

## **Chapman Planning Pty Ltd**

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### **Clause 4.6 – Exceptions to Development Standards**

**Height of Buildings – Clause 4.3 Canterbury LEP 2012.**

**Property Description:** 364 – 374 Canterbury Road, Canterbury

**Development:** Mixed Use Development

#### **Introduction**

This clause 4.6 variation supports amended plans (Revision E) with the variation to the building height being the lift overrun on the front building (Canterbury Road) and roof structure associated with the communal open space area, and the plans have increased the floor to floor height to 3m with the upper roof level exceeding 18m in height.

This clause 4.6 seeks variation to the 18m building height development standard contained in clause 4.3 – Height of Buildings contained in the Canterbury LEP 2012.

The proposed front building has a 2.8m - variation measured to the lift overrun and roof structure for the communal area and a 450mm variation measured to the roof of the front and rear buildings. The lift overrun and roof structure for the communal open space (front building) is setback from the edge of the building form and will not be visually dominate when viewed from the Canterbury Road, with the roof-top communal area contributing to residential amenity by providing communal open space receiving solar access and distant views/outlook.

The building presents a 6 storey form to Canterbury Road and Onslow Lane consistent with the 18m height control for development on Canterbury Road.

#### **What are the objectives of Clause 4.6?**

The objectives of clause 4.6 – Exceptions to development standards are:

- (a) *to provide an appropriate degree of flexibility in applying certain development standards to particular development,*

*(b) to achieve better outcomes for and from development by allowing flexibility in particular circumstances.*

The proposed variation to the 18m height development standard is consistent with the objectives of clause 4.6 as follows:

- The portions of the building exceeding the 18m height control are to the lift overrun and roof structure for the communal space, and upper roof level to ensure the development achieves a suitable floor to floor height.

In my opinion the variations are an acceptable degree of flexibility to the height control and achieve an acceptable planning outcome with the provision of accessible rooftop communal space and good residential amenity.

#### **What are the objectives of the development standard?**

The objectives of the development standard are at clause 4.3(1) of the Canterbury LEP 2012 as follows:

- (a) to establish and maintain the desirable attributes and character of an area,*
- (b) to minimise overshadowing and ensure there is a desired level of solar access and public open space,*
- (c) to support building design that contributes positively to the streetscape and visual amenity of an area,*
- (d) to reinforce important road frontages in specific localities.*

The proposed building meets the objectives of the building height development standard based on the following assessment:

- The development proposal has a 4 storey form to Canterbury Road with the upper levels (5<sup>th</sup> and 6<sup>th</sup> storeys) setback ensuring the variation to the 18m height control will not present unreasonable building height or scale to Canterbury Road.
- The portion of the building exceeding the 18m height control including the lift overrun and communal roof top structure will not generate unreasonable additional overshadowing, noting the variation at the front – northern portion of the site is setback from the edge of the building. The rear portion of the building results in a minor variation to the 18m height control.
- The upper level of the building is setback from Canterbury Road presenting a well-articulated building contributing to development on Canterbury Road.

- The development proposal has been designed with a 3m setback to Canterbury Road and ground floor commercial space consistent with development on Canterbury Road.

**Compliance with the development standard is unreasonable or unnecessary in this particular case?**

Pursuant to clause 4.6(3)(a) of the LEP the variation to the 18m building height development standard is acceptable in the circumstances of the case and compliance with the development standard is considered unreasonable and unnecessary based on the following:

- The development proposal presents a 4 storey building form to Canterbury Road with the upper level and portion of the buildings and lift overrun exceeding the 18m height control being recessed from the level below.
- The variation to the 18m height control measured to the roof – upper level of the buildings is minor, and the lift overrun and structures associated with the communal roof terrace are centrally located ensuring the built form will be viewed as 6 storey development to Canterbury Road and Onslow Street and lane.
- The variation to the 18m height at the front and rear portions of the buildings is 450mm above the height control (excluding the lift overrun). The building presents a 4 storey form to Canterbury Road and the portion of the building exceeding 18m in height is not visually significant.
- The lift overrun and roof structure for the communal open space area exceeding the 18m height control are centrally located on each building and will not be visually dominant and do not contribute to unreasonable visual bulk and scale when viewed from the public domain or adjoining properties.
- The portion of the buildings and lift overrun exceeding the 18m height control will not result in unreasonable additional overshadowing, noting the minor variation to the built form is at the front and rear buildings, with the lift overrun and roof terrace structure centrally on the building to Canterbury Road.

**Are there sufficient environmental planning grounds to justify contravening the development standard?**

Pursuant to 4.6(3)(b) of the LEP the variation to the FSR development standard is acceptable on environmental planning grounds as follows:

- The variation to the height control resulting from the lift overrun and communal roof terrace structures ensures the development provides accessible communal open space that receives solar access and achieves distant views/outlook contributing the residential amenity of the development.
- The amended plans have a residential floor to floor height of 3m ensuring a minimum floor to ceiling height of 2.7m can be achieved meeting the SEPP 65 – RFDC and ensures an acceptable level of residential amenity is achieved in the development.
- The lift overrun and communal roof terrace structure are setback 12m from the front boundary and the variation to the upper roof level is minor ensuring the development presents a 6 storey form consistent with the planning controls for Canterbury Road.
- The shadow diagrams submitted with the development confirm the proposed variation to the height control will not result in unreasonable amenity impacts to 1 Onslow Street. This property retains 3 hours of solar access at mid-winter to the north facing kitchen and study windows, and to the private open space – rear yard.
- The minor variation to the building height does not present unreasonable bulk and scale with the building height being consistent with the planning controls for the subject site.

### **Is the proposed Development in the public interest?**

Clause 4.6(4)(ii) of the LEP states:

*Development consent must not be granted for development that contravenes a development standard unless:*

*(a) the consent authority is satisfied that:*

*(i) the applicant's written request has adequately addressed the matters required to be demonstrated by subclause (3), and  
(ii) the proposed development will be in the public interest because it is consistent with the objectives of the particular standard and the objectives for development within the zone in which the development is proposed to be carried out, and*

*(b) the concurrence of the Secretary has been obtained.*

The proposed variation to building height is in the public interest as follows:

- The development proposal provides additional housing within the catchment of public transport and services with the building height and form consistent with the Canterbury Road Masterplan.
- The building height is consistent with the planning controls for the subject site and ensures an acceptable form of development with good residential amenity is provided on this in-fill site.
- The portions of the building exceeding the 18m height control will not present unacceptable bulk and scale to the public domain or result in unreasonable impacts.

### **Conclusion**

The development proposal has a variation to the 18m building height control contained in Clause 4.3 of the Canterbury LEP 2012; notwithstanding, the building has been designed to present a 4 storey form to Canterbury Road, with the upper level recessed 5m from the level below, consistent with the planning outcome for Canterbury Road.

The lift overrun and communal roof terrace structure are recessed from the edge of the upper level and will not be visually dominant viewed from the public domain or adjoining properties, and the lift on the front building ensures the communal area is accessible and contributes to residential amenity.

The variation to the building height standard does not attempt to affect the planning outcomes for the broader locality; rather the building design is consistent with the 6 storey height control reflecting the scale and form of development planned for Canterbury Road.

In my opinion the application to vary the building height development standard is well founded and as addressed the proposed height meets the objectives of the building height development standard and achieves an acceptable development outcome that is in the public interest. In accordance with the environmental planning grounds addressing in this clause 4.6 variation the building height can be supported.

Garry Chapman  
Chapman Planning Pty Ltd



SUMMARY EXPERT OPINION  
**SEPP 65 AMENITY COMPLIANCE**  
**SOLAR ACCESS**  
**NATURAL VENTILATION**

**PROPOSED MIXED USE RESIDENTIAL DEVELOPMENT**  
(Amended for JRPP)  
364-374 Canterbury Rd, Canterbury

6 September 2015

Signed,



Steve King

## **1.0 PRELIMINARIES**

1.1 I provide this Summary Report as an expert opinion, relating to **solar access** and **natural ventilation** compliance with the relevant local controls for the proposed **mixed use residential flat building** at the above address. This Summary Report revises and updates my previous report of 20 March 2015.

1.2 The amendments to the proposal respond to the recommendations of the JRPP Record of Deferral dated 19 August 2015, being the **deletion of four dwellings, nominated by the JRPP apartments 82, 83, 99 and 100**. I note that the amended architectural drawings also show the **deletion of an additional apartment, resulting in a proposed new total of 95 apartments**.

1.3 The purpose of this Summary Report is to revise the analysis of solar access and cross ventilation compliance of the proposal.

1.4 My qualifications and experience are included at *2.0 Credentials* in my original report.

1.3 The documents on which I rely are Issue E of the Architectural drawings, issued to me digitally on 27 August 2015, with changes from previous Issue D clouded.

## **2.0 PREDICTED SOLAR ACCESS: METHODOLOGY**

2.1 I confirm that the original analysis was conducted with the use of a 3D digital model in the *Trimble SketchUp* software package, imported from the CAD file prepared by the architects. The model includes block representations of the adjacent buildings, so that the quantification of solar access takes account of relevant actual overshadowing.

I examine the design by use of 'views from the sun', and record the detailed compliance of each apartment in a comprehensive detailed table.

**S T E V E   K I N G**  
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Figure 1: Geolocated model of JRPP scheme in SketchUp: view from the sun at 12 noon

2.2 The model was not updated for the current amendments. It is possible to conservatively interpolate the predicted solar access performance of amended apartments by inspection of the former model.

I include as Appendix A to this Summary Report the updated detailed compliance table. I note that the architects employ a sequential numbering for the apartment numbers. I have had to use some discretion in identifying the equivalents between the former apartment numbers and the new. Table 1 sets out the summary of solar access achieved.

Table 1: Summary of solar access compliance

Number of units		95
Units which achieve 3 hours or more sunlight to Living and POS 9am – 3pm as defined in the RFDC		50
Units which achieve 2 hours or more sunlight to Living and POS 9am – 3pm as defined in the RFDC appropriate for closely built up context		16
Units which achieve 2 hours or more sunlight to Living and POS 8am – 4pm		1
<b>Total complying</b>	<b>67</b>	<b>70.5%</b>

Table 3 in Appendix A sets out the details of solar access for each individual apartment.

### 3.0 NATURAL VENTILATION

3.1 The objectives of the RFDC with respect to natural ventilation for amenity can be satisfied by a variety of ventilation arrangements, but for simplicity, conventional cross ventilation is preferred. I characterise as cross ventilated for amenity:

- All corner and ‘through’ apartments with openings in two principal facades;
- Apartments with openings to local corner conditions which may be regarded as sufficiently similar in their likely ventilation performance to deeper ‘through’ apartments to be regarded as cross ventilated.
- Some apartments that are cross ventilated to suitably fully open portions of the common access galleries;
- Top floor apartments with ventilating skylights.

3.2 Table 2 summarises the compliance achieved for natural ventilation. In Appendix A, Table 3 I report in detail the cross ventilation status of each apartment.

Number of units	95	
<b>Cross ventilated</b>	<b>58</b>	<b>61.1%</b>
Table 2: Ventilation compliance		

In Appendix A, Table 3 lists the individual apartments with their ventilation status.

## **4.0 CONCLUSIONS**

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### **4.1 Solar access**

The proportion of dwellings which achieve projected solar access of minimum 2 hours between 9am and 3pm June is 66 units from a total of 95, being 69.5%.

I note that if I pay regard to the direct sun available before 9am and after 3pm another one apartment can be shown to obtain a minimum of two hours on June 21, giving an overall proportion of 67/95, being 70.5%. The RFDC *Rules of Thumb* nominate as a minimum 70%.

### **7.2 Natural ventilation**

The proportion of apartments which comply with the RFDC *Rule of Thumb* for natural ventilation amenity achieved by **cross ventilation** is **58 apartments out of a total 95, or 61.1%**. The proportion required by the RFDC *Rule of Thumb* is a minimum of 60%.

**In my considered opinion, the proposed further amended development proposal therefore fully complies with the relevant controls for solar access and natural ventilation.**

## A.0 APPENDIX: DETAILED COMPLIANCE TABLE

Table 3: Solar access for individual dwellings

Old numbers	New Unit numbers	Notes	8	830	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>2hrs (8-16)	>2hrs (8-16)	Cross vent
1																						
2			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
3			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
4			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
5			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
6			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
7			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
8																						
9																						
10																						
11			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
12			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
13			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
14																						
15																						
16																						
17																						
18			B	B	b	B	B	B	B	B	B	B	B	B	B	B	B	B	B	YES	YES	
19			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
20			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
21																						
22																						
23																						
24			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
25			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
26			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
27			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
28			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
29			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
30																						
31																						
32																						
33			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	
34			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	

**STEVE KING**

CONSULTANT  
11 Clovelly Road Randwick NSW 2031 Australia  
PHONE 0414 385485

Old numbers	New Unit numbers	Notes	8	9	930	9	930	10	1030	11	1130	12	1230	13	1330	14	1430	15	1530	16	>3 hrs	>2hrs (8-16)	Cross vent
35			Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y						YES	YES	YES	
36																							
37																							
38			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES	
39																					YES	YES	YES
40			B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	YES	YES	YES	
41			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES	
42																							
43																							
44																					YES	YES	YES
45			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
46			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES
47			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES
48			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
49			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
50			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
51			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
52			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
53																					YES	YES	YES
54																							
55			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
56			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
57			Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	YES	YES	YES
58																							
59																							
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## **Chapman Planning Pty Ltd**

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7 September 2015

General Manager  
Canterbury City Council  
PO Box 77  
CAMPsie NSW 2194

Attention: Rita Nakhlé

**Property:** 364 – 374 Canterbury Road, Canterbury

**DA Number:** DA – 505/2014

**Re:** Amended Plans and Clause 4.6 Variation – Height of Buildings

Dear Rita,

I refer to the abovementioned development application for a mixed use development at 364 – 374 Canterbury Road, Canterbury and the Joint Regional Planning Panel – Sydney East (JRPP) held on 19 August 2015.

As you are aware the JRPP deferred the determination of the application and invited the submission of amended plans addressing the following:

- Redesign the 5<sup>th</sup> and 6<sup>th</sup> floor levels to achieve an 18m separation between the buildings,
- Comply with the building height plane measured from Onslow Lane,
- Reduce the lift overrun to the communal roof terrace on the front building (Canterbury Road) building to 2.4m in height, and
- Provide residential floor to floor height of at least 3m.

In addressing the above recommendations the amended plans have resulted in a reduction in the number of units to 95 with the following unit mix:

- 38 x 1 bedroom units,
- 49 x 2 bedroom units,
- 8 x 3 bedroom units.

To address the issues raised by the JRPP in addition to this letter the following is submitted:

- *Architectural plans numbered A100 – A105, A200 – A201, A300 – A302 Issue E dated 27 August 2015 prepared by Mackenzie Architects International,*
- *Solar Access and Natural Ventilation Report dated 6 September 2015 prepared by Steve King,*
- *Clause 4.6 variation – height of buildings prepared by Chapman Planning Pty Ltd.*

The following addresses the amended plans and issues raised in the minutes from the JRPP meeting.

#### Building Separation

Plans 104 and 105 Issue E prepared by Mackenzie Architects International shows the modifications to the 5<sup>th</sup> and 6<sup>th</sup> storey to achieve a minimum 18m separation between the residential units on the front and rear building. The modifications includes the deletion of units on the rear building and modification to the units on the front building to 1 bedroom units.

It is noted that the amended plans (Issue E) meet the solar access and cross ventilation residential amenity principles contained in SEPP 65 with 67 of 95 units – 70% receiving a minimum of 2 hours of solar access and 58 of 95 units - 61% being cross ventilated. The solar access and cross ventilation is addressed in the report prepared by Steve King.

#### Building Height Plane – Onslow Lane

Plans 105 Issue E prepared by Mackenzie Architects International show the modification at the 5<sup>th</sup> level (6<sup>th</sup> storey) at the south-east corner of the building to Onslow Lane resulting the deletion of a unit to achieve a greater setback to the Onslow Lane boundary. This ensures the building is within the building height plane control contained in Part 3.1.8 of the Canterbury DCP.

The building height plane and amended building is shown on Section A and B plan No. 200 prepared by Mackenzie Architects International.

#### Lift Overrun

The lift overrun has been reduced in height to 2.4m above the upper roof level and this is shown on Section A plan No. 200 prepared by Mackenzie Architects International.

#### Floor to Floor Height

The residential levels have been amended with a 3m floor to floor height.

In conclusion the amended plans have addressed the issues raised in the minutes issued by the JRPP with the reduction in the number of units to 95 achieving an 18m separation  
L.AmendedPlans.JRPP.Sept2015.docx

between the buildings at the 5<sup>th</sup> and 6<sup>th</sup> storey, and the building is within the building height plane to Onslow Lane. Further, the amended plans include a lift overrun of 2.4m to the communal roof terrace and minimum residential floor to floor height of 3m. The variation to the 18m height control resulting from the lift overrun, roof structure for the communal open space, and the minor variation to the upper roof level is addressed in the attached clause 4.6 variation.

If you wish to discuss the issues addressed in this letter or the amended plans please contact Garry Chapman on 9560 7013.

Regards,



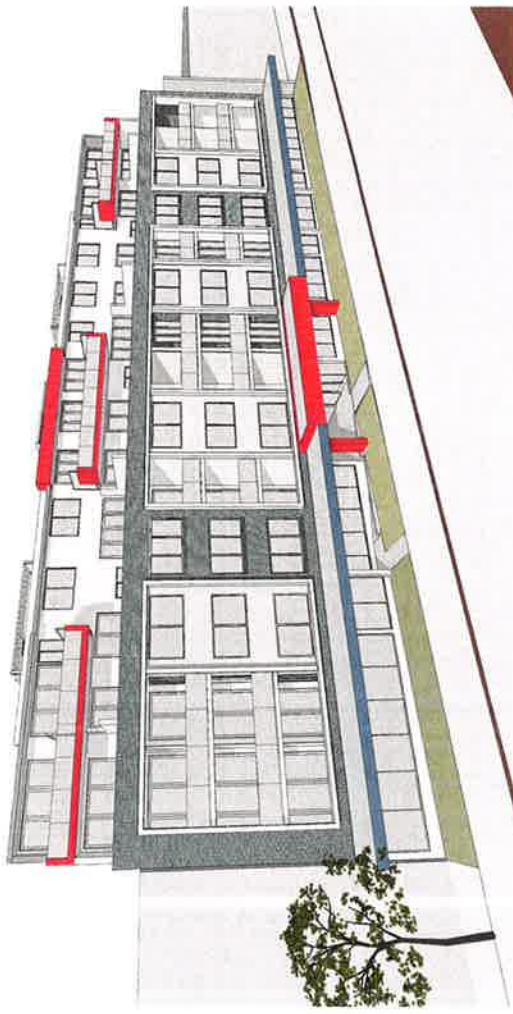
Garry Chapman  
Chapman Planning Pty Ltd

Attached:

1. Clause 4.6 variation – Height of Buildings



MULTI RESIDENTIAL DEVELOPMENT  
**364-374 CANTERBURY ROAD,**  
**CANTERBURY, NSW**



Perspective

Revised Thermal Specification-2015.09.04-Canterbury

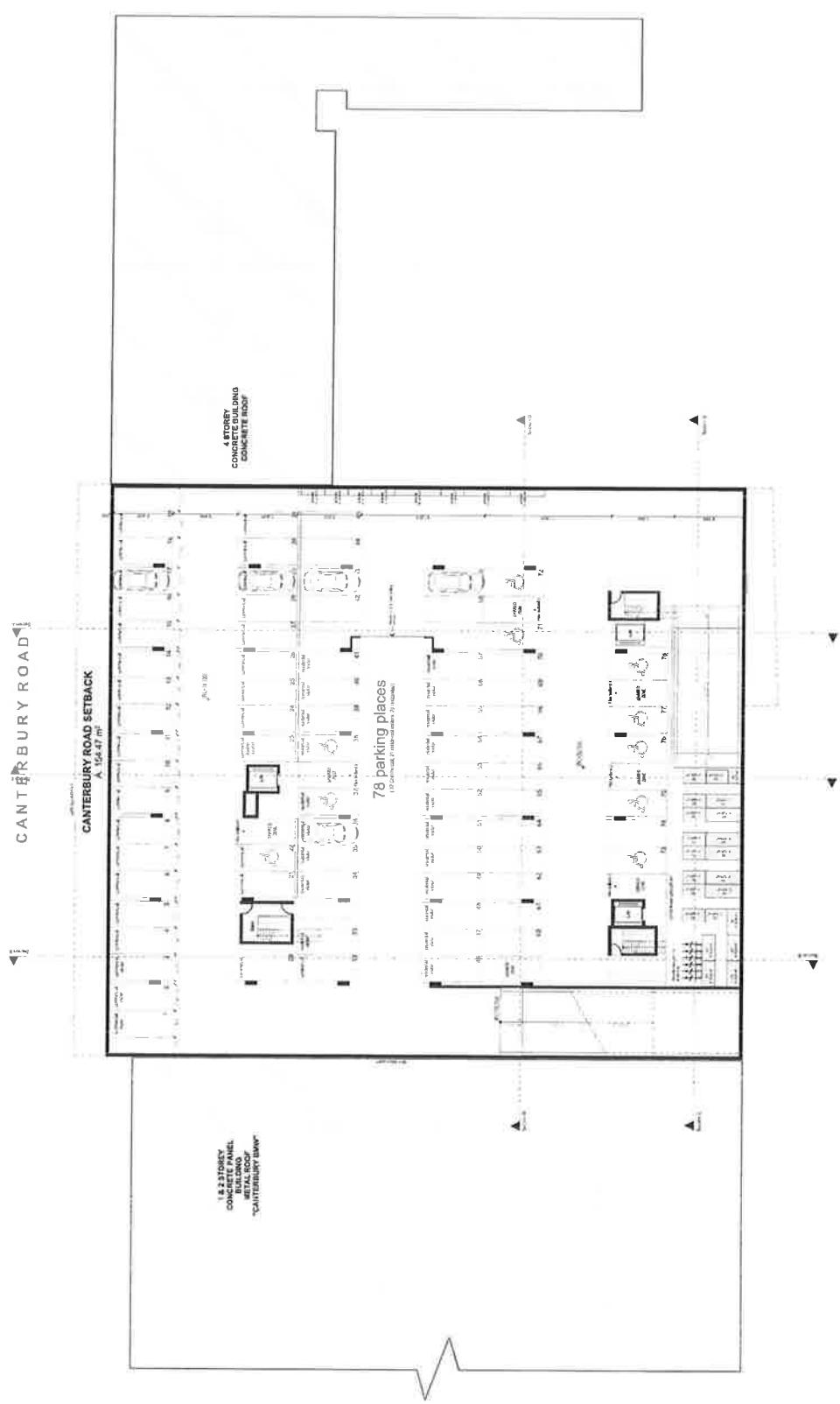
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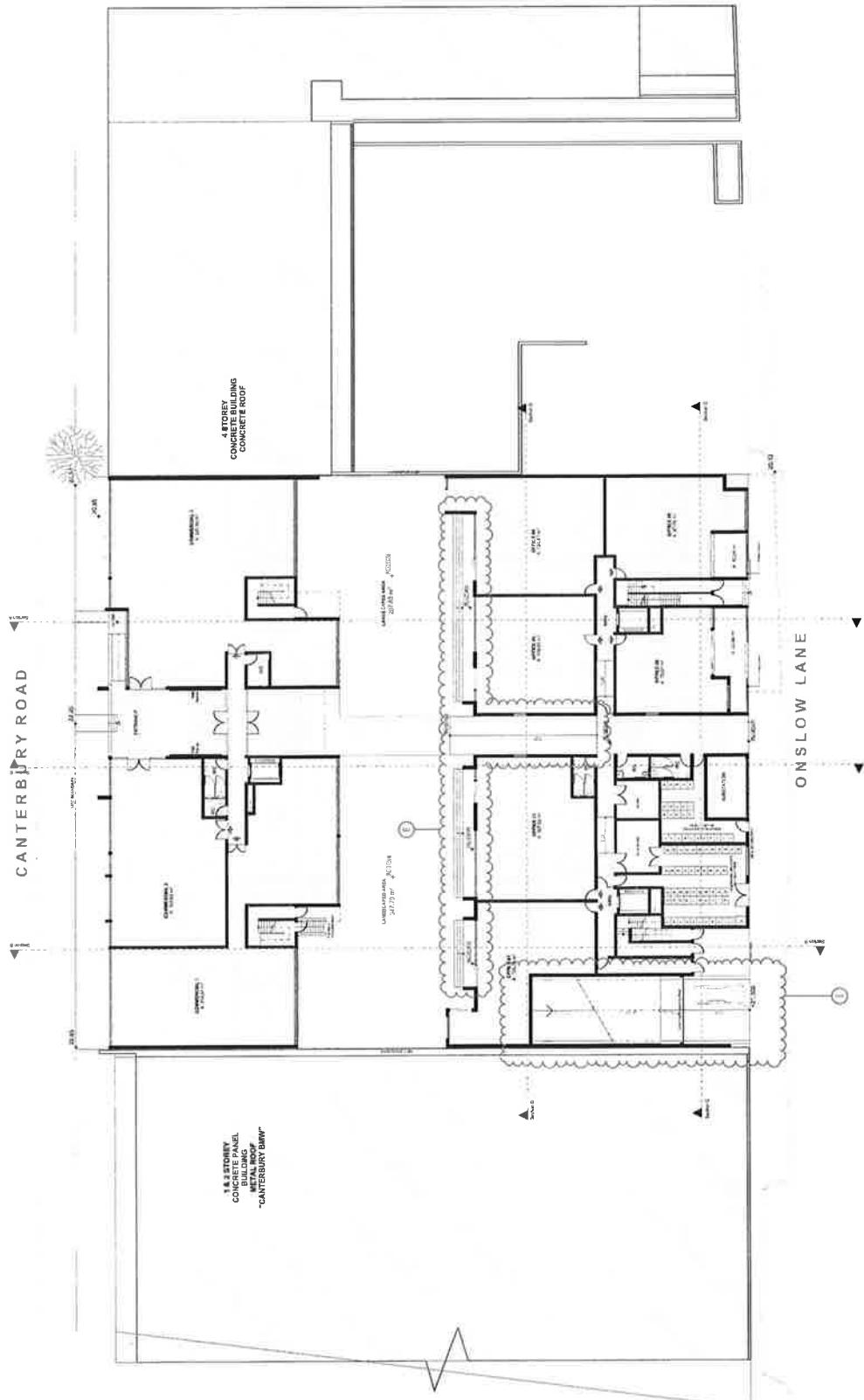
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PROJECT NAME:			
364-374 Canterbury Road, CANTERBURY NSW 2194.			
ISSUE E			



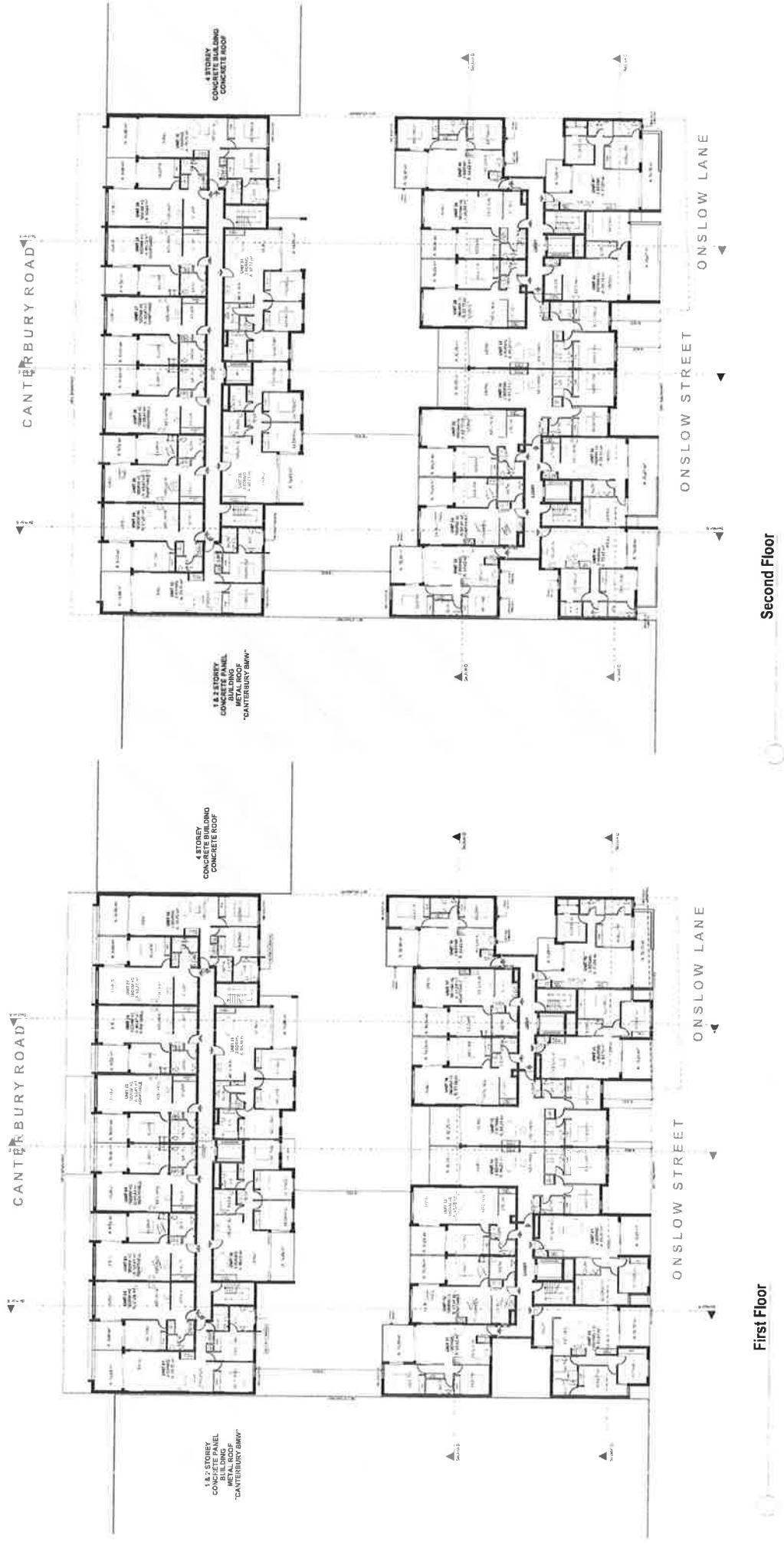




Basement 01



Ground Floor



MACKENZIE ARCHITECTS

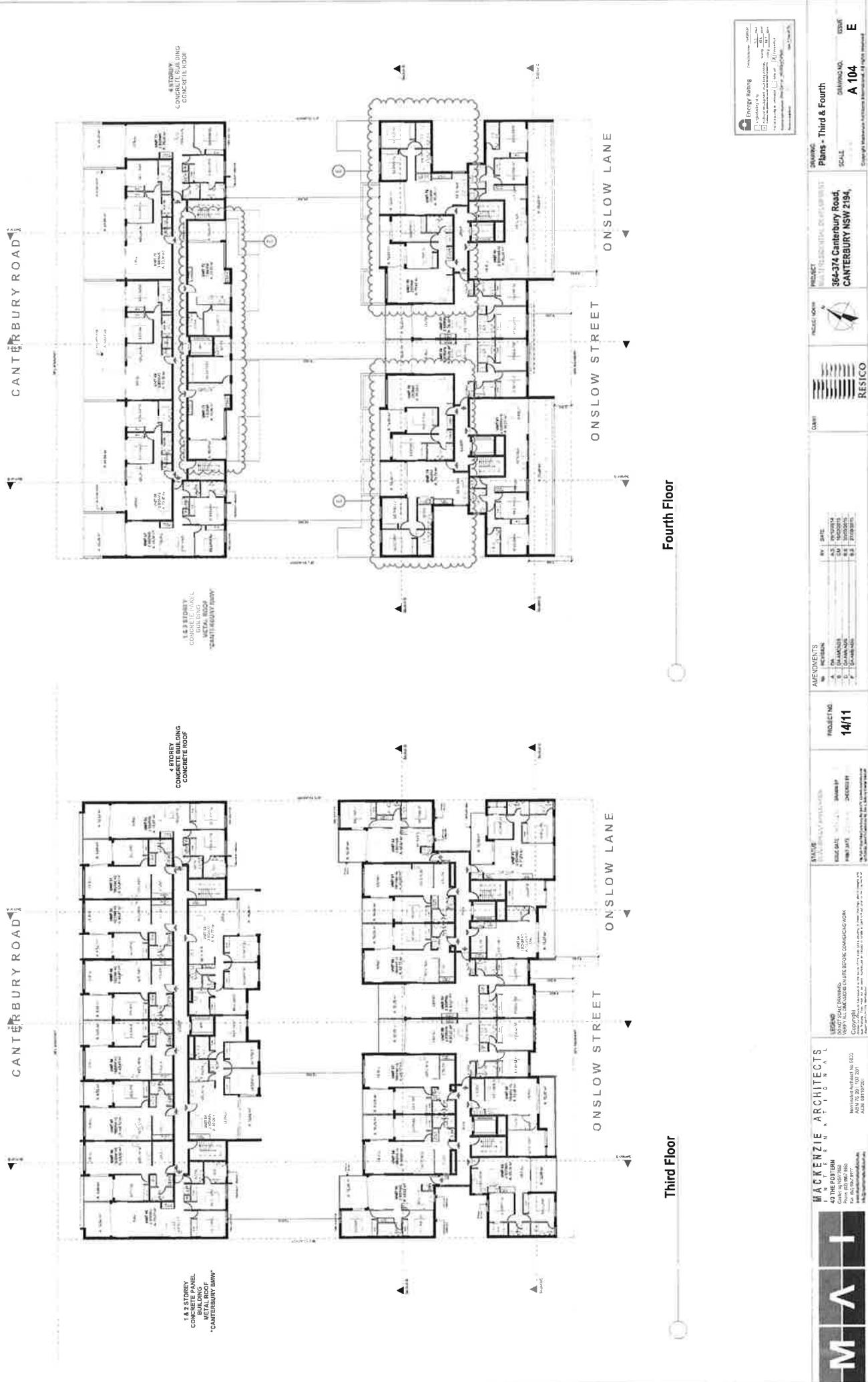
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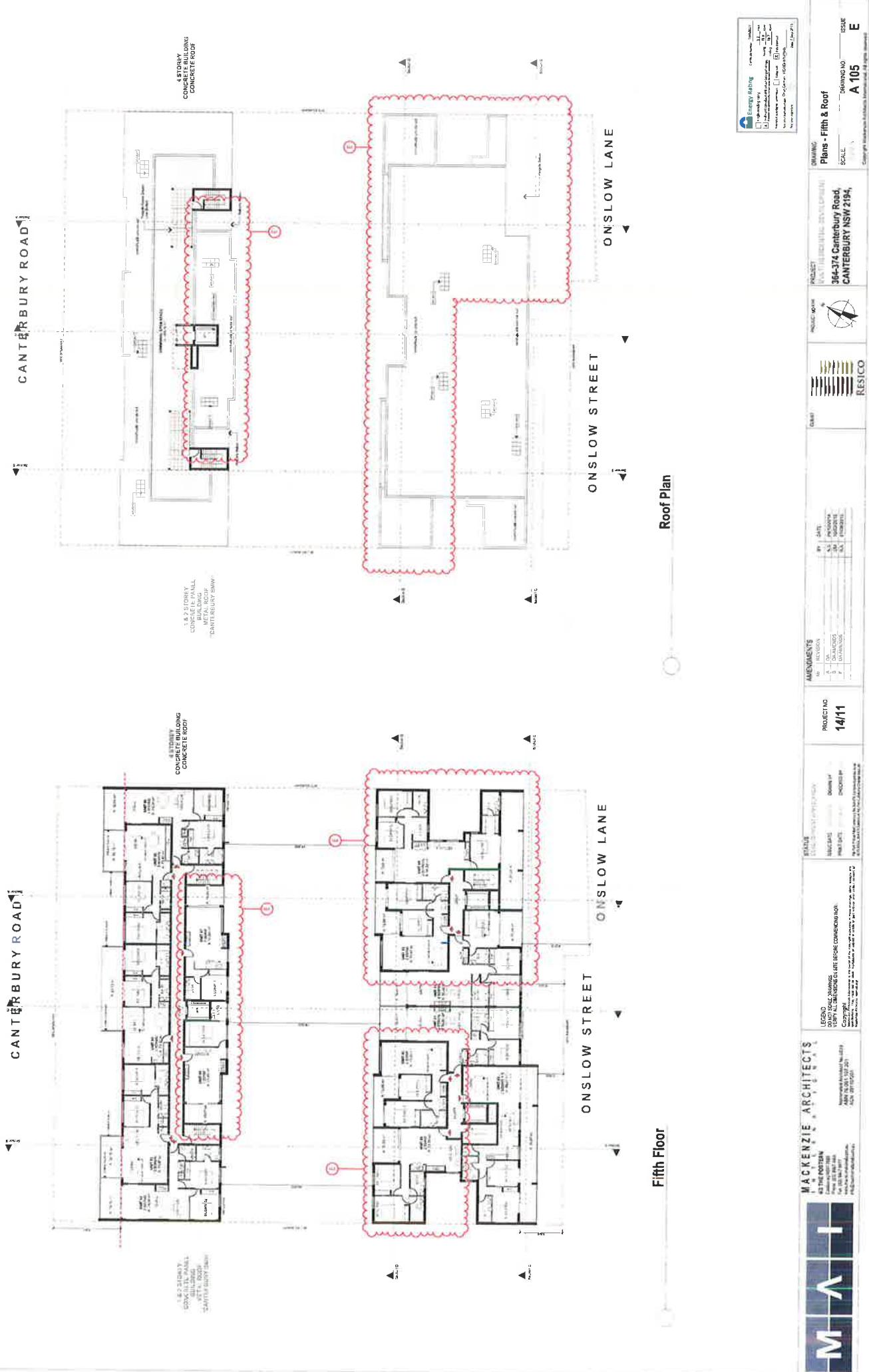
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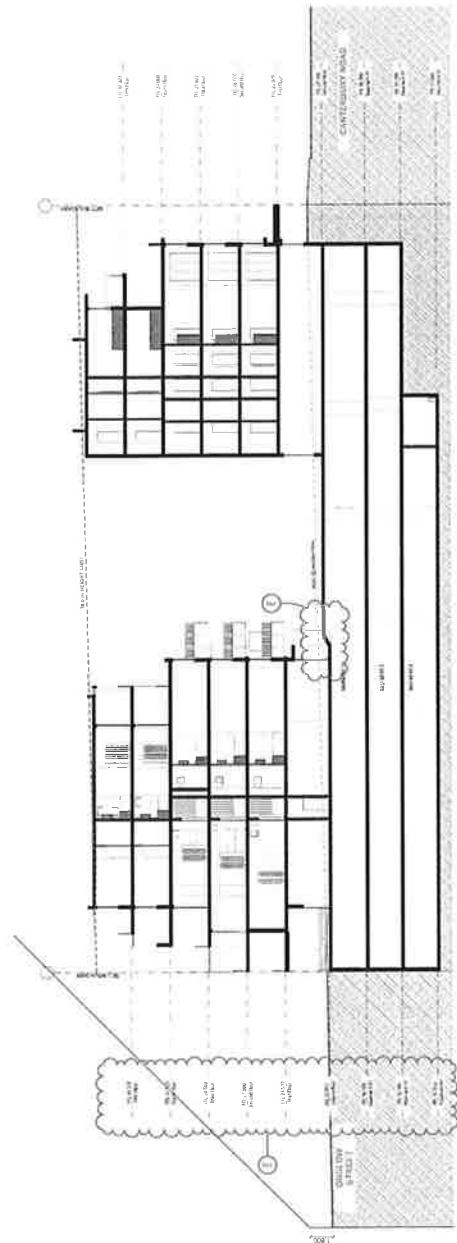
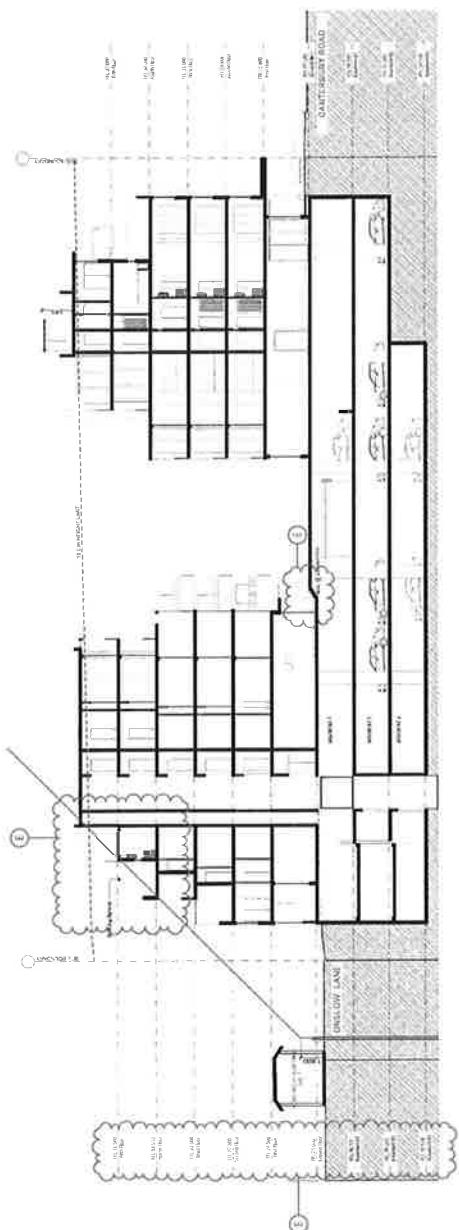
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PHOTOGRAPH  
PRINTS FROM YOUR DIGITAL IMAGE  
36-374 Canterbury Road,  
CANTERBURY NSW 2194.









MACKENZIE ARCHITECTS

M-A-T

PROJECT NO.

14/11

DATE

14/01/11

AMENDMENT'S

NO.

CHANGES

REASON

REMARKS

REMARKS

REMARKS

REMARKS

REMARKS

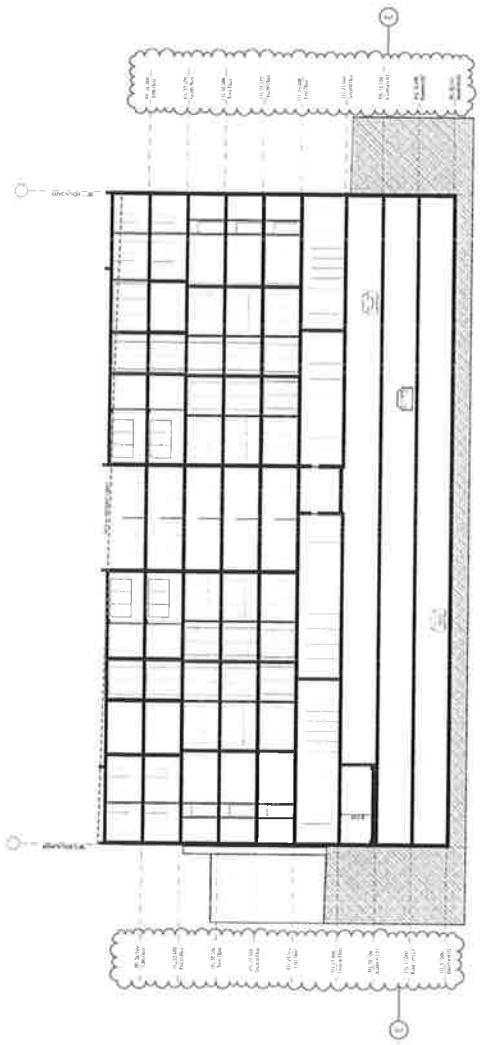
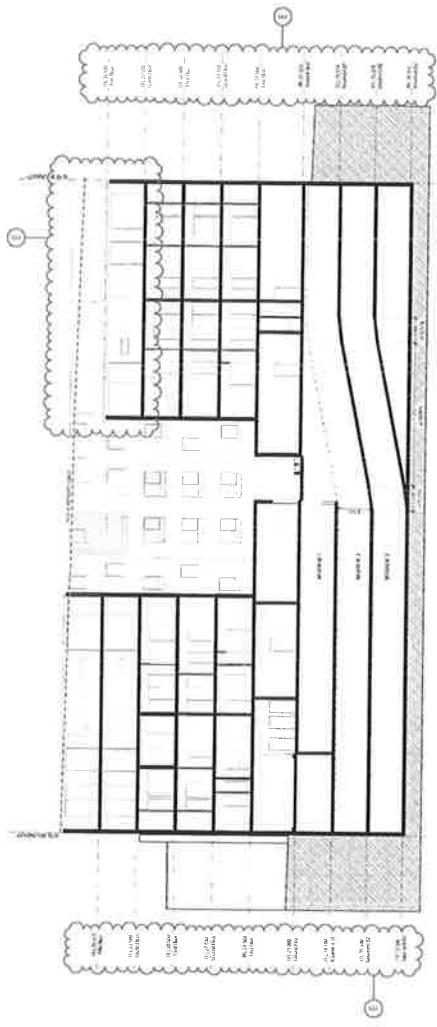
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STATUS

NOT DRAWN

SECTION

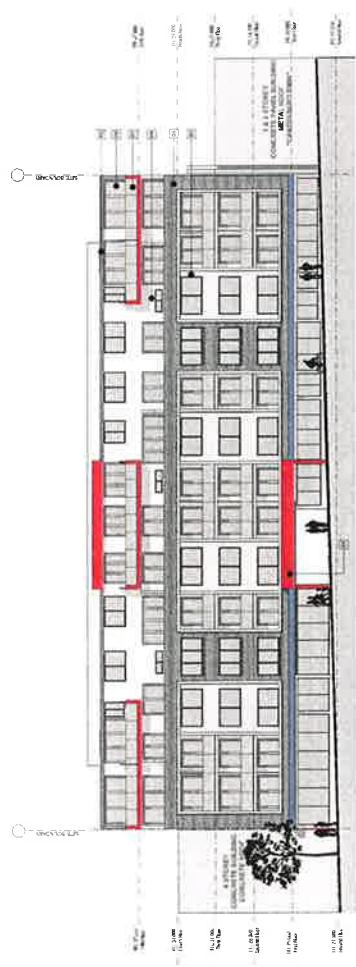
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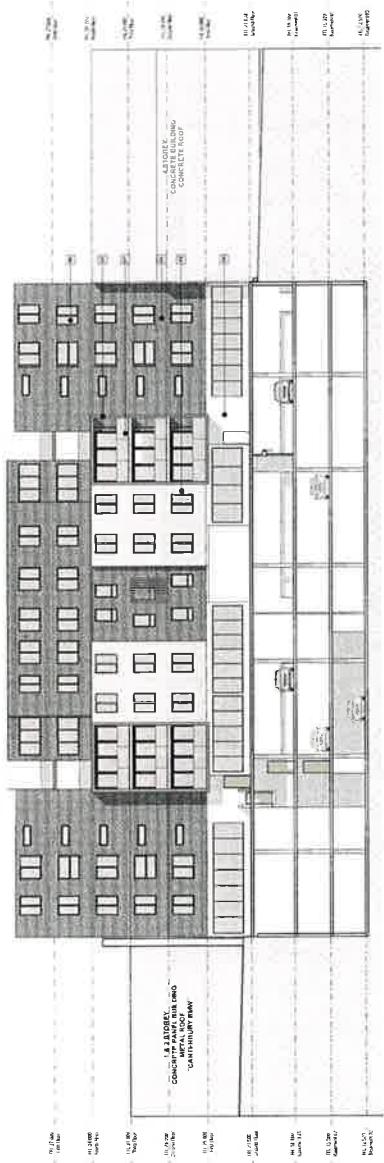
 Energy Rating		PROJECT:	
		384-374 Canterbury Road, CANTERBURY NSW 2194,	
<b>MACKENZIE ARCHITECTS</b> 40 THE PATTERN Carlton VIC 3053 Tel: (03) 9662 2020 Fax: (03) 9662 2021 <a href="http://www.mackenziearch.com.au">www.mackenziearch.com.au</a> ABN 78 136 107 221 ACN 601 012 021		DRAWING NO.	E 201
		SCALE	1:250
		REVISION	
		AMENDMENTS	
		PRODUCT NO.	14/11
		DATE	
		REVISION NO.	
		CHANGES	
		INITIALS	
		REMARKS	
 Resco			
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**EXTERNAL FINISHES A/E**

- 01 ALUMINUM
- 02 RENDER & PAINT 01-
- 03 RENDER & PAINT 02-
- 04 RENDER & PAINT 03
- 05 BRICKWORK
- 06 ALUM FRAMED WINDOVS & SLIDING DOORS
- 07 TOUGHENED GLASS BALUSTRADE
- 08 ALUM VERTICAL PRIVACY SCREEN



**BUILDING-A NORTH ELEVATION**



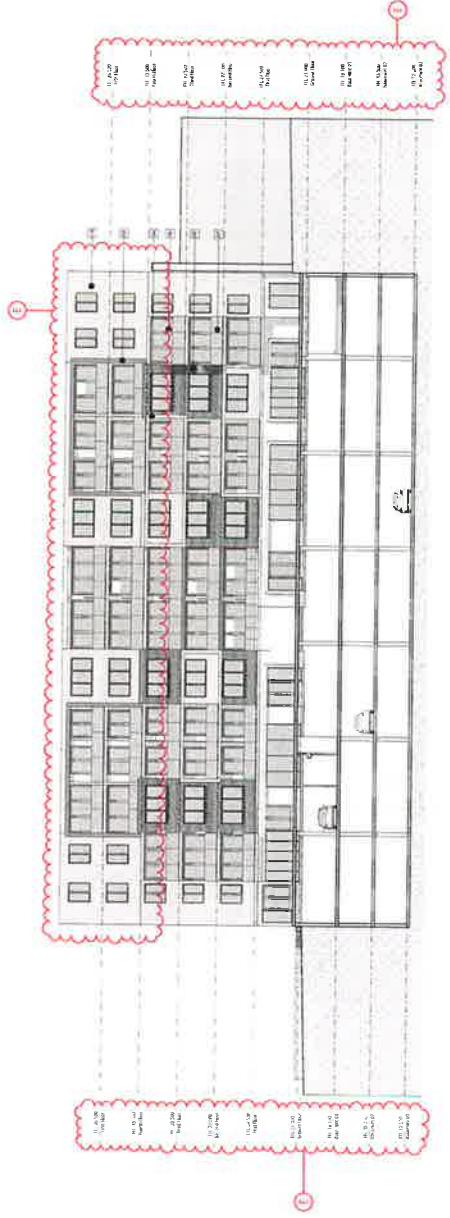
**BUILDING-A SOUTH ELEVATION**



EXTERNAL FINISHES KEY	
01	AACUDCOAT
02	RENDER & PAINT - 01-
03	RENDER & PAINT - 02-
04	RENDER & PAINT 03
05	BRICKWORK
06	ALUM FRAMED WINDOWS & SLIDING DOORS
07	TOUGHENED GLASS BALUSTRADE
08	ALUM VERTICAL PRIVACY SCREEN



**BUILDING-B SOUTH ELEVATION**



BUILDING-B NORTH ELEVATION

MACKENZIE ARCHITECTS

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DRAWING NO. Elevation  
SCALE:

ASSESSMENTS	NO	REVIEWED	BY
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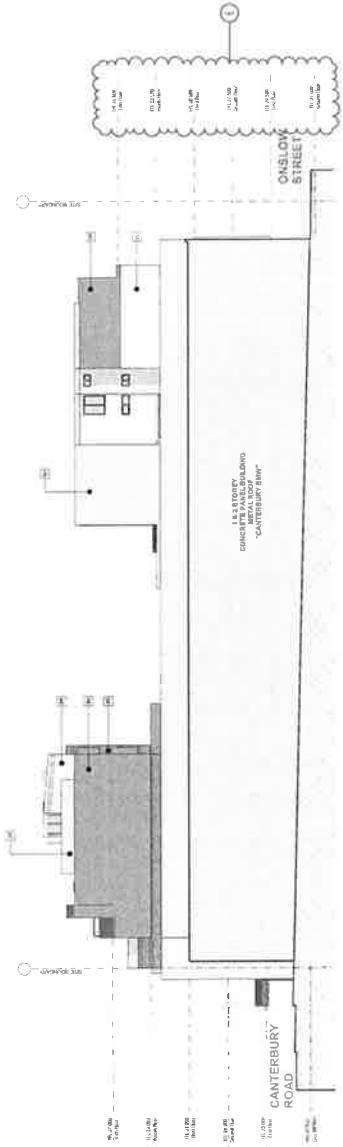
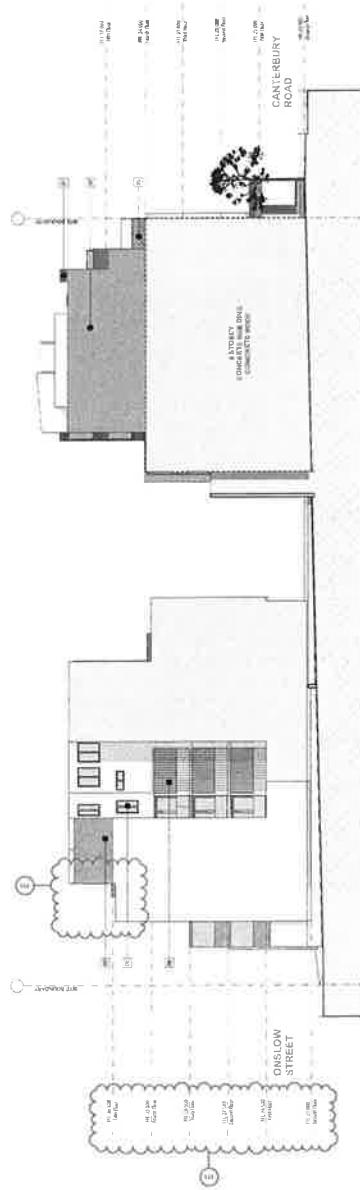
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**WACKENZIE ARCHITECTS**  
INTERNAATIONAL  
442 THE POSTMAN  
Camberwell NSW 2504  
Phone (02) 4667 9864  
Fax (02) 4667 9817  
E-mail: [wacken@optusnet.com.au](mailto:wacken@optusnet.com.au)  
Post: P.O. Box 2300, Camberwell VIC 3124  
ABN 76 001 107 210  
ACN 001 112 020  
Notified by architect No. 0022

MVA

## EXTERNAL FINISHES KEY

- 01 ALUMINUM
- 02 RENDER & PAINT 01-
- 03 RENDER & PAINT 02-
- 04 RENDER & PAINT C3
- 05 BRICKWORK
- 06 ALUM FRAMED WINDOWS & DOORS
- 07 TOUGHED GLASS BALUSTRADE
- 08 ALUM VERTICAL PRIVACY SCREEN



MACKENZIE ARCHITECTS



DRAWINGS - Elevation 03

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MULTI RESIDENTIAL DEVELOPMENT  
**364-374 CANTERBURY ROAD,**  
**CANTERBURY. NSW**



Perspective

Revised Thermal Specification-2015.09.04-Canterbury

Long List

Layout ID	Subset Name	Name	Scale
COVER SHEET	Ground Floor Plan	Ground Floor Plan	1:200
COVER SHEET	Roof Plan	Roof Plan	1:200
COVER SHEET	External Finishes Key	External Finishes Key	1:200
COVER SHEET	Unit Schedule	Unit Schedule	1:200
A 100	Plans	Basement 02	1:200
A 101	Plans	Basement 03	1:200
A 102	Plans	Ground Floor	1:200
A 103	Plans	Fifth Floor	1:200
	Plans	Second Floor	1:200
A 104	Plans	Fourth Floor	1:200
	Plans	Third Floor	1:200
A 105	Plans	Fifth Floor	1:200
	Plans	Roof Plan	1:200
A 200	Sections	Section A	1:200
	Sections	Section B	1:200
A 201	Sections	Section C	1:200
	Sections	Section D	1:200
A 202	Elevations	External Elevation: E	1:200
A 300	Elevations	External Elevation: F	1:200
	Elevations	Building A South Elevation	1:200
	Elevations	Building A North Elevation	1:200
A 351	Elevations	Building B South Elevation	1:200
	Elevations	Building B North Elevation	1:200
A 362	Elevations	External Finishes Key	1:200
A 400	Elevations	External Finishes Key	1:200
	Additional Information	West Elevation	1:200
A 401	Additional Information	Street View	1:200
	Additional Information	Site Analysis	1:200
	Additional Information	Site Images	1:200
A 402	Additional Information	Fifth Floor	1:250
	Additional Information	Fourth Floor	1:250
	Additional Information	Ground Floor	1:250
	Additional Information	Second Floor	1:250
	Additional Information	Third Floor	1:250

Units Schedule

STATUS		PROJECT NO.		PROJECT NAME		DRAWING NO.		COVER SHEET - Cover Sheet	
Site Owner / Developers GBCS Ltd		14/11		354-374 Canterbury Road, CANTERBURY NSW 2194		DRAFTED:		AS DRAWN	
Architect / Designer GBCS Ltd		AMENDMENTS		By		SCALE:		E	
		No.		NAME		1:500		Circular Standard Section 10mm thick and 40 mm internal	

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Basement 01

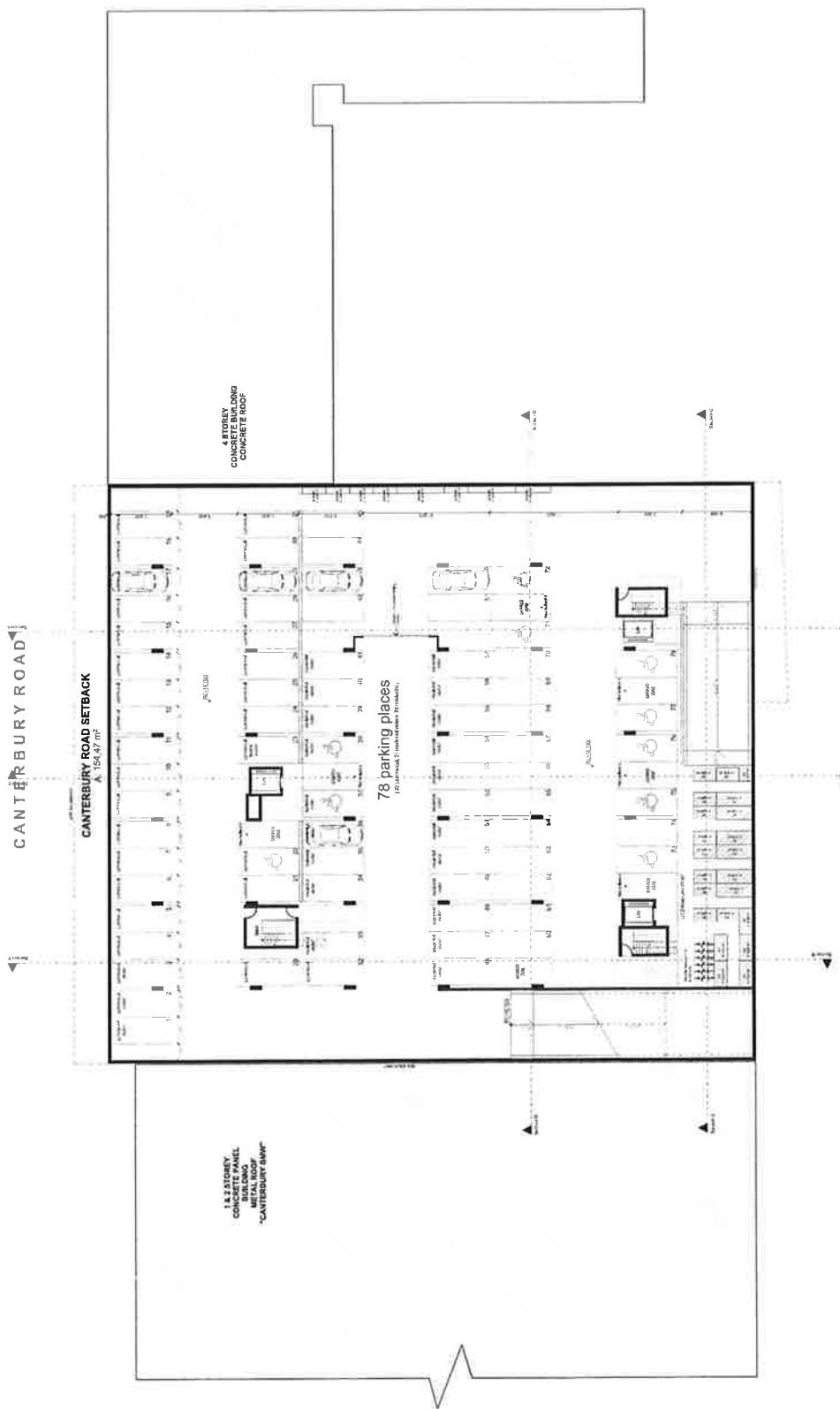
MACKENZIE ARCHITECTS  
INTELLIGENT DESIGN  
43 THE POSITION

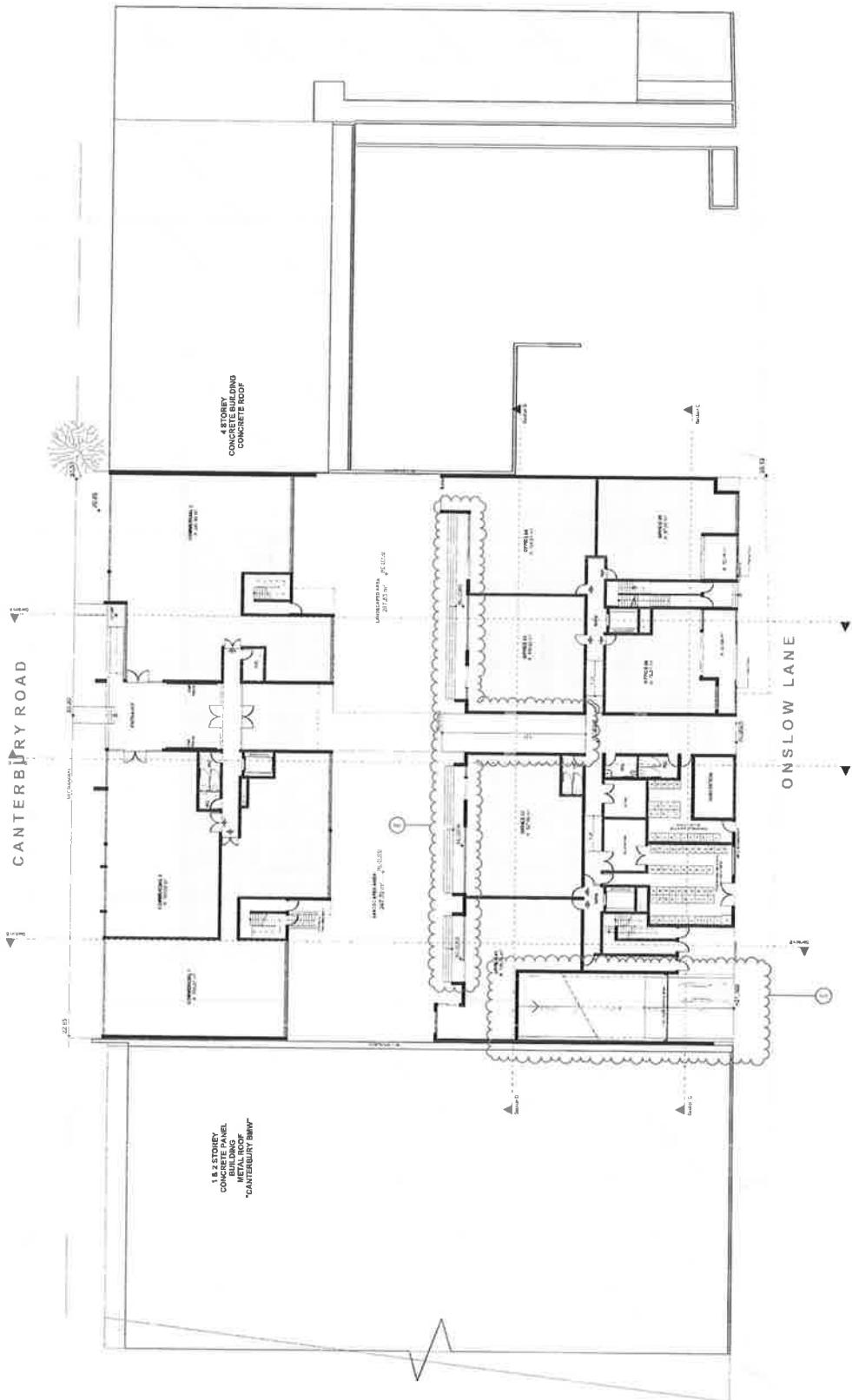
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DRAWING NO. <b>A 101</b>		ISSUE <b>C</b>	
PRODUCT: 354-374 Canterbury Road, CANTERBURY NSW 2194.		DRAWING NO. 354-374 Canterbury Road, CANTERBURY NSW 2194.	
SCALE: Comply with Australian Standard AS/NZS 4498:2000		SCALE: Comply with Australian Standard AS/NZS 4498:2000	
PROJECT NO. <b>14/11</b>		PROJECT NO. 14/11	
STAGE: Site Survey - Stage 1		STAGE: Site Survey - Stage 1	
AMENDMENTS: None		AMENDMENTS: None	
DATE: 25/07/2011		DATE: 25/07/2011	
DRAWN BY: D. S. D'Amato		DRAWN BY: D. S. D'Amato	
DESIGNED BY: RESICO		DESIGNED BY: RESICO	

Ergonomics  
Volume 47 Number 10 December 2004

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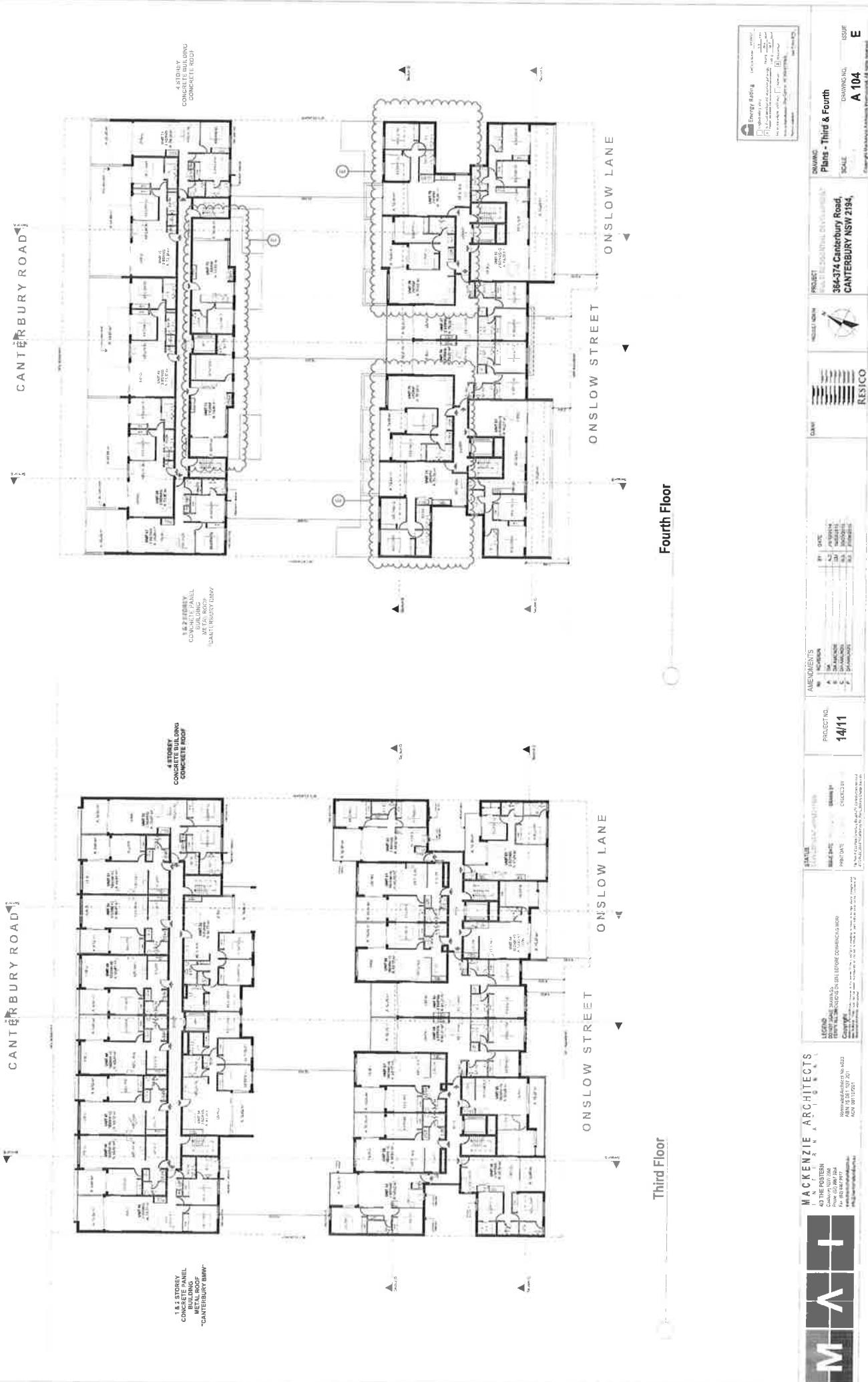




Ground Floor

MACKENZIE ARCHITECTS		PROJECT NO.	PRODUCING	AMENDMENTS	STATUS	DRAWN BY	CHECKED BY	APPROVED BY	DATE	DRAWN ON	REVISION								
NAME	DESIGNATION																		
40 THE COTTAGE GLENBROOK NSW 2570 Phone 02 8561 8888 ABN 76 051 102 241 ACN 601 162 021	LICENCED ARCHITECT Trevor Hall Associates Suite 14, 140 Elizabeth Street, Glenbrook, Gladesville, NSW 2194	14/11	14/11	A 1A B 1A C 1A D 1A E 1A	RECORDED RECORDED RECORDED RECORDED RECORDED	DR. G. HALL	T. HALL	DR. G. HALL	10/02/2011	14/02/2011	0.0	14/02/2011	0.0	14/02/2011	0.0	14/02/2011	0.0	14/02/2011	0.0
<b>Energy Rating</b>		CONSTRUCTION		OPERATION		REFURBISHMENT		DEMOLITION		RELOCATION		REPAIRS		MAINTENANCE		REFURBISHMENT		DEMOLITION	
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### CANTERBURY ROAD ▾

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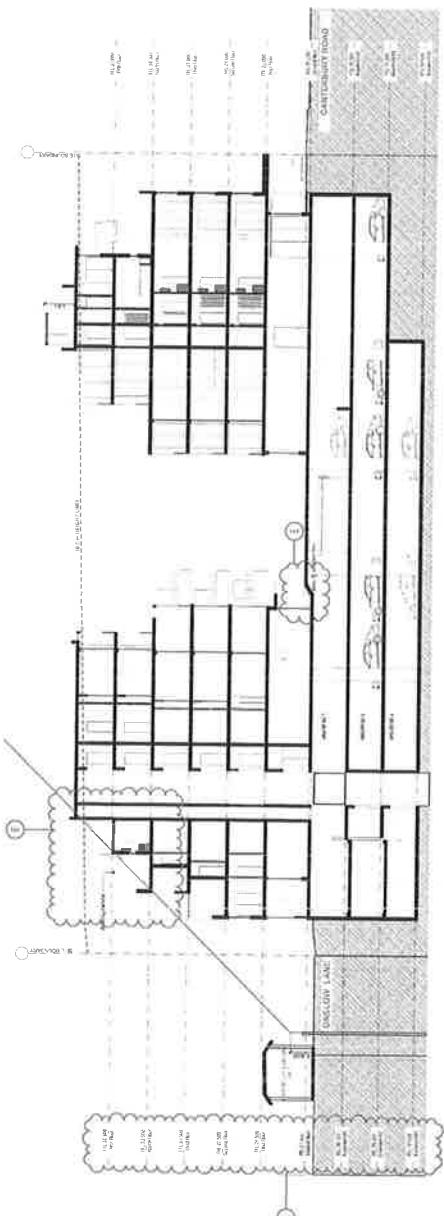
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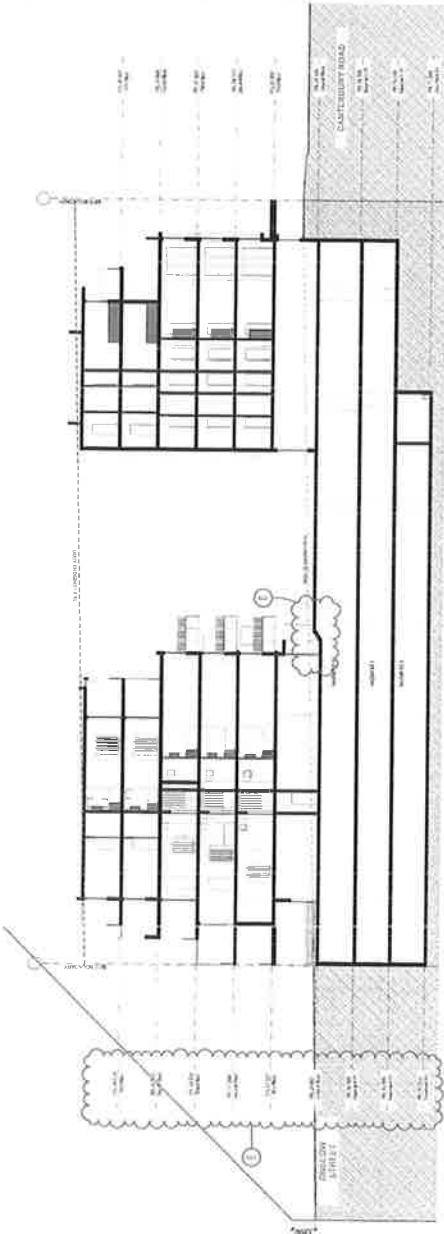
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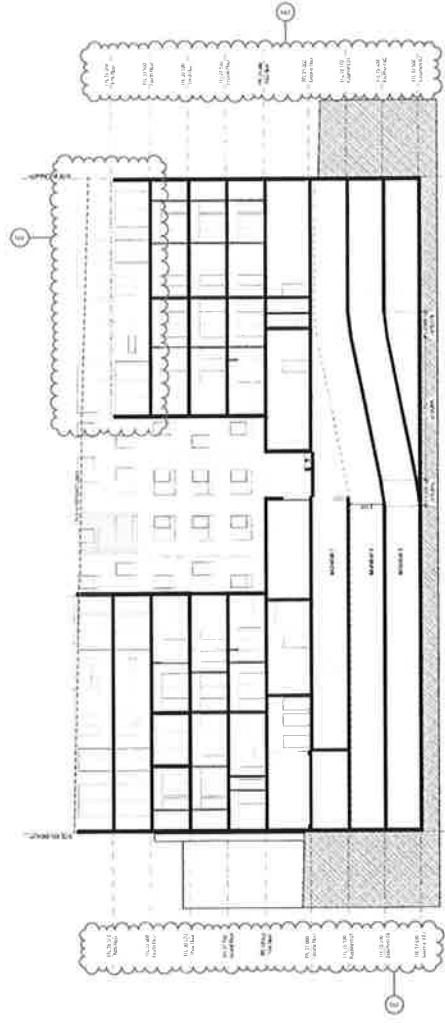


**Section A**

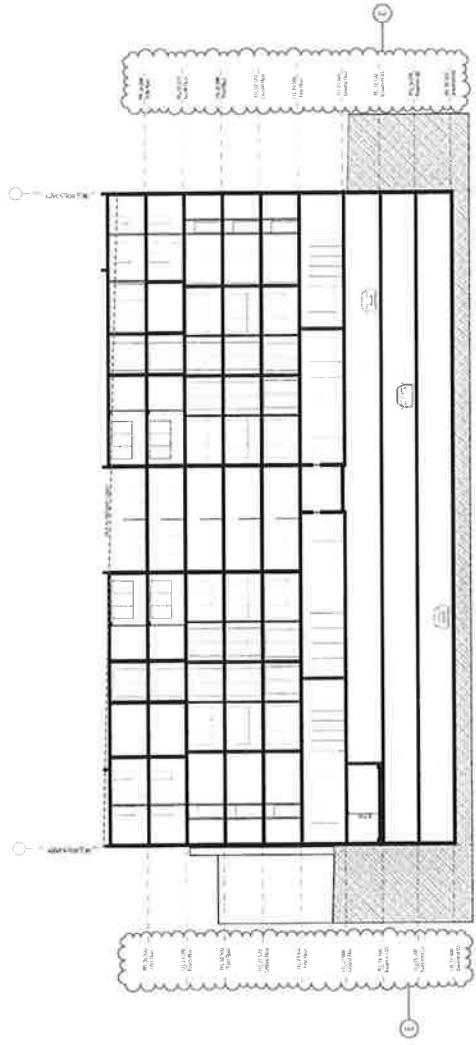


**Section B**

 Energy Rating 5 stars 6 stars 7 stars 8 stars 9 stars 10 stars 11 stars 12 stars 13 stars 14 stars 15 stars 16 stars 17 stars 18 stars 19 stars 20 stars 21 stars 22 stars 23 stars 24 stars 25 stars 26 stars 27 stars 28 stars 29 stars 30 stars 31 stars 32 stars 33 stars 34 stars 35 stars 36 stars 37 stars 38 stars 39 stars 40 stars 41 stars 42 stars 43 stars 44 stars 45 stars 46 stars 47 stars 48 stars 49 stars 50 stars 51 stars 52 stars 53 stars 54 stars 55 stars 56 stars 57 stars 58 stars 59 stars 60 stars 61 stars 62 stars 63 stars 64 stars 65 stars 66 stars 67 stars 68 stars 69 stars 70 stars 71 stars 72 stars 73 stars 74 stars 75 stars 76 stars 77 stars 78 stars 79 stars 80 stars 81 stars 82 stars 83 stars 84 stars 85 stars 86 stars 87 stars 88 stars 89 stars 90 stars 91 stars 92 stars 93 stars 94 stars 95 stars 96 stars 97 stars 98 stars 99 stars 100 stars		PROJECT NO.	
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DRAWING SECTION			
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PROJECT NUMBER			
364-374 Canterbury Road, CANTERBURY NSW 2194,			
DRAWING NUMBER			
SECTION - A			
SHEET NUMBER			
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SCALE			
1:200			
DRAWN BY			
CHECKED BY			
APPROVED BY			
DATE			
MACKENZIE ARCHITECTS			
LITTLE ST, CANTERBURY NSW 2194			
Phone: (02) 8578 3200			
Fax: (02) 8578 3201			
Email: mackenzie@optusnet.com.au			
www.mackenziearchitects.com.au			



**Section C**



**Section D**

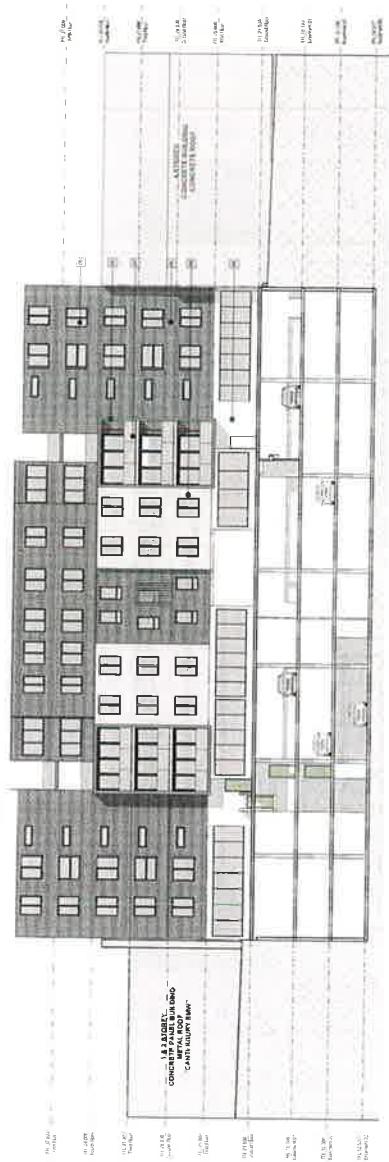
 <b>NSW Building Regulation Approved Document A</b>		<b>Section 2</b> <b>364-374 Canterbury Road, CANTERBURY NSW 2194,</b> <b>RESICO</b>	
<b>Project No:</b> <b>14/11</b>		<b>Date:</b> <b>03/09/2012</b>	<b>Issue Date:</b> <b>03/09/2012</b>
<b>Amendments:</b> <b>No</b>		<b>Engineer No:</b> <b>A. MARCHAND</b>	<b>Designer:</b> <b>D. MARCHAND</b>
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<b>MACKENZIE ARCHITECTS</b> <b>47 THE PATTERN</b> <b>CARLTON VIC 3053</b> <b>Tel: (03) 9207 2600</b> <b>Fax: (03) 9207 2601</b> <b>info@mackenziearchitects.com.au</b>			

**EXTERNAL FINISHES & FLOORING**

- 01. ALUCOBOND
- 02. RENDER & PAINT CO.
- 03. RENDER & PAINT CO-  
ALUMINIUM
- 04. BRICKWORK
- 05. ALUMINIUM WINDOW & SLIDING DOORS
- 06. GLASS BALUSTRADE
- 07. ALUMINIUM PRIVACY SCREEN
- 08. ALUMINIUM



## BUILDING-A NORTH ELEVATION

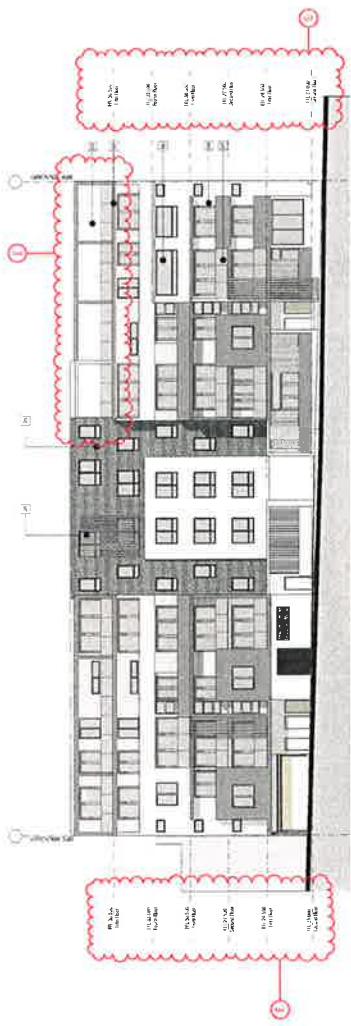


## BUILDING-A SOUTH ELEVATION

MACKENZIE ARCHITECTS  
43 THE PORTER,  
CAMPBELL STREET, SYDNEY, N.S.  
TELEGRAMS: "MACKENZIE", SYDNEY,  
NO. 403. TELEPHONE: 242-4423  
TELETYPE: NO. 242-4423  
A MEMBER OF THE CANADIAN ASSOCIATION  
OF ARCHITECTS

DRAWING NO.		A 300											
ISSUE		C											
Elevations - Elevations 01													
PROJECT NUMBER													
364-374 Canterbury Road, CANTERBURY NSW 2194,													
PROJECT HEIGHT													
SCALE													
DESCRIPTION													
<p>ANEXMENTS</p> <table border="1"> <tr> <td>No.</td> <td>INVENTION</td> </tr> <tr> <td>1</td> <td>1. Site Plan</td> </tr> <tr> <td>2</td> <td>2. Site Profile</td> </tr> <tr> <td>3</td> <td>3. Site Schedule</td> </tr> <tr> <td>4</td> <td>4. Site Details</td> </tr> </table>				No.	INVENTION	1	1. Site Plan	2	2. Site Profile	3	3. Site Schedule	4	4. Site Details
No.	INVENTION												
1	1. Site Plan												
2	2. Site Profile												
3	3. Site Schedule												
4	4. Site Details												
<p>PROJECT NO.</p> <p><b>14/11</b></p>													
<p>REVISION NO.</p> <p>00000000000000000000000000000000</p>													
<p>DATE</p> <p>2020/01/01</p>													
<p>DESIGNER</p> <p>Shawn M</p>													
<p>APPROVED</p> <p>Shawn M</p>													
<p>REVIEWED</p> <p>Shawn M</p>													
<p>INITIALS</p> <p>SHM</p>													
<p>PRINTED DATE</p> <p>2020/01/01</p>													
<p>PRINTED BY</p> <p>Shawn M</p>													
<p>PRINTED ON</p> <p>2020/01/01</p>													
<p>PRINTED IN</p> <p>2020/01/01</p>													
<p>PRINTED BY</p> <p>Shawn M</p>													
<p>PRINTED ON</p> <p>2020/01/01</p>													
<p>PRINTED IN</p> <p>2020/01/01</p>													

EXTERNAL FINISHES KEY	
01	ALUMINUM
02	RENDER & PAINT 01
03	RENDER & PAINT 02
04	RENDER & PAINT 03
05	BICKWORK
06	ALUM FRAME WINDOWS & SLIDING DOORS
07	TOUCHED GLASS BALUSTRADE
08	ALUM VERTICAL PRIVACY SCREEN



BUILDING-B SOUTH ELEVATION



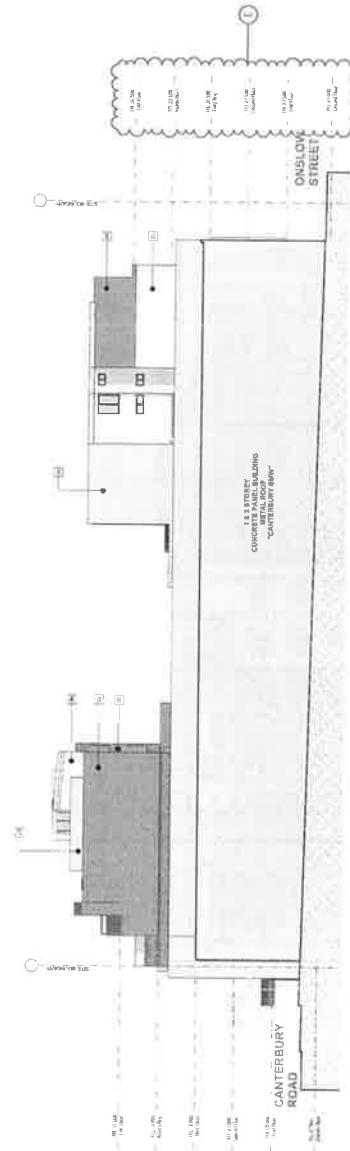
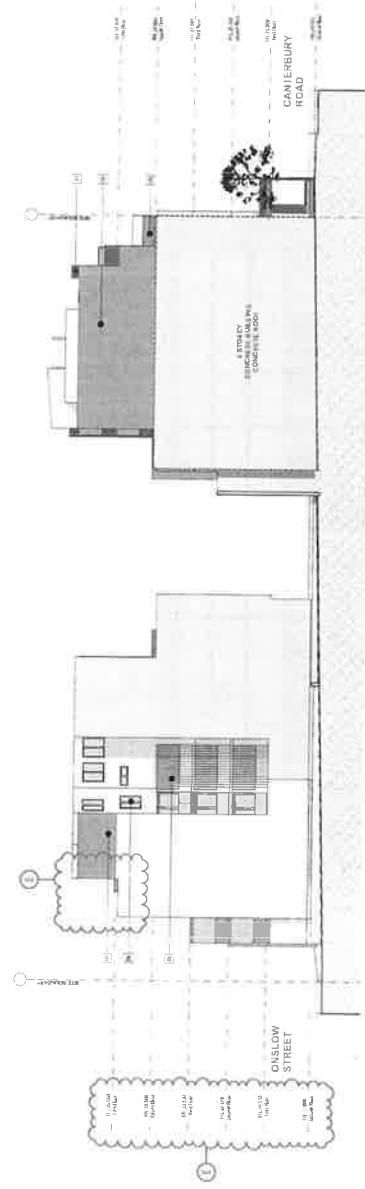
BUILDING-B NORTH ELEVATION

DRAWING		Elevations - Elevations 02		PROJECT	
SCALE	DRAWING NO.	DATE	DESIGNER	REVISION	RESCO
1:200	A 301	E	384-374 Canterbury Road, CANTERBURY NSW 2194,		



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EXTERNAL FINISHES KEY	
01.	ALUCOBOND
02.	RENDER & PAINT 01+
03.	HEXA PAINT 01+
04.	RENDER & PAINT 02
05.	BURROWWORK
06.	ALUMINIUMED WINDOWS & SLIDING DOORS
07.	TOUGHENED GLASS BALUSTRADE
08.	ALUM. VERTICAL PRIVACY SCREEN



MACKENZIE ARCHITECTS



DRAWING		PROJECT		DRAWING	
Elevations - Elevations 03		BUILDING SITE PLAN - Site Layout		Elevations - Elevation 03	
DRAFTING		SCALE		ISSUE	
A	1:500	14/11	1:500	A	E
1	100mm	1	100mm	1	100mm
2	200mm	2	200mm	2	200mm
3	300mm	3	300mm	3	300mm
4	400mm	4	400mm	4	400mm
5	500mm	5	500mm	5	500mm
6	600mm	6	600mm	6	600mm
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168	16800mm	168	16800mm	168	16800mm
169	16900mm	169	16900mm	169	16900mm
170	17000mm	170	17000mm	170	17000mm</td

# BASIX Certificate

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

## Multi Dwelling

Certificate number: 583867M\_02

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 18/09/2014 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 583867M lodged with the consent authority or certifier on 28 October 2014 with application DA 505/2014.

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: Monday, 07 September 2015

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



### Certificate Prepared by

  
Greenview Consulting Pty Ltd  
ABN: 32600067338  
Email: dean@greenview.net.au Phone: 0404 649 762

Project summary		
Project name	364-374 Canterbury Road Canterbury_02	
Street address	364-366 Canterbury Road Canterbury 2193	
Local Government Area	Canterbury City Council	
Plan type and plan number	deposited 115903	
Lot no.	1	
Section no.	-	
No. of residential flat buildings	2	
No. of units in residential flat buildings	95	
No. of multi-dwelling houses	0	
No. of single dwelling houses	0	
Project score		
Water	↙ 42	Target 40
Thermal Comfort	↙ Pass	Target Pass
Energy	↙ 33	Target 20

# Description of project

Project address		Common area landscape	
Project name	364-374 Canterbury Road Canterbury_02	Common area lawn (m <sup>2</sup> )	0
Street address	364-366 Canterbury Road Canterbury 2193	Common area garden (m <sup>2</sup> )	635.62
Local Government Area	Canterbury City Council	Area of indigenous or low water use species (m <sup>2</sup> )	0
Plan type and plan number		Assessor details	
Lot no.	1	Assessor number	BDAV/13/1645
Section no.	-	Certificate number	16450037
		Climate zone	56
Project type		Project score	
No. of residential flat buildings	2	Water	↙ 42 Target 40
No. of units in residential flat buildings	95	Thermal Comfort	↙ Pass Target Pass
No. of multi-dwelling houses	0	Energy	↙ 33 Target 20
No. of single dwelling houses	0		
Site details			
Site area (m <sup>2</sup> )	3158		
Roof area (m <sup>2</sup> )	1528.1		
Non-residential floor area (m <sup>2</sup> )	1486.68		
Residential car spaces	209		
Non-residential car spaces	32		

## Description of project

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

### **R**esidential flat buildings - Building A, 44 dwellings, 6 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> )	Area of garden & lawn (m <sup>2</sup> )	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> )	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> )				
1	2	79.8	0.0	0	0	2	1	60.5	0.0	0	0	3	1	60.5	0.0	0	4	1	60.5	0.0	0
5	1	60.5	0.0	0	0	6	1	60.5	0.0	0	0	7	1	60.5	0.0	0	8	2	79.8	0.0	0
9	3	94.3	0.0	0	0	10	3	89.3	0.0	0	0	23	2	79.8	0.0	0	24	1	60.5	0.0	0
25	1	60.5	0.0	0	0	26	1	60.5	0.0	0	0	27	1	60.5	0.0	0	28	1	60.5	0.0	0
29	1	60.5	0.0	0	0	30	2	79.8	0.0	0	0	31	3	94.3	0.0	0	32	3	89.3	0.0	0
45	2	79.8	0.0	0	0	46	1	60.5	0.0	0	0	47	1	60.5	0.0	0	48	1	60.5	0.0	0
49	1	60.5	0.0	0	0	50	1	60.5	0.0	0	0	51	1	60.5	0.0	0	52	2	79.8	0.0	0
53	3	94.3	0.0	0	0	54	3	89.3	0.0	0	0	67	2	74.1	0.0	0	68	2	72.8	0.0	0
69	2	72.8	0.0	0	0	70	2	72.8	0.0	0	0	71	2	74.1	0.0	0	72	1	51.1	0.0	0
73	1	44.5	4.6	0	0	82	2	74.1	0.0	0	0	83	2	72.8	0.0	0	84	2	72.8	0.0	0
85	2	72.8	0.0	0	0	86	2	74.1	0.0	0	0	87	1	51.1	0.0	0	88	1	44.5	4.6	0

### **R**esidential flat buildings - Building B, 51 dwellings, 6 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> )	Area of garden & lawn (m <sup>2</sup> )	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> )	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> )				
1	2	79.8	0.0	0	0	2	1	60.5	0.0	0	0	3	1	60.5	0.0	0	4	1	60.5	0.0	0
5	1	60.5	0.0	0	0	6	1	60.5	0.0	0	0	7	1	60.5	0.0	0	8	2	79.8	0.0	0
9	3	94.3	0.0	0	0	10	3	89.3	0.0	0	0	23	2	79.8	0.0	0	24	1	60.5	0.0	0
25	1	60.5	0.0	0	0	26	1	60.5	0.0	0	0	27	1	60.5	0.0	0	28	1	60.5	0.0	0
29	1	60.5	0.0	0	0	30	2	79.8	0.0	0	0	31	3	94.3	0.0	0	32	3	89.3	0.0	0
45	2	79.8	0.0	0	0	46	1	60.5	0.0	0	0	47	1	60.5	0.0	0	48	1	60.5	0.0	0
49	1	60.5	0.0	0	0	50	1	60.5	0.0	0	0	51	1	60.5	0.0	0	52	2	79.8	0.0	0
53	3	94.3	0.0	0	0	54	3	89.3	0.0	0	0	67	2	74.1	0.0	0	68	2	72.8	0.0	0
69	2	72.8	0.0	0	0	70	2	72.8	0.0	0	0	71	2	74.1	0.0	0	72	1	51.1	0.0	0
73	1	44.5	4.6	0	0	82	2	74.1	0.0	0	0	83	2	72.8	0.0	0	84	2	72.8	0.0	0
85	2	72.8	0.0	0	0	86	2	74.1	0.0	0	0	87	1	51.1	0.0	0	88	1	44.5	4.6	0

11	2	64.1	0.0	0	0	12	1	60.5	0.0	0	0	13	1	60.5	0.0	0	0	14	2	81.7	0.0	0	0	0	0
15	2	81.7	0.0	0	0	16	1	60.5	0.0	0	0	17	1	60.5	0.0	0	0	18	2	64.1	0.0	0	0	0	0
19	2	70.5	0.0	0	0	20	2	69.1	0.0	0	0	21	2	69.1	0.0	0	0	22	2	76.0	4.8	0	0	0	0
33	2	64.1	0.0	0	0	34	1	60.5	0.0	0	0	35	1	60.5	0.0	0	0	36	2	81.7	0.0	0	0	0	0
37	2	81.7	0.0	0	0	38	1	60.5	0.0	0	0	39	1	60.5	0.0	0	0	40	2	64.1	0.0	0	0	0	0
41	2	70.5	0.0	0	0	42	1	57.6	0.0	0	0	43	1	57.6	0.0	0	0	44	2	74.6	0.0	0	0	0	0
55	2	64.1	0.0	0	0	56	1	60.5	0.0	0	0	57	1	60.5	0.0	0	0	58	2	81.7	0.0	0	0	0	0
59	2	81.7	0.0	0	0	60	1	60.5	0.0	0	0	61	1	60.5	0.0	0	0	62	2	64.1	0.0	0	0	0	0
63	2	70.5	0.0	0	0	64	1	52.4	0.0	0	0	65	1	52.4	0.0	0	0	66	2	64.9	0.0	0	0	0	0
74	2	65.9	5.2	0	0	75	2	69.0	0.0	0	0	76	2	81.7	0.0	0	0	77	2	81.7	0.0	0	0	0	0
78	2	69.0	0.0	0	0	79	2	65.9	5.2	0	0	80	2	86.5	5.6	0	0	81	2	86.5	5.6	0	0	0	0
89	2	65.9	5.2	0	0	90	2	69.0	0.0	0	0	91	2	81.7	0.0	0	0	92	3	98.0	0.0	0	0	0	0
93	2	69.0	0.0	0	-	94	3	100.6	0.0	0	-	95	2	86.5	0.0	0	-								

## Description of project

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

### Common areas of unit building - Building A

Common area	Floor area (m <sup>2</sup> )
Lift car (No. 1)	-

### Common areas of unit building - Building B

Common area	Floor area (m <sup>2</sup> )
Lift car (No. 2)	-
Bulk Store	17.6

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

Common area	Floor area (m <sup>2</sup> )
Carpark B3	2346
Ground Lobbies	57.3

Common area	Floor area (m <sup>2</sup> )
Residential Bin Store	59.5

Common area	Floor area (m <sup>2</sup> )
Carpark B1	2951.4
Building A and B Lobbies	444.47

# Schedule of BASIX commitments

## 1. Commitments for Residential flat buildings - Building A

- (a) Dwellings
    - (i) Water
    - (ii) Energy
    - (iii) Thermal Comfort
  - (b) Common areas and central systems/facilities
    - (i) Water
    - (ii) Energy
- ## 2. Commitments for Residential flat buildings - Building B
- (a) Dwellings
    - (i) Water
    - (ii) Energy
    - (iii) Thermal Comfort
  - (b) Common areas and central systems/facilities
    - (i) Water
    - (ii) Energy
- ## 3. Commitments for multi-dwelling houses
- ## 4. Commitments for single dwelling houses
- ## 5. 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 - Building A

### (a) Dwellings

(i) Water	Certifier check	Show on DA plans	Show on CCI/CDC plans & specs
(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.			➤

Dwelling no.	Fixtures				Appliances			Individual pool			Individual spa			
	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	4 star	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	-	-	-	-	-	-	-	-
All dwellings	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	-	-	-	-	-	-	-	-

Dwelling no.	Alternative water source			Configuration			Landscape connection			Toilet connection (s)			Laundry connection			Pool top-up			Spa top-up		
	Alternative water supply systems	Size																			
None	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

## (ii) Energy

- (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.

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(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	gas instantaneous 6 star	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling		Heating		Artificial lighting		Natural lighting				
	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study rooms	Each kitchen	All bathrooms/ toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
82	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no			
86	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
72, 73, 87, 88	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
9, 10, 31, 32, 53, 54	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no			
68, 69, 70, 83, 84, 85	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			
1, 8, 23, 30, 45, 52, 67, 71	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	no			
2, 3, 4, 5, 6, 7, 24, 25, 26, 27, 28, 29, 46, 47, 48, 49, 50, 51	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no

		Appliances & other efficiency measures										
Dwelling no.	Individual pool	Individual spa	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
All dwellings	-	-	-	-	gas cooktop & electric oven	-	yes	4.5 star	-	2.5 star	yes	no

(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:			
(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.			

Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)		Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
	Thermal loads	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	
1	39.7		13.7
53	56.0		9.0
54	64.4		10.7
69	26.9		14.2
72	55.9		12.6
73	63.7		15.4
87	62.3		30.9
88	59.9		23.7
9, 31	49.0		12.2
10, 32	57.3		14.4
45, 52	45.2		13.8
67, 71	41.4		10.9
68, 70	29.6		15.7
82, 86	43.1		15.9
8, 23, 30	39.7		17.0
83, 84, 85	33.6		14.4
46, 47, 48, 49, 50, 51	37.5		15.6
All other dwellings	27.9		24.3

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

<b>(i) Water</b>		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.	➤	➤	➤

<b>(ii) Energy</b>		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 ventilation system		Common area lighting			
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Lift car (No. 1)	-	-	light-emitting diode	connected to lift call button	No
<b>Central energy systems</b>					
Lift (No. 1)	Type	Specification	Number of levels (including basement): 9		
	gearless traction with VVV F motor				

## 2. Commitments for Residential flat buildings - Building B

### (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.	➤	➤	➤
(f) 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.	➤	➤	
(g) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).	➤	➤	➤
(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.		➤	➤

Dwelling no.	Fixtures				Appliances				Individual pool				Individual spa			
	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		
93, 94, 95	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	4 star	-	-	-	-	-	-	-		
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 74, 75, 76, 77, 78, 79, 80, 81, 89, 90, 91, 92	3 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	no	-	4 star	-	-	-	-	-	-	-		

Alternative water source				
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection (s)
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.	➤	➤	
(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".			

Dwelling no.	Hot water system	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
		Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
95	gas instantaneous 6 star	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 74, 75, 76, 77, 78, 79, 80, 81, 89, 90, 91, 92, 93, 94	gas instantaneous 6 star	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

Dwelling no.	Cooling living areas	Heating		Artificial lighting		Natural lighting		Main kitchen		
		bedroom areas	living areas	No. of bedrooms &or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/ toilets	All hallways	No. of bathrooms &/or toilets	Main kitchen
92	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	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	All hallways	No. of bathrooms &/or toilets
94	1-phase airconditioning EER 3.0 - 3.5 (zoned)	3 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	no			
95	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes			
20, 21	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes			
75, 78	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2	1	yes	yes	yes	no			
80, 81	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes			
74, 79, 89	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes			
42, 43, 56, 64, 65	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	no			
14, 15, 36, 37, 58, 59, 76, 77	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	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, 13, 16, 17, 34, 35, 38, 39, 57, 60, 61	1-phase airconditioning EER 3.0 - 3.5 (zoned)	1	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	no			
11, 18, 19, 22, 33, 40, 41, 44, 55, 62, 63, 66, 90, 91, 93	1-phase airconditioning EER 3.0 - 3.5 (zoned)	2	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	0	yes			

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
93, 94, 95	-	-	-	-	gas cooktop & electric oven	-	yes	4.5 star	-	2.5 star	yes	no

Dwelling no.	Individual pool		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
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 74, 75, 76, 77, 78, 79, 80, 81, 89, 90, 91, 92	-	-	-	-	gas cooktop & electric oven	-	yes	4.5 star	-	2.5 star	yes	no

(iii) Thermal Comfort	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.		

### (iii) Thermal Comfort

(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:

(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.

Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)	Thermal loads	Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)
19	63.7		21.7
22	43.7		16.3
37	25.9		17.5
41	60.7		16.4
44	47.9		12.1
55	35.1		15.3
62	33.6		15.1
63	62.0		17.1
66	55.9		12.3
74	26.0		13.6
79	22.2		13.9

Dwelling no.	Area adjusted heating load (in mJ/m <sup>2</sup> /yr)		Area adjusted cooling load (in mJ/m <sup>2</sup> /yr)	Thermal loads
	80	63.2		
81	56.1		10.9	
89	34.4		14.1	
91	29.8		21.1	
92	46.1		23.4	
94	44.0		14.5	
95	63.8		19.7	
20, 21	44.8		12.9	
42, 43	56.3		25.1	
64, 65	57.4		23.4	
75, 78	40.0		15.2	
90, 93	52.8		22.6	
14, 15, 36	25.8		17.5	
11, 18, 33, 40	28.1		24.3	
56, 57, 60, 61	38.6		12.7	
58, 59, 76, 77	25.2		14.8	
All other dwellings	42.5		21.5	

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

<b>(i) Water</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.	➤

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	3 star ( $> 4.5$ but $\leq 6$ L/min)	4 star	5 star	5 star

<b>(ii) Energy</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 ventilation system					Common area lighting		
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS		
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		
Residential Bin Store	ventilation exhaust only	-	fluorescent	motion sensors	No		
Bulk Store	no mechanical ventilation	-	fluorescent	motion sensors	No		

Central energy systems	Type	Specification
Lift (No. 2)	gearless traction with VVV F motor	Number of levels (including basement): 9
Lift (No. 3)	gearless traction with VVV F motor	Number of levels (including basement): 9

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

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

	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<b>(i) Water</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>Clothes washers rating</b>
All common areas	3 star (> 4.5 but <= 6 L/min)	4 star	5 star
			5 star
<b>(ii) Energy</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 lighting					
Common area	Ventilation system type	Ventilation efficiency measure	Primary type of artificial lighting	Lighting efficiency measure	Lighting control system/BMS
Carpark B3	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	time clock and motion sensors	No
Carpark B2	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	time clock and motion sensors	No
Carpark B1	ventilation (supply + exhaust)	carbon monoxide monitor + VSD fan	fluorescent	time clock and motion sensors	No
Ground Lobbies	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No
Building A and B Lobbies	no mechanical ventilation	-	compact fluorescent	daylight sensor and motion sensor	No

## 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).

NatHERS Thermal Performance - Multi Dwelling Certificate

# Assessor Certificate



Building Designers  
Association Victoria

Project Address			Client Details		Assessor Details	
364-374 Canterbury Road Canterbury NSW 2193 Lot 1 DP 115903			Bayside Building Group		Dean Gorman - VIC/BDAV/13/1645	
Software	Version	Climate Zone	Certificate Number	Rated with Downlights	Concessions	Assessment Date
BERS Pro 4.2	V110811/A	56	16450037	No	None	07-September-2015

## Drawings used for the Thermal Performance Assessment

Architect: Mackenzie Architects International / 4/3 The Postern Castlecrag NSW 2068 / Ph (02) 9967 9966

Project Ref	Drawing No	Drawing Title	Rev	Date
14/11		Cover Sheet	E	27.08.2015
14/11	A100	Plans - Basement 02 & 03	B	16.03.2015
14/11	A101	Plans - Basement 01	C	30.03.2015
14/11	A102	Plans - Ground	E	27.08.2015
14/11	A103	Plans - First & Second	C	30.03.2015
14/11	A104	Plans - Third & Fourth	E	27.08.2015
14/11	A105	Plans - Fifth & Roof	E	27.08.2015
14/11	A200	Sections - Section 1	E	27.08.2015
14/11	A201	Sections - Sections 2	E	27.08.2015
14/11	A300	Elevations - Elevations 01	C	30.03.2015
14/11	A301	Elevations - Elevations 02	E	27.08.2015
14/11	A302	Elevations - Elevations 03	E	27.08.2015

## NatHERS Thermal Performance Results

Unit No	Beds	Cond Area	Uncond Area	Heating	Cooling	Total H & C	Stars	BERS File Ref	Comments/Notes
		m <sup>2</sup>	m <sup>2</sup>	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>			
1	2	79.8	0	39.7	17.0	56.7	5.5	140811 U3_1	
2	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
3	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
4	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
5	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
6	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
7	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
8	2	79.8	0	39.7	17.0	56.7	5.5	140811 U3_1	
9	3	94.3	0	49.0	12.2	61.2	5.0	140811 U11_1	
10	3	89.3	0	57.3	14.4	71.7	4.5	140811 U12_1	
11	2	64.1	0	28.1	24.3	52.4	5.5	140811 U13_1	
12	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
13	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
14	2	81.7	0	25.8	17.5	43.3	6.5	140811 U16_1	
15	2	81.7	0	25.8	17.5	43.3	6.5	140811 U16_1	
16	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
17	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
18	2	64.1	0	28.1	24.3	52.4	5.5	140811 U13_1	
19	2	70.5	0	63.7	21.7	85.4	4.0	140811 U19_1	
20	2	69.1	0	44.8	12.9	57.7	5.5	140811 U22_1	
21	2	69.1	0	44.8	12.9	57.7	5.5	140811 U22_1	
22	2	76.0	4.8	43.7	18.3	60.0	5.0	140811 U24_1	
23	2	79.8	0	39.7	17.0	56.7	5.5	140811 U3_1	
24	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
25	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
26	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
27	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
28	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
29	1	60.5	0	27.9	24.3	52.2	5.5	140811 U4_1	
30	2	79.8	0	39.7	17.0	56.7	5.5	140811 U3_1	
31	3	94.3	0	49.0	12.2	61.2	5.0	140811 U11_1	
32	3	89.3	0	57.3	14.4	71.7	4.5	140811 U12_1	
33	2	64.1	0	28.1	24.3	52.4	5.5	140811 U13_1	
34	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
35	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
36	2	81.7	0	25.8	17.5	43.3	6.5	140811 U16_1	
37	2	81.7	0	25.8	17.5	43.3	6.5	140811 U16_1	
38	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
39	1	60.5	0	42.5	21.5	64.0	5.0	140811 U15_1	
40	2	64.1	0	28.1	24.3	52.4	5.5	140811 U13_1	
41	2	70.5	0	60.7	16.4	77.1	4.0	140811 U41_1	

	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating	5.3	stars
<input checked="" type="checkbox"/> multi-unit development (attach listing of ratings)	39.6	MJ/m <sup>2</sup>
If selected, data specifies the average across the entire development		
Recessed downlights confirmation:	<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

NatHERS Thermal Performance Results									
Unit No	Beds	Cond Area	Uncond Area	Heating	Cooling	Total H & C	Stars	BERS File Ref	Comments/Notes
		m <sup>2</sup>	m <sup>2</sup>	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>			
42	1	57.6	0	56.3	25.1	81.4	4.0	140811 U44_1	
43	1	57.6	0	58.3	25.1	81.4	4.0	140811 U44_1	
44	2	74.6	0	47.9	12.7	60.6	5.0	140811 U44_2	
45	2	79.8	0	45.2	13.8	59.0	5.0	140811 U47_1	
46	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
47	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
48	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
49	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
50	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
51	1	60.5	0	37.5	15.6	53.1	5.5	140811 U48_1	
52	2	79.8	0	45.2	13.8	59.0	5.0	140811 U47_1	
53	3	94.3	0	56.0	9.0	65.0	5.0	140811 U53_1	
54	3	89.3	0	64.4	10.7	75.1	4.0	140811 U54_1	
55	2	64.1	0	35.1	15.3	50.4	6.0	140811 U55_2	
56	1	60.5	0	38.6	12.7	51.3	5.5	140811 U59_1	
57	1	60.5	0	38.6	12.7	51.3	5.5	140811 U59_1	
58	2	81.7	0	25.2	14.8	40.0	6.5	140811 U60_1	
59	2	81.7	0	25.2	14.8	40.0	6.5	140811 U60_1	
60	1	60.5	0	38.6	12.7	51.3	5.5	140811 U59_1	
61	1	60.5	0	38.6	12.7	51.3	5.5	140811 U59_1	
62	2	64.1	0	33.6	15.1	48.7	6.0	140811 U57_1	
63	2	70.5	0	62.0	17.1	79.1	4.0	140811 U63_1	
64	1	52.4	0	57.4	23.4	80.8	4.0	140811 U66_1	
65	1	52.4	0	57.4	23.4	80.8	4.0	140811 U66_1	
66	2	64.9	0	55.9	12.3	68.2	4.5	140811 U68_1	
67	2	74.1	0	41.4	10.9	52.3	5.5	140811 U69_1	
68	2	72.8	0	29.6	15.7	45.3	6.0	140811 U68_2	
69	2	72.8	0	26.9	14.2	41.1	6.5	140811 U69_2	
70	2	72.8	0	29.6	15.7	45.3	6.0	140811 U68_2	
71	2	74.1	0	41.4	10.9	52.3	5.5	140811 U69_1	
72	1	51.1	0	55.9	12.6	68.5	4.5	140811 U72_1	
73	1	44.5	4.6	63.7	15.4	79.1	4.0	140811 U73_1	
74	2	65.9	5.2	26.0	13.6	39.6	6.5	140811 U74_2	
75	2	69	0	40.0	15.2	55.2	5.5	140811 U75_2	
76	2	81.7	0	25.2	14.8	40.0	6.5	140811 U60_1	
77	2	81.7	0	25.2	14.8	40.0	6.5	140811 U60_1	
78	2	69	0	40.0	15.2	55.2	5.5	140811 U75_2	
79	2	65.9	5.2	22.2	13.9	36.1	7.0	140811 U79_1	
80	2	86.5	5.6	63.2	11.4	74.6	4.5	140811 U84_1	
81	2	86.5	5.6	56.1	10.9	67.0	4.5	140811 U85_1	
82	2	74.1	0	43.1	15.9	59.0	5.0	140811 U82_1	
83	2	72.8	0	33.6	14.4	48.0	6.0	140811 U83_2	
84	2	72.8	0	33.6	14.4	48.0	6.0	140811 U83_2	
85	2	72.8	0	33.6	14.4	48.0	6.0	140811 U83_2	
86	2	74.1	0	43.1	15.9	59.0	5.0	140811 U82_1	
87	1	51.1	0	62.3	30.9	93.2	3.5	140811 U87_2	
88	1	44.5	4.6	59.9	23.7	83.6	4.0	140811 U88_1	
89	2	65.9	5.2	34.4	14.1	48.5	6.0	140811 U89_1	
90	2	69	0	52.8	22.6	75.4	4.0	140811 U90_1	
91	2	81.7	0	29.8	21.1	50.9	6.0	140811 U91_2	
92	3	98	0	46.1	23.4	69.5	4.5	140811 U92_2	
93	2	69	0	52.8	22.6	75.4	4.0	140811 U90_1	
94	3	100.6	0	44.0	14.5	58.5	5.0	140811 U94_2	
95	2	86.5	5.8	63.8	19.7	83.5	4.0	140811 U95_2	
		Heating	Cooling	Total H & C	Stars				
		MJ/m <sup>2</sup>	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>					
Average all dwellings		40.4	17.9	58.3	5.3				

	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3 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>39.6 MJ/m<sup>2</sup></u> cooling <u>18.7 MJ/m<sup>2</sup></u>
Recessed downlights confirmation	<input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without <input type="checkbox"/>
Assessor Name/Number	<u>Dean Gorman</u> /VIC/BDAV/13/1645	
Assessor Signature		
Date	<u>7 Sep 2015</u>	

## Building Element Details

Project 140811 U3 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	79.8 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	79.8 m <sup>2</sup>
Total Glazed Area	16.3 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	20.4 %
Gross External Wall Area	119.3 m <sup>2</sup>
Net External Wall Area	101.2 m <sup>2</sup>

### Window

16.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

18.7 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
54.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
28.1 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

59.9 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

53.8 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
26.0 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation

### External Ceiling

79.9 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

79.8 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without	
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature 	Date <u>7 Sep 2015</u>



# 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 140811\_U3\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 79.85 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 17.0 MJ/m<sup>2</sup>  
Adjusted Heating 39.7 MJ/m<sup>2</sup>  
Adjusted Total 56.7 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/> single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
	cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without		
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 3  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@minternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U4 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	60.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	60.5 m <sup>2</sup>
Total Glazed Area	17.8 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	29.4 %
Gross External Wall Area	92.9 m <sup>2</sup>
Net External Wall Area	73.3 m <sup>2</sup>

### Window

17.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

10.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
54.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
7.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

30.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

12.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
47.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

60.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

60.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature 	
Date <u>7 Sep 2015</u>	



# 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 140811\_U4\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 60.53 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 24.3 MJ/m<sup>2</sup>  
Adjusted Heating 27.9 MJ/m<sup>2</sup>  
Adjusted Total 52.2 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/>	single-dwelling rating	5.3	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 39.6	MJ/m <sup>2</sup>
		cooling 18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645	
Assessor Signature			
		Date 7 Sep 2015	

### Dwelling Address

DP Number 115903  
Unit Number 4  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor....., Date...../...../.....

*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 140811 U11 Run 1  
CAMP SIE PC 2194 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	94.3 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	94.3 m <sup>2</sup>
Total Glazed Area	24.9 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	26.4 %
Gross External Wall Area	118.8 m <sup>2</sup>
Net External Wall Area	92.1 m <sup>2</sup>

### Window

24.9 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

11.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
56.0 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
25.0 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5

### Internal Wall

62.1 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

59.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
24.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
10.7 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation

### External Ceiling

94.3 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

94.3 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup>  
cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 5.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U11\_1  
Date 28/10/2014  
Location CAMPSIE PC 2194  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 94.30 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 12.2 MJ/m<sup>2</sup>  
Adjusted Heating 49.0 MJ/m<sup>2</sup>  
Adjusted Total 61.2 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 11  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U12 Run 1  
CAMPsie PC 2194 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	89.3 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	89.3 m <sup>2</sup>
Total Glazed Area	25.6 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.6 %
Gross External Wall Area	121.0 m <sup>2</sup>
Net External Wall Area	93.6 m <sup>2</sup>

### Window

25.6 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

23.3 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
60.5 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
9.7 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

58.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

54.5 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
24.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
10.7 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation

### External Ceiling

89.3 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

89.3 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 4.5 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U12\_1  
Date 28/10/2014  
Location CAMPSIE PC 2194  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 89.33 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 14.4 MJ/m<sup>2</sup>  
Adjusted Heating 57.3 MJ/m<sup>2</sup>  
Adjusted Total 71.7 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 12  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U13 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	64.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	64.1 m <sup>2</sup>
Total Glazed Area	20.1 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	31.3 %
Gross External Wall Area	99.4 m <sup>2</sup>
Net External Wall Area	77.5 m <sup>2</sup>

### Window

20.1 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

54.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
21.9 m<sup>2</sup> PowerPanel to neighbour No Insulation  
1.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.4 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

23.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
40.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

64.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

64.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# 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 140811 U13\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 64.11 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 24.3 MJ/m<sup>2</sup>  
Adjusted Heating 28.1 MJ/m<sup>2</sup>  
Adjusted Total 52.4 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

### Dwelling Address

DP Number 115903  
Unit Number 13  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date ...../...../.....

*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 140811 U15 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	60.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	60.5 m <sup>2</sup>
Total Glazed Area	17.0 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.1 %
Gross External Wall Area	92.9 m <sup>2</sup>
Net External Wall Area	74.1 m <sup>2</sup>

### Window

17.0 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

22.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
43.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
8.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

30.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

12.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
47.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

60.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

60.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>	
Assessor Signature 	
Date <u>7 Sep 2015</u>	



# NatHERS Certificate

## New Dwelling



**5.0 Stars**

### Simulation Software

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

### Simulation Details

Project Name	140811 U15_1
Date	28/10/2014
Location	CANTERBURY PC 2193
Climate file	climat56.TXT
Adjusted Star Rating	5.0 Stars
Conditioned Area	60.53 m <sup>2</sup>
Unconditioned Area	0.00 m <sup>2</sup>
Adjusted Cooling	21.5 MJ/m <sup>2</sup>
Adjusted Heating	42.5 MJ/m <sup>2</sup>
Adjusted Total	64.0 MJ/m <sup>2</sup>

Energy Rating		Certificate Number 16450037	
<input type="checkbox"/> single-dwelling rating	5.3 stars	<input type="checkbox"/> multi-unit development (attach listing of ratings)	heating 39.6 MJ/m <sup>2</sup>
<input checked="" type="checkbox"/> If selected, data specified is the average across the entire development	cooling 18.7 MJ/m <sup>2</sup>		
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without			
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645			
Assessor Signature		Date 7 Sep 2015	

### Dwelling Address

DP Number	115903
Unit Number	15
Lot Number	1
House Number	364-374
Street Name	Canterbury Rd
Development Name	
Suburb	Canterbury NSW 2194

### Client Details

Name	Mackenzie Architects International
Phone	9967 9966 Fax
Email	felipe@mainternational.com.au
Postal Address	4/3 The Postern Castlecrag NSW 2068
Street Details	

### Assessor Details

Name	Dean Gorman
Phone	9575 7043 Fax
Email	dean@greenview.net.au
Postal Address	35 Riverview Rd Oyster Bay
Street Details	35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U16 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	81.7 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	81.7 m <sup>2</sup>
Total Glazed Area	15.4 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	18.8 %
Gross External Wall Area	118.3 m <sup>2</sup>
Net External Wall Area	101.1 m <sup>2</sup>

### Window

15.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

13.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
85.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
2.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

44.3 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

70.6 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
11.1 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation

### External Ceiling

81.7 m<sup>2</sup> Concrete Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

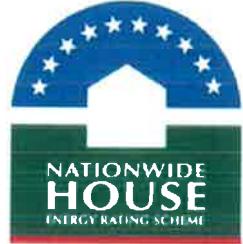
81.7 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 HOTEL	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature		
		Date <u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 6.5 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U16\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.5 Stars  
Conditioned Area 81.67 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 17.5 MJ/m<sup>2</sup>  
Adjusted Heating 25.8 MJ/m<sup>2</sup>  
Adjusted Total 43.4 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

#### Dwelling Address

DP Number 115903  
Unit Number 16  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U19 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	70.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	70.5 m <sup>2</sup>
Total Glazed Area	34.6 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	49.0 %
Gross External Wall Area	108.6 m <sup>2</sup>
Net External Wall Area	72.2 m <sup>2</sup>

### Window

34.6 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

42.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
15.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
14.6 m<sup>2</sup> PowerPanel Bulk Insulation R 1.5

### Internal Wall

60.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

8.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
26.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
35.2 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

70.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

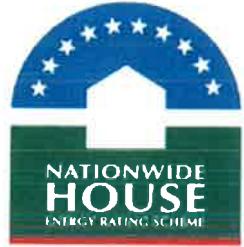
70.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U19\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 70.46 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 21.7 MJ/m<sup>2</sup>  
Adjusted Heating 63.7 MJ/m<sup>2</sup>  
Adjusted Total 85.4 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/> single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
	cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		
Assessor Signature		
Date 7 Sep 2015		

#### Dwelling Address

DP Number 115903  
Unit Number 19  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U22 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	69.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	69.1 m <sup>2</sup>
Total Glazed Area	14.3 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	20.7 %
Gross External Wall Area	111.2 m <sup>2</sup>
Net External Wall Area	95.1 m <sup>2</sup>

### Window

14.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

31.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
32.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
31.1 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5

### Internal Wall

37.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

26.3 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
6.3 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation  
36.5 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

69.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

69.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# 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 140811\_U22\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 69.12 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 12.9 MJ/m<sup>2</sup>  
Adjusted Heating 44.8 MJ/m<sup>2</sup>  
Adjusted Total 57.7 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 22  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U24 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	76.0 m <sup>2</sup>
Unconditioned Area	4.8 m <sup>2</sup>
Total Floor Area	80.8 m <sup>2</sup>
Total Glazed Area	17.8 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	22.1 %
Gross External Wall Area	112.3 m <sup>2</sup>
Net External Wall Area	92.6 m <sup>2</sup>

### Window

17.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

62.3 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
18.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
12.2 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

70.2 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

29.4 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
9.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
8.4 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
33.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

11.2 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity  
69.6 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

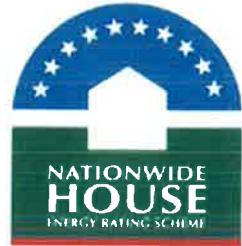
11.2 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof  
69.6 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>	
	cooling 18.7 MJ/m <sup>2</sup>	
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without	
Assessor Name/Number	<u>Dean Gorman</u> VIC/BDAV/13/1645	
Assessor Signature		
Date	<u>7 Sep 2015</u>	



# NatHERS Certificate

## New Dwelling



### 5.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U24\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 75.97 m<sup>2</sup>  
Unconditioned Area 4.83 m<sup>2</sup>  
Adjusted Cooling 16.3 MJ/m<sup>2</sup>  
Adjusted Heating 43.7 MJ/m<sup>2</sup>  
Adjusted Total 59.9 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 24  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor.....Date...../...../.....

*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 140811 U41 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	70.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	70.5 m <sup>2</sup>
Total Glazed Area	34.6 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	49.0 %
Gross External Wall Area	108.6 m <sup>2</sup>
Net External Wall Area	72.2 m <sup>2</sup>

### Window

34.6 m<sup>2</sup> GGG-05-013a Generics Uval 4.70 SHGC 0.63  
Glass Single Glazed Low E Clear  
Frame Aluminium

### External Wall

42.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
15.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
14.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

60.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

8.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
26.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
35.2 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

70.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

70.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U41\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 70.46 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 16.4 MJ/m<sup>2</sup>  
Adjusted Heating 60.7 MJ/m<sup>2</sup>  
Adjusted Total 77.1 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 41  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U44 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	57.6 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	57.6 m <sup>2</sup>
Total Glazed Area	16.7 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.9 %
Gross External Wall Area	95.6 m <sup>2</sup>
Net External Wall Area	77.1 m <sup>2</sup>

### Window

16.7 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

32.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
27.0 m<sup>2</sup> PowerPanel to neighbour No Insulation  
17.9 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5

### Internal Wall

37.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

13.3 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
7.7 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation  
9.9 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
26.6 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

57.6 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

57.6 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U44\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 57.62 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 25.1 MJ/m<sup>2</sup>  
Adjusted Heating 56.3 MJ/m<sup>2</sup>  
Adjusted Total 81.5 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>			
Assessor Signature		Date <u>7 Sep 2015</u>	

#### Dwelling Address

DP Number 115903  
Unit Number 44  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U44 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	74.6 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	74.6 m <sup>2</sup>
Total Glazed Area	17.8 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	23.8 %
Gross External Wall Area	105.8 m <sup>2</sup>
Net External Wall Area	86.2 m <sup>2</sup>

### Window

17.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

55.3 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
18.0 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
12.9 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

61.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

8.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
29.9 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
36.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

74.6 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

74.6 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>	
	cooling <u>18.7</u> MJ/m <sup>2</sup>	
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without	
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>	
Assessor Signature		
Date	<u>7 Sep 2015</u>	



# NatHERS Certificate

## New Dwelling



5.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U44\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 74.62 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 12.7 MJ/m<sup>2</sup>  
Adjusted Heating 47.9 MJ/m<sup>2</sup>  
Adjusted Total 60.6 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6	MJ/m <sup>2</sup>
		cooling	18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

### Dwelling Address

DP Number 115903  
Unit Number 44  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U47 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	79.8 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	79.8 m <sup>2</sup>
Total Glazed Area	16.3 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	20.4 %
Gross External Wall Area	119.3 m <sup>2</sup>
Net External Wall Area	101.2 m <sup>2</sup>

### Window

16.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

18.7 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
54.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
28.1 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

59.9 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

53.8 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
26.0 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation

### External Ceiling

79.9 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

79.8 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature 	Date <u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 5.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U47\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 79.85 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 13.8 MJ/m<sup>2</sup>  
Adjusted Heating 45.2 MJ/m<sup>2</sup>  
Adjusted Total 59.1 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 47  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U48 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	60.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	60.5 m <sup>2</sup>
Total Glazed Area	17.8 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	29.4 %
Gross External Wall Area	92.9 m <sup>2</sup>
Net External Wall Area	73.3 m <sup>2</sup>

### Window

17.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

10.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
54.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
7.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

30.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

12.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
47.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

30.9 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above  
29.6 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

30.9 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof  
29.6 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>	
Assessor Signature 	
Date <u>7 Sep 2015</u>	



# 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 140811\_U48\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 60.53 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.6 MJ/m<sup>2</sup>  
Adjusted Heating 37.5 MJ/m<sup>2</sup>  
Adjusted Total 53.1 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/>	single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>	
		cooling	18.7 MJ/m <sup>2</sup>	
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

### Dwelling Address

DP Number 115903  
Unit Number 48  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor....., Date ...../...../.....

*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 140811 U53 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	94.3 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	94.3 m <sup>2</sup>
Total Glazed Area	24.9 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	26.4 %
Gross External Wall Area	118.8 m <sup>2</sup>
Net External Wall Area	92.1 m <sup>2</sup>

### Window

24.9 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

11.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
56.0 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
25.0 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5

### Internal Wall

62.1 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

59.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
24.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
10.7 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation

### External Ceiling

70.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above  
24.2 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

70.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof  
24.2 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 5.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U53\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 94.30 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 9.0 MJ/m<sup>2</sup>  
Adjusted Heating 56.0 MJ/m<sup>2</sup>  
Adjusted Total 64.9 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without		
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 53  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U54 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	89.3 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	89.3 m <sup>2</sup>
Total Glazed Area	25.6 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.6 %
Gross External Wall Area	121.0 m <sup>2</sup>
Net External Wall Area	93.6 m <sup>2</sup>

### Window

25.6 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

23.3 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
60.5 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
9.7 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

58.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

54.5 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
24.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
10.7 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation

### External Ceiling

65.2 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above  
24.2 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

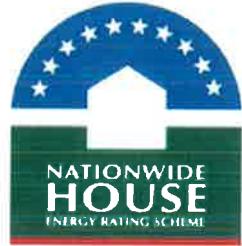
65.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof  
24.2 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



**4.0 Stars**

### Simulation Software

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

### Simulation Details

Project Name	140811 U54_1
Date	7/09/2015
Location	CANTERBURY PC 2193
Climate file	climat56.TXT
Adjusted Star Rating	4.0 Stars
Conditioned Area	89.33 m <sup>2</sup>
Unconditioned Area	0.00 m <sup>2</sup>
Adjusted Cooling	10.7 MJ/m <sup>2</sup>
Adjusted Heating	64.4 MJ/m <sup>2</sup>
Adjusted Total	75.2 MJ/m <sup>2</sup>

Energy Rating		Certificate Number 16450037	
<input type="checkbox"/> single-dwelling rating	5.3 stars	<input checked="" type="checkbox"/> multi-unit development (attach listing of ratings)	heating 39.6 MJ/m <sup>2</sup>
		cooling 18.7 MJ/m <sup>2</sup>	
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645			
Assessor Signature		Date 7 Sep 2015	

### Dwelling Address

DP Number	115903
Unit Number	54
Lot Number	1
House Number	364-374
Street Name	Canterbury Rd
Development Name	
Suburb	Canterbury NSW 2194

### Client Details

Name	Mackenzie Architects International
Phone	9967 9966 Fax
Email	felipe@mainternational.com.au
Postal Address	4/3 The Postern Castlecrag NSW 2068
Street Details	

### Assessor Details

Name	Dean Gorman
Phone	9575 7043 Fax
Email	dean@greenview.net.au
Postal Address	35 Riverview Rd Oyster Bay
Street Details	35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U55 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	64.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	64.1 m <sup>2</sup>
Total Glazed Area	20.1 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	31.3 %
Gross External Wall Area	99.4 m <sup>2</sup>
Net External Wall Area	77.5 m <sup>2</sup>

### Window

20.1 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

54.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
21.9 m<sup>2</sup> PowerPanel to neighbour No Insulation  
1.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.4 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

23.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
40.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

12.6 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity  
51.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

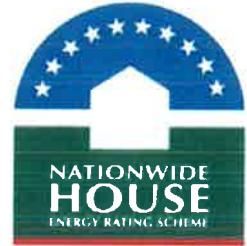
### Roof (Horizontal area)

12.6 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof  
51.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/>	Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature  Date <u>7 Sep 2015</u>	



# NatHERS Certificate New Dwelling



## 6.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U55\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.0 Stars  
Conditioned Area 64.11 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.3 MJ/m<sup>2</sup>  
Adjusted Heating 35.1 MJ/m<sup>2</sup>  
Adjusted Total 50.4 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

### Dwelling Address

DP Number 115903  
Unit Number 55  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U57 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	64.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	64.1 m <sup>2</sup>
Total Glazed Area	20.1 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	31.3 %
Gross External Wall Area	99.4 m <sup>2</sup>
Net External Wall Area	77.5 m <sup>2</sup>

### Window

20.1 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

54.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
21.9 m<sup>2</sup> PowerPanel to neighbour No Insulation  
1.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.4 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

23.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
40.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

64.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

64.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 6.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U57\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.0 Stars  
Conditioned Area 64.11 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.1 MJ/m<sup>2</sup>  
Adjusted Heating 33.6 MJ/m<sup>2</sup>  
Adjusted Total 48.8 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number	Dean Gorman VIC/BDAV/13/1645	
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 57  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U59 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	60.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	60.5 m <sup>2</sup>
Total Glazed Area	17.0 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.1 %
Gross External Wall Area	92.9 m <sup>2</sup>
Net External Wall Area	74.1 m <sup>2</sup>

### Window

17.0 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

22.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
43.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
8.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

30.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

12.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
47.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

60.5 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

60.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 <b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without	
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature 	Date <u>7 Sep 2015</u>



# 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	140811 U59_1
Date	28/10/2014
Location	CANTERBURY PC 2193
Climate file	climat56.TXT
Adjusted Star Rating	5.5 Stars
Conditioned Area	60.53 m <sup>2</sup>
Unconditioned Area	0.00 m <sup>2</sup>
Adjusted Cooling	12.7 MJ/m <sup>2</sup>
Adjusted Heating	38.6 MJ/m <sup>2</sup>
Adjusted Total	51.3 MJ/m <sup>2</sup>

Energy Rating		Certificate Number 16450037	
<input type="checkbox"/> single-dwelling rating	5.3 stars	heating	39.6 MJ/m <sup>2</sup>
<input checked="" type="checkbox"/> multi-unit development (attach listing of ratings) <small>If selected, data specified is the average across the entire development</small>		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without			
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645		Assessor Signature 	
		Date 7 Sep 2015	

### Dwelling Address

DP Number	115903
Unit Number	59
Lot Number	1
House Number	364-374
Street Name	Canterbury Rd
Development Name	
Suburb	Canterbury NSW 2194

### Client Details

Name	Mackenzie Architects International
Phone	9967 9966 Fax
Email	felipe@mainternational.com.au
Postal Address	4/3 The Postern Castlecrag NSW 2068
Street Details	

### Assessor Details

Name	Dean Gorman
Phone	9575 7043 Fax
Email	dean@greenview.net.au
Postal Address	35 Riverview Rd Oyster Bay
Street Details	35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U60 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	81.7 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	81.7 m <sup>2</sup>
Total Glazed Area	15.4 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	18.8 %
Gross External Wall Area	118.3 m <sup>2</sup>
Net External Wall Area	101.1 m <sup>2</sup>

### Window

15.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

13.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
85.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
2.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

44.3 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

70.6 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
11.1 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation

### External Ceiling

81.7 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

81.7 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> VIC/BDAV/13/1645
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 6.5 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U60\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.5 Stars  
Conditioned Area 81.67 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 14.8 MJ/m<sup>2</sup>  
Adjusted Heating 25.2 MJ/m<sup>2</sup>  
Adjusted Total 40.1 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6	MJ/m <sup>2</sup>
		cooling	18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

### Dwelling Address

DP Number 115903  
Unit Number 60  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U63 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	70.5 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	70.5 m <sup>2</sup>
Total Glazed Area	30.8 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	43.8 %
Gross External Wall Area	108.6 m <sup>2</sup>
Net External Wall Area	75.9 m <sup>2</sup>

### Window

30.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

46.2 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
15.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
14.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

60.5 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

8.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
26.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
35.2 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

70.5 m<sup>2</sup> Concrete Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

70.5 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings)  
If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup>  
cooling 18.7 MJ/m<sup>2</sup>

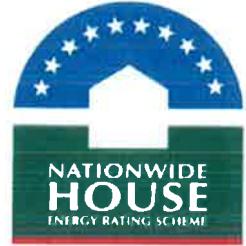
Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U63\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 70.46 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 17.1 MJ/m<sup>2</sup>  
Adjusted Heating 62.0 MJ/m<sup>2</sup>  
Adjusted Total 79.1 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without		
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645		Date 7 Sep 2015
Assessor Signature		

#### Dwelling Address

DP Number 115903  
Unit Number 63  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U66 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	52.4 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	52.4 m <sup>2</sup>
Total Glazed Area	16.7 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	31.8 %
Gross External Wall Area	96.1 m <sup>2</sup>
Net External Wall Area	77.6 m <sup>2</sup>

### Window

16.7 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

32.2 m<sup>2</sup> PowerPanel Bulk Insulation R 1.5  
27.0 m<sup>2</sup> PowerPanel to neighbour No Insulation  
18.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5

### Internal Wall

32.9 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

13.6 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
6.1 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation  
9.9 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
22.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

52.4 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

52.4 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3	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	39.6 MJ/m <sup>2</sup>
	cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>		
Assessor Signature 		Date <u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U66\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 52.44 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 23.4 MJ/m<sup>2</sup>  
Adjusted Heating 57.4 MJ/m<sup>2</sup>  
Adjusted Total 80.9 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6	MJ/m <sup>2</sup>
		cooling	18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

#### Dwelling Address

DP Number 115903  
Unit Number 66  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U68 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	64.9 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	64.9 m <sup>2</sup>
Total Glazed Area	18.7 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	28.9 %
Gross External Wall Area	101.5 m <sup>2</sup>
Net External Wall Area	81.0 m <sup>2</sup>

### Window

18.7 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

55.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
18.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
7.0 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

52.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

5.3 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
24.6 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
27.5 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
7.6 m<sup>2</sup> Concrete Slab, Unit Below 40/60 Carpet 10mm/Ceramic No Insulation

### External Ceiling

16.9 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity  
48.0 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

16.9 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof  
48.0 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



### 4.5 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U68\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 64.87 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 12.3 MJ/m<sup>2</sup>  
Adjusted Heating 55.9 MJ/m<sup>2</sup>  
Adjusted Total 68.2 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

#### Dwelling Address

DP Number 115903  
Unit Number 68  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor....., Date...../...../.....

*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 140811 U68 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	72.8 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	72.8 m <sup>2</sup>
Total Glazed Area	23.0 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	31.6 %
Gross External Wall Area	103.7 m <sup>2</sup>
Net External Wall Area	78.9 m <sup>2</sup>

### Window

23.0 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

14.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
40.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
23.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

37.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

10.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
62.0 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

72.8 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

72.8 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> VIC/BDAV/13/1645
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 6.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U68\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.0 Stars  
Conditioned Area 72.80 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.7 MJ/m<sup>2</sup>  
Adjusted Heating 29.6 MJ/m<sup>2</sup>  
Adjusted Total 45.3 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/> single-dwelling rating		5.3 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 39.6 MJ/m <sup>2</sup>	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645	
Assessor Signature			
		Date 7 Sep 2015	

### Dwelling Address

DP Number 115903  
Unit Number 68  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U69 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	74.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	74.1 m <sup>2</sup>
Total Glazed Area	16.8 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	22.7 %
Gross External Wall Area	108.5 m <sup>2</sup>
Net External Wall Area	89.9 m <sup>2</sup>

### Window

16.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

48.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
14.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
27.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

53.7 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

26.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
5.1 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
42.2 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

74.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

74.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup>  
cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# 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 140811\_U69\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 74.06 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 10.9 MJ/m<sup>2</sup>  
Adjusted Heating 41.4 MJ/m<sup>2</sup>  
Adjusted Total 52.4 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

#### Dwelling Address

DP Number 115903  
Unit Number 69  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U69 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	72.8 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	72.8 m <sup>2</sup>
Total Glazed Area	24.1 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	33.1 %
Gross External Wall Area	103.7 m <sup>2</sup>
Net External Wall Area	77.7 m <sup>2</sup>

### Window

24.1 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

13.7 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
40.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
23.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

37.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

10.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
62.0 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

72.8 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

72.8 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 6.5 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U69\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.5 Stars  
Conditioned Area 72.80 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 14.2 MJ/m<sup>2</sup>  
Adjusted Heating 26.9 MJ/m<sup>2</sup>  
Adjusted Total 41.1 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 69  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U72 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	51.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	51.1 m <sup>2</sup>
Total Glazed Area	21.1 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	41.4 %
Gross External Wall Area	88.5 m <sup>2</sup>
Net External Wall Area	65.6 m <sup>2</sup>

### Window

21.1 m<sup>2</sup> GGG-05-013a Generics Uval 4.70 SHGC 0.63  
Glass Single Glazed Low E Clear  
Frame Aluminium

### External Wall

37.2 m<sup>2</sup> PowerPanel Bulk Insulation R 1.5  
23.1 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
5.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

23.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

4.9 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
11.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
35.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

51.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

51.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 4.5 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U72\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 51.10 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 12.6 MJ/m<sup>2</sup>  
Adjusted Heating 55.9 MJ/m<sup>2</sup>  
Adjusted Total 68.5 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 72  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U73 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	44.5 m <sup>2</sup>
Unconditioned Area	4.6 m <sup>2</sup>
Total Floor Area	49.1 m <sup>2</sup>
Total Glazed Area	23.8 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	48.4 %
Gross External Wall Area	94.6 m <sup>2</sup>
Net External Wall Area	69.2 m <sup>2</sup>

### Window

23.8 m<sup>2</sup> GGG-05-013a Generics Oval 4.70 SHGC 0.63  
Glass Single Glazed Low E Clear  
Frame Aluminium

### External Wall

40.3 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
23.6 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
5.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

19.0 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

14.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
4.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
29.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

49.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

49.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number 16450037
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without	
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645	
Assessor Signature 	Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 4.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U73\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 44.52 m<sup>2</sup>  
Unconditioned Area 4.56 m<sup>2</sup>  
Adjusted Cooling 15.4 MJ/m<sup>2</sup>  
Adjusted Heating 63.7 MJ/m<sup>2</sup>  
Adjusted Total 79.1 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 73  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U74 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	65.9 m <sup>2</sup>
Unconditioned Area	5.2 m <sup>2</sup>
Total Floor Area	71.1 m <sup>2</sup>
Total Glazed Area	17.3 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	24.3 %
Gross External Wall Area	118.2 m <sup>2</sup>
Net External Wall Area	99.2 m <sup>2</sup>

### Window

17.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

66.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
25.8 m<sup>2</sup> PowerPanel to neighbour No Insulation  
6.7 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.1 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

51.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
14.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
5.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation

### External Ceiling

71.1 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

71.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 6.5 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U74\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.5 Stars  
Conditioned Area 65.90 m<sup>2</sup>  
Unconditioned Area 5.22 m<sup>2</sup>  
Adjusted Cooling 13.6 MJ/m<sup>2</sup>  
Adjusted Heating 26.0 MJ/m<sup>2</sup>  
Adjusted Total 39.6 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645		
Assessor Signature		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 74  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U75 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	69.0 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	69.0 m <sup>2</sup>
Total Glazed Area	22.4 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	32.4 %
Gross External Wall Area	109.2 m <sup>2</sup>
Net External Wall Area	84.9 m <sup>2</sup>

### Window

22.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

30.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
37.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
16.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

52.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

24.6 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
6.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
7.9 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
30.3 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

69.0 m<sup>2</sup> Concrete, Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

69.0 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# 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 140811\_U75\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.5 Stars  
Conditioned Area 69.01 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.2 MJ/m<sup>2</sup>  
Adjusted Heating 40.0 MJ/m<sup>2</sup>  
Adjusted Total 55.3 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

## Dwelling Address

DP Number 115903  
Unit Number 75  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

## Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

## Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U79 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	65.9 m <sup>2</sup>
Unconditioned Area	5.2 m <sup>2</sup>
Total Floor Area	71.1 m <sup>2</sup>
Total Glazed Area	17.3 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	24.3 %
Gross External Wall Area	118.2 m <sup>2</sup>
Net External Wall Area	99.2 m <sup>2</sup>

### Window

17.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

66.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
25.8 m<sup>2</sup> PowerPanel to neighbour No Insulation  
6.7 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.1 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

51.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
14.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
5.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation

### External Ceiling

71.1 m<sup>2</sup> Concrete Plasterboard No Insulation Apartment above

### Roof (Horizontal area)

71.1 m<sup>2</sup> Concrete No Insulation, Only an Air Gap 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup>  
cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



### 7.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U79\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 7.0 Stars  
Conditioned Area 65.90 m<sup>2</sup>  
Unconditioned Area 5.22 m<sup>2</sup>  
Adjusted Cooling 13.9 MJ/m<sup>2</sup>  
Adjusted Heating 22.2 MJ/m<sup>2</sup>  
Adjusted Total 36.1 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 79  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U82 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	74.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	74.1 m <sup>2</sup>
Total Glazed Area	16.8 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	22.7 %
Gross External Wall Area	108.5 m <sup>2</sup>
Net External Wall Area	89.9 m <sup>2</sup>

### Window

16.8 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

48.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
14.1 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
27.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

53.7 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

26.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
5.1 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
42.2 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

74.1 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

74.1 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 5.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U82\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 74.06 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 15.9 MJ/m<sup>2</sup>  
Adjusted Heating 43.1 MJ/m<sup>2</sup>  
Adjusted Total 59.0 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/> single-dwelling rating		5.3 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 39.6 MJ/m <sup>2</sup>	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645	
Assessor Signature			
		Date 7 Sep 2015	

### Dwelling Address

DP Number 115903  
Unit Number 82  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@minternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U83 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	72.8 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	72.8 m <sup>2</sup>
Total Glazed Area	17.7 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	24.3 %
Gross External Wall Area	103.7 m <sup>2</sup>
Net External Wall Area	84.2 m <sup>2</sup>

### Window

17.7 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

20.1 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
40.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
23.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

37.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

10.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
62.0 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

72.8 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

72.8 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



**6.0 Stars**

### Simulation Software

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

### Simulation Details

Project Name	140811_U83_2
Date	7/09/2015
Location	CANTERBURY PC 2193
Climate file	climat56.TXT
Adjusted Star Rating	6.0 Stars
Conditioned Area	72.80 m <sup>2</sup>
Unconditioned Area	0.00 m <sup>2</sup>
Adjusted Cooling	14.4 MJ/m <sup>2</sup>
Adjusted Heating	33.6 MJ/m <sup>2</sup>
Adjusted Total	48.1 MJ/m <sup>2</sup>

Energy Rating		Certificate Number 16450037	
<input type="checkbox"/> single-dwelling rating	5.3 stars	<input checked="" type="checkbox"/> multi-unit development (attach listing of ratings)	heating 39.6 MJ/m <sup>2</sup>
<small>If selected, data specified is the average across the entire development</small>		cooling 18.7 MJ/m <sup>2</sup>	
Recessed downlights confirmation: <input type="checkbox"/> Rated with		<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number Dean Gorman VIC/BDAV/13/1645			
Assessor Signature		Date 7 Sep 2015	

### Dwelling Address

DP Number 115903  
Unit Number 83  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name Canterbury  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U84 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	86.5 m <sup>2</sup>
Unconditioned Area	5.6 m <sup>2</sup>
Total Floor Area	92.1 m <sup>2</sup>
Total Glazed Area	30.6 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	33.2 %
Gross External Wall Area	158.8 m <sup>2</sup>
Net External Wall Area	126.3 m <sup>2</sup>

### Window

27.9 m <sup>2</sup>	GGG-05-013a	Generics	Uval 4.70	SHGC 0.63
			Glass Single Glazed Low E Clear	
			Frame Aluminium	
2.7 m <sup>2</sup>	GGG-05-001a	Generics	Uval 6.57	SHGC 0.74
			Glass Single Glazed Clear	
			Frame Aluminium	

### External Wall

53.4 m <sup>2</sup>	Brick Veneