52.0	0.0	0	0
20.01	2	86.0	0.0	0	0
20.05	1	50.0	7.0	0	0
20.09	1	52.0	0.0	0	0
21.01	2	86.0	0.0	0	0
21.05	1	50.0	7.0	0	0
21.09	1	52.0	0.0	0	0
22.01	2	86.0	0.0	0	0
22.05	1	50.0	7.0	0	0
22.09	1	52.0	0.0	0	0
23.01	2	86.0	0.0	0	0
23.05	1	50.0	7.0	0	0
23.09	1	52.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
16.06	2	73.0	5.0	0	0
16.10	2	79.0	0.0	0	0
17.02	3	106.0	0.0	0	0
17.06	2	73.0	5.0	0	0
17.10	2	79.0	0.0	0	0
18.02	3	106.0	0.0	0	0
18.06	2	73.0	5.0	0	0
18.10	2	79.0	0.0	0	0
19.02	3	106.0	0.0	0	0
19.06	2	73.0	5.0	0	0
19.10	2	79.0	0.0	0	0
20.02	3	106.0	0.0	0	0
20.06	2	73.0	5.0	0	0
20.10	2	79.0	0.0	0	0
21.02	3	106.0	0.0	0	0
21.06	2	73.0	5.0	0	0
21.10	2	79.0	0.0	0	0
22.02	3	106.0	0.0	0	0
22.06	2	73.0	5.0	0	0
22.10	2	79.0	0.0	0	0
23.02	3	106.0	0.0	0	0
23.06	2	73.0	5.0	0	0
23.10	2	79.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
16.07	1	58.0	0.0	0	0
16.11	2	69.0	0.0	0	0
17.03	1	52.0	0.0	0	0
17.07	1	58.0	0.0	0	0
17.11	2	69.0	0.0	0	0
18.03	1	52.0	0.0	0	0
18.07	1	58.0	0.0	0	0
18.11	2	69.0	0.0	0	0
19.03	1	52.0	0.0	0	0
19.07	1	58.0	0.0	0	0
19.11	2	69.0	0.0	0	0
20.03	1	53.0	0.0	0	0
20.07	1	58.0	0.0	0	0
20.11	2	69.0	0.0	0	0
21.03	1	52.0	0.0	0	0
21.07	1	58.0	0.0	0	0
21.11	2	69.0	0.0	0	0
22.03	1	52.0	0.0	0	0
22.07	1	58.0	0.0	0	0
22.11	2	69.0	0.0	0	0
23.03	1	52.0	0.0	0	0
23.07	1	58.0	0.0	0	0
23.11	2	69.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
23.12	2	74.0	5.0	0	0
24.04	1	58.0	0.0	0	0
24.08	3	142.0	0.0	0	0
25.01	4 or more bedrooms	156.0	0.0	0	0
25.06	2	73.0	5.0	0	0
25.10	2	69.0	0.0	0	0
26.04	2	93.0	0.0	0	0
26.08	2	79.0	0.0	0	0
27.03	2	84.0	0.0	0	0
27.07	3	142.0	0.0	0	0
28.01	4 or more bedrooms	165.0	0.0	0	0
28.05	2	79.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
24.01	2	86.0	0.0	0	0
24.05	1	50.0	7.0	0	0
24.09	2	79.0	0.0	0	0
25.03	1	52.0	0.0	0	0
25.07	1	58.0	0.0	0	0
25.11	2	80.0	0.0	0	0
26.05	2	73.0	5.0	0	0
26.09	2	69.0	0.0	0	0
27.04	2	93.0	0.0	0	0
27.08	2	79.0	0.0	0	0
28.02	3	110.0	0.0	0	0
28.06	2	69.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
24.02	3	106.0	0.0	0	0
24.06	2	73.0	5.0	0	0
24.10	2	70.0	0.0	0	0
25.04	1	58.0	0.0	0	0
25.08	3	142.0	0.0	0	0
26.01	4 or more bedrooms	156.0	0.0	0	0
26.06	1	58.0	0.0	0	0
26.10	2	80.0	0.0	0	0
27.05	2	73.0	5.0	0	0
27.09	2	69.0	0.0	0	0
28.03	3	125.0	0.0	0	0
28.07	2	80.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
24.03	1	52.0	0.0	0	0
24.07	1	58.0	0.0	0	0
24.11	2	74.0	5.0	0	0
25.05	1	50.0	7.0	0	0
25.09	2	79.0	0.0	0	0
26.03	2	84.0	0.0	0	0
26.07	3	142.0	0.0	0	0
27.01	4 or more bedrooms	156.0	0.0	0	0
27.06	1	58.0	0.0	0	0
27.10	2	80.0	0.0	0	0
28.04	4 or more bedrooms	165.0	0.0	0	0
29.01	4 or more bedrooms	165.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
29.02	3	110.0	0.0	0	0
29.06	2	69.0	0.0	0	0
30.03	3	125.0	0.0	0	0
30.07	2	80.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
29.03	3	125.0	0.0	0	0
29.07	2	80.0	0.0	0	0
30.04	4 or more bedrooms	231.0	6.0	14	0
31.01	3	114.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
29.04	4 or more bedrooms	165.0	0.0	0	0
30.01	4 or more bedrooms	232.0	4.0	14	0
30.05	2	79.0	0.0	0	0

Dwelling no.	No. of bedrooms	Conditioned floor area (m <sup>2</sup> )	Unconditioned floor area (m <sup>2</sup> )	Area of garden & lawn (m <sup>2</sup> )	Indigenous species (min area m <sup>2</sup> )
29.05	2	79.0	0.0	0	0
30.02	3	110.0	0.0	0	0
30.06	2	69.0	0.0	0	0

## Description of project

The tables below describe the dwellings and common areas within the project

### Common areas of unit building - Tower D

Common area	Floor area (m²)
Lift car (No. 4)	-
Communal Space	104
Hallway/lobby type (No. 1)	2155

Common area	Floor area (m²)
Lift car (No. 5)	-
Plant or service room	251

Common area	Floor area (m²)
Lift car (No. 6)	-
Meter Room	29

### Common areas of the development (non-building specific)

Common area	Floor area (m²)
Car park area ground to Basement 2	7075
Switch Room	28
Change rooms/WC	85

Common area	Floor area (m²)
Car park Basement 3 & 4	608
Storage rooms	843
Ground floor lobby type (No. 1)	395

Common area	Floor area (m²)
Garbage rooms	245
Mail Room	42

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Tower D

### (a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

### (b) Common areas and central systems/facilities

- (i) Water
- (ii) Energy

## 2. Commitments for multi-dwelling houses

## 3. Commitments for single dwelling houses

## 4. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy



## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

### 1. Commitments for Residential flat buildings - Tower D

#### (a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
30.01, 30.04	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	-	-	2 star	36	yes	outdoors	no	-	-	-

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
10.12, 11.01, 11.02, 11.03, 11.04, 11.05, 11.06, 11.07, 11.08, 11.09, 11.10, 11.11, 11.12, 12.01, 12.02, 12.03, 12.04, 12.05, 12.06, 12.07, 12.08, 12.09, 12.10, 12.11, 12.12, 13.01, 13.02, 13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11, 13.12, 14.01, 14.02, 14.03,	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	-	-	2 star	-	-	-	-	-	-	-

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
14.04, 14.05, 14.06, 14.07, 14.08, 14.09, 14.10, 14.11, 14.12, 15.01, 15.02, 15.03, 15.04, 15.05, 15.06, 15.07, 15.08, 15.09, 15.10, 15.11, 15.12, 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07, 16.08, 16.09, 16.10, 16.11, 16.12, 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
17.08, 17.09, 17.10, 17.11, 17.12, 18.01, 18.02, 18.03, 18.04, 18.05, 18.06, 18.07, 18.08, 18.09, 18.10, 18.11, 18.12, 19.01, 19.02, 19.03, 27.10, 28.01, 28.02, 28.03, 28.04														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
02.01, 02.02, 02.03, 02.04, 02.05, 03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, 03.08, 03.09, 03.10, 03.11, 03.12, 04.01, 04.02, 04.03, 04.04, 04.05, 04.06, 04.07, 04.08, 04.09, 04.10, 04.11, 04.12, 05.01, 05.02, 05.03, 05.04, 05.05, 05.06, 05.07, 05.08, 05.09, 05.10, 05.11,	3 star (> 7.5 but <= 9 L/min)	3 star	3 star	3 star	-	-	2 star	-	-	-	-	-	-	-

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
05.12,														
06.01,														
06.02,														
06.03,														
06.04,														
06.05,														
06.06,														
06.07,														
06.08,														
06.09,														
06.10,														
06.11,														
06.12,														
07.01,														
07.02,														
07.03,														
07.04,														
07.05,														
07.06,														
07.07,														
07.08,														
07.09,														
07.10,														
07.11,														
07.12,														
08.01,														
08.02,														
08.03,														
08.04,														
08.05,														
08.06,														
08.07,														
08.08,														
08.09,														
08.10,														
08.11,														
08.12,														
09.01,														
09.02,														
09.03,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
09.04, 09.05, 09.06, 09.07, 09.08, 09.09, 09.10, 09.11, 09.12, 10.01, 10.02, 10.03, 10.04, 10.05, 10.06, 10.07, 10.08, 10.09, 10.10, 10.11, 19.04, 19.05, 19.06, 19.07, 19.08, 19.09, 19.10, 19.11, 19.12, 20.01, 20.02, 20.03, 20.04, 20.05, 20.06, 20.07, 20.08, 20.09, 20.10, 20.11,														



	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
20.12, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07, 21.08, 21.09, 21.10, 21.11, 21.12, 22.01, 22.02, 22.03, 22.04, 22.05, 22.06, 22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 23.01, 23.02, 23.03, 23.04, 23.05, 23.06, 23.07, 23.08, 23.09, 23.10, 23.11, 23.12, 24.01, 24.02, 24.03,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
24.04, 24.05, 24.06, 24.07, 24.08, 24.09, 24.10, 24.11, 25.01, 25.03, 25.04, 25.05, 25.06, 25.07, 25.08, 25.09, 25.10, 25.11, 26.01, 26.03, 26.04, 26.05, 26.06, 26.07, 26.08, 26.09, 26.10, 27.01, 27.03, 27.04, 27.05, 27.06, 27.07, 27.08, 27.09, 28.05, 28.06, 28.07, 29.01, 29.02,														

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
29.03, 29.04, 29.05, 29.06, 29.07, 30.02, 30.03, 30.05, 30.06, 30.07, 31.01														

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	reticulated alternative water supply	-	See central systems	yes	yes	-	-	-
None	-	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All dwellings	central hot water system 1	individual fan, ducted to façade or roof	interlocked to light	individual fan, not ducted	manual switch on/off	individual fan, ducted to façade or roof	interlocked to light

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
31.01	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	4	2	yes	yes	yes	yes	0	no
26.04, 27.04	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	0	yes
30.01, 30.04	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	4	1	yes	yes	yes	yes	1	no
25.01, 26.01, 27.01	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	4	1	yes	yes	yes	yes	0	no
24.08, 25.08, 26.07, 27.07	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	3	1	yes	yes	yes	yes	0	yes
28.01, 28.04, 29.01, 29.04	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	4	1	yes	yes	yes	yes	0	yes

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.05, 04.05, 05.05, 06.05, 07.05, 08.05, 09.05, 10.05, 11.05, 12.05, 13.05, 14.05, 15.05, 16.05, 17.05, 18.05, 19.05, 20.05, 21.05, 22.05, 23.05, 24.05, 25.05	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1	1	yes	yes	yes	yes	1	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.06, 04.06, 05.06, 06.06, 07.06, 08.06, 09.06, 10.06, 11.06, 12.06, 13.06, 14.06, 15.06, 16.06, 17.06, 18.06, 19.06, 20.06, 21.06, 22.06, 23.06, 24.06, 24.11, 25.06, 26.05, 27.05	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	1	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.02, 04.02, 05.02, 06.02, 07.02, 08.02, 09.02, 10.02, 11.02, 12.02, 13.02, 14.02, 15.02, 16.02, 17.02, 18.02, 19.02, 20.02, 21.02, 22.02, 23.02, 24.02, 28.02, 28.03, 29.02, 29.03, 30.02, 30.03	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	3	1	yes	yes	yes	yes	0	no



Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
03.03, 03.04, 03.07, 03.09, 04.03, 04.04, 04.07, 04.09, 05.03, 05.04, 05.07, 05.09, 06.03, 06.04, 06.07, 06.09, 07.03, 07.04, 07.07, 07.09, 08.04, 08.07, 08.09, 09.03, 09.04, 09.07, 09.09, 10.03, 10.04, 10.07, 10.09, 11.03, 11.04, 11.07, 11.09, 12.03, 12.04, 12.07, 12.09,	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1	1	yes	yes	yes	yes	0	no

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
13.03, 13.04, 13.07, 13.09, 14.03, 14.04, 14.07, 14.09, 15.03, 15.04, 15.07, 15.09, 16.03, 16.04, 16.07, 16.09, 17.03, 17.04, 17.07, 17.09, 18.03, 18.04, 18.07, 18.09, 19.03, 19.04, 19.07, 19.09, 20.03, 20.04, 20.07, 20.09, 21.03, 21.04, 21.07, 21.09, 22.03, 22.04, 22.07,												

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
22.09, 23.03, 23.04, 23.09, 24.03, 24.04, 24.07, 25.03, 25.04, 25.07, 26.06, 27.06												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
02.01, 02.02, 02.03, 02.04, 02.05, 03.01, 03.08, 03.10, 03.11, 03.12, 04.01, 04.08, 04.10, 04.11, 04.12, 05.01, 05.08, 05.10, 05.11, 05.12, 06.01, 06.08, 06.10, 06.11, 06.12, 07.01, 07.08, 07.10, 07.11, 07.12, 08.01, 08.03, 08.08, 08.10, 08.11, 08.12, 09.01, 09.08, 09.10,	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	1-phase airconditioning 2.5 Star (new rating)	2	1	yes	yes	yes	yes	0	no

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
09.11, 09.12, 10.01, 10.08, 10.10, 10.11, 10.12, 11.01, 11.08, 11.10, 11.11, 11.12, 12.01, 12.08, 12.10, 12.11, 12.12, 13.01, 13.08, 13.10, 13.11, 13.12, 14.01, 14.08, 14.10, 14.11, 14.12, 15.01, 15.08, 15.10, 15.11, 15.12, 16.01, 16.08, 16.10, 16.11, 16.12, 17.01, 17.08,												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
17.10, 17.11, 17.12, 18.01, 18.08, 18.10, 18.11, 18.12, 19.01, 19.08, 19.10, 19.11, 19.12, 20.01, 20.08, 20.10, 20.11, 20.12, 21.01, 21.08, 21.10, 21.11, 21.12, 22.01, 22.08, 22.10, 22.11, 22.12, 23.01, 23.07, 23.08, 23.10, 23.11, 23.12, 24.01, 24.09, 24.10, 25.09, 25.10,												

Dwelling no.	Cooling		Heating		Artificial lighting						Natural lighting	
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
25.11, 26.03, 26.08, 26.09, 26.10, 27.03, 27.08, 27.09, 27.10, 28.05, 28.06, 28.07, 29.05, 29.06, 29.07, 30.05, 30.06, 30.07												

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
31.01	-	-	-	-	gas cooktop & electric oven	-	no	3.5 star	-	2 star	no	no
30.01, 30.04	gas	yes	-	-	gas cooktop & electric oven	-	-	3.5 star	-	2 star	no	no

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
02.01, 02.02, 02.03, 02.04, 02.05, 03.01, 03.02, 03.03, 03.04, 03.05, 03.06, 03.07, 03.08, 03.09, 03.10, 03.11, 03.12, 04.01, 04.02, 04.03, 04.04, 04.05, 04.06, 04.07, 04.08, 04.09, 04.10, 04.11, 04.12, 05.01, 05.02, 05.03, 05.04, 05.05, 05.06, 05.07, 05.08, 05.09,	-	-	-	-	gas cooktop & electric oven	-	-	3.5 star	-	2 star	no	no



	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
05.10, 05.11, 05.12, 06.01, 06.02, 06.03, 06.04, 06.05, 06.06, 06.07, 06.08, 06.09, 06.10, 06.11, 06.12, 07.01, 07.02, 07.03, 07.04, 07.05, 07.06, 07.07, 07.08, 07.09, 07.10, 07.11, 07.12, 08.01, 08.02, 08.03, 08.04, 08.05, 08.06, 08.07, 08.08, 08.09, 08.10, 08.11,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
08.12, 09.01, 09.02, 09.03, 09.04, 09.05, 09.06, 09.07, 09.08, 09.09, 09.10, 09.11, 09.12, 10.01, 10.02, 10.03, 10.04, 10.05, 10.06, 10.07, 10.08, 10.09, 10.10, 10.11, 10.12, 11.01, 11.02, 11.03, 11.04, 11.05, 11.06, 11.07, 11.08, 11.09, 11.10, 11.11, 11.12, 12.01,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
12.02, 12.03, 12.04, 12.05, 12.06, 12.07, 12.08, 12.09, 12.10, 12.11, 12.12, 13.01, 13.02, 13.03, 13.04, 13.05, 13.06, 13.07, 13.08, 13.09, 13.10, 13.11, 13.12, 14.01, 14.02, 14.03, 14.04, 14.05, 14.06, 14.07, 14.08, 14.09, 14.10, 14.11, 14.12, 15.01, 15.02, 15.03,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
15.04, 15.05, 15.06, 15.07, 15.08, 15.09, 15.10, 15.11, 15.12, 16.01, 16.02, 16.03, 16.04, 16.05, 16.06, 16.07, 16.08, 16.09, 16.10, 16.11, 16.12, 17.01, 17.02, 17.03, 17.04, 17.05, 17.06, 17.07, 17.08, 17.09, 17.10, 17.11, 17.12, 18.01, 18.02, 18.03, 18.04, 18.05,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
18.06, 18.07, 18.08, 18.09, 18.10, 18.11, 18.12, 19.01, 19.02, 19.03, 19.04, 19.05, 19.06, 19.07, 19.08, 19.09, 19.10, 19.11, 19.12, 20.01, 20.02, 20.03, 20.04, 20.05, 20.06, 20.07, 20.08, 20.09, 20.10, 20.11, 20.12, 21.01, 21.02, 21.03, 21.04, 21.05, 21.06, 21.07,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
21.08, 21.09, 21.10, 21.11, 21.12, 22.01, 22.02, 22.03, 22.04, 22.05, 22.06, 22.07, 22.08, 22.09, 22.10, 22.11, 22.12, 23.01, 23.02, 23.03, 23.04, 23.05, 23.06, 23.07, 23.08, 23.09, 23.10, 23.11, 23.12, 24.01, 24.02, 24.03, 24.04, 24.05, 24.06, 24.07, 24.08, 24.09,												

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
24.10, 24.11, 25.01, 25.03, 25.04, 25.05, 25.06, 25.07, 25.08, 25.09, 25.10, 25.11, 26.01, 26.03, 26.04, 26.05, 26.06, 26.07, 26.08, 26.09, 26.10, 27.01, 27.03, 27.04, 27.05, 27.06, 27.07, 27.08, 27.09, 27.10, 28.01, 28.02, 28.03, 28.04, 28.05, 28.06, 28.07, 29.01,												

Dwelling no.	Individual pool		Individual spa		Appliances & other efficiency measures							
	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
29.02, 29.03, 29.04, 29.05, 29.06, 29.07, 30.02, 30.03, 30.05, 30.06, 30.07												

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.			
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.			
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must:	✓	✓	✓



(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.			
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
02.01	61	22
02.03	33	25
02.04	55	18
02.05	48	13
03.01	39	19
03.02	38	19
03.03	46	26
03.04	52	23
03.05	46	25
03.06	33	14
03.07	58	20
03.08	46	28
03.09	66	30
03.10	60	20
03.12	66	15
06.08	28	20
16.02	34	20
18.07	46	13
21.07	57	14

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
24.02	24	14
24.10	65	13
25.01	44	18
25.03	40	21
25.05	63	18
25.07	47	13
25.11	58	16
26.03	58	21
26.04	44	20
27.03	41	22
27.04	38	21
27.06	61	13
28.02	45	17
28.03	58	15
29.01	46	19
29.03	46	16
30.01	39	31
30.02	32	18
30.03	51	16
30.04	65	36
30.05	40	18
31.01	53	44
03.11, 25.04	62	18
04.08, 05.08	38	20
24.11, 27.05	44	13
26.01, 27.01	43	18
28.04, 29.04	66	20

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
28.05, 29.05	38	18
28.06, 29.06	33	17
29.02, 30.07	40	16
04.01, 05.01, 06.01	24	15
04.02, 05.02, 06.02	21	17
04.03, 05.03, 06.03	29	23
04.04, 05.04, 06.04	32	20
04.05, 05.05, 06.05	46	21
04.06, 05.06, 06.06	36	12
04.09, 05.09, 06.09	35	23
04.10, 05.10, 06.10	28	18
04.11, 05.11, 06.11	59	15
04.12, 05.12, 06.12	36	13
24.08, 25.08, 26.07	41	18
25.10, 26.09, 27.09	31	18
04.07, 05.07, 06.07, 14.08	52	17
07.01, 08.01, 09.01, 10.01	26	13
07.02, 08.02, 09.02, 10.02	22	15
07.03, 08.03, 09.03, 10.03	32	21
07.04, 08.04, 09.04, 10.04	35	18
07.05, 08.05, 09.05, 10.05	49	19
07.06, 08.06, 09.06, 10.06	38	11
07.07, 08.07, 09.07, 10.07	55	16
07.08, 08.08, 09.08, 10.08	40	17
07.09, 08.09, 09.09, 10.09	37	20
07.10, 08.10, 09.10, 10.10	30	17
07.11, 08.11, 09.11, 10.11	62	13

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m²/yr)	Area adjusted cooling load (in mJ/m²/yr)
07.12, 08.12, 09.12, 10.12	38	13
11.01, 12.01, 13.01, 14.01	28	14
11.02, 12.02, 13.02, 14.02	23	21
11.03, 12.03, 13.03, 14.03	31	17
11.04, 12.04, 13.04, 14.04	37	15
11.06, 12.06, 13.06, 14.06	39	12
11.07, 12.07, 13.07, 14.07	54	13
11.08, 12.08, 13.08, 27.07	42	17
11.09, 12.09, 13.09, 14.09	37	17
11.10, 12.10, 13.10, 14.10	32	19
11.11, 12.11, 13.11, 14.11	65	15
11.12, 12.12, 13.12, 14.12	39	14
15.02, 17.02, 18.02, 19.02	24	20
15.07, 16.07, 17.07, 19.07	56	13
20.01, 21.01, 22.01, 23.01	28	12
20.02, 21.02, 22.02, 23.02	25	18
20.08, 21.08, 22.08, 23.08	41	14
20.09, 21.09, 22.09, 23.09	40	19
20.10, 21.10, 22.10, 23.10	32	16
02.02, 11.05, 12.05, 13.05, 14.05	49	21
15.04, 16.04, 17.04, 18.04, 19.04	38	15
15.05, 16.05, 17.05, 18.05, 19.05	51	19
15.06, 16.06, 17.06, 18.06, 19.06	40	12
15.09, 16.09, 17.09, 18.09, 19.09	38	17
15.10, 16.10, 17.10, 18.10, 19.10	33	19
15.12, 16.12, 17.12, 18.12, 19.12	40	13
20.07, 22.07, 23.07, 24.07, 26.06	57	13

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
15.01, 16.01, 17.01, 18.01, 19.01, 24.01	28	13
20.03, 21.03, 22.03, 23.03, 24.03, 30.06	34	17
20.05, 21.05, 22.05, 23.05, 24.05, 28.01	52	19
20.06, 21.06, 22.06, 23.06, 24.06, 25.06, 26.05	42	14
15.03, 16.03, 17.03, 18.03, 19.03, 24.09, 25.09, 26.08, 27.08	33	16
15.08, 16.08, 17.08, 18.08, 19.08, 20.12, 21.12, 22.12, 23.12	43	16
15.11, 16.11, 17.11, 18.11, 19.11, 20.11, 21.11, 22.11, 23.11	66	14
All other dwellings	38	16

**(b) Common areas and central systems/facilities**

<b>(i) Water</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

<b>Common area</b>	<b>Showerheads rating</b>	<b>Toilets rating</b>	<b>Taps rating</b>	<b>Clothes washers rating</b>
All common areas	3 star (> 7.5 but ≤ 9 L/min)	3 star	3 star	no common laundry facility

<b>(ii) Energy</b>	<b>Show on DA plans</b>	<b>Show on CC/CDC plans &amp; specs</b>	<b>Certifier check</b>
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 4)	-	-	compact fluorescent	connected to lift call button	No
Lift car (No. 5)	-	-	compact fluorescent	connected to lift call button	No
Lift car (No. 6)	-	-	compact fluorescent	connected to lift call button	No
Communal Space	ventilation supply only	time clock or BMS controlled	compact fluorescent	zoned switching with motion sensor	No
Plant or service room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Meter Room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Hallway/lobby type (No. 1)	ventilation supply only	none ie. continuous	compact fluorescent	zoned switching with motion sensor	No

Central energy systems	Type	Specification
Lift (No. 4)	geared traction with V V A C motor	Number of levels (including basement): 35
Lift (No. 5)	gearless traction with V V V F motor	Number of levels (including basement): 34
Lift (No. 6)	gearless traction with V V V F motor	Number of levels (including basement): 34

#### 4. Commitments for common areas and central systems/facilities for the development (non-building specific)

##### (b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star (> 7.5 but ≤ 9 L/min)	3 star	3 star	no common laundry facility

Central systems	Size	Configuration	Connection (to allow for...)
Reticulated alternative water supply	-	Installation of plumbing to make provision for connection to Sydney Olympic Park Authority reticulated alternative water supply.	- irrigation of 2356 square metres of common landscaped area on the site - car washing in 2 car washing bays on the site
Fire sprinkler system (No. 1)	-	-	-



(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Common area	Common area ventilation system		Common area lighting		
	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Car park area ground to Basement 2	ventilation supply only	carbon monoxide monitor + VSD fan	fluorescent	zoned switching with motion sensor	No
Car park Basement 3 & 4	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	zoned switching with motion sensor	No
Garbage rooms	ventilation exhaust only	-	fluorescent	motion sensors	No
Switch Room	no mechanical ventilation	-	fluorescent	manual on / manual off	No
Storage rooms	ventilation supply only	interlocked to light	fluorescent	manual on / manual off	No
Mail Room	ventilation supply only	none ie. continuous	compact fluorescent	manual on / manual off	No
Change rooms/WC	ventilation exhaust only	time clock or BMS controlled	compact fluorescent	zoned switching with motion sensor	No
Ground floor lobby type (No. 1)	ventilation supply only	none ie. continuous	compact fluorescent	zoned switching with motion sensor	No

Central energy systems	Type	Specification
Central hot water system (No. 1)	gas-fired boiler	Piping insulation (ringmain & supply risers): (a) Piping external to building: R1.0 (~38 mm); (b) Piping internal to building: R1.0 (~38 mm)

## Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

## Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).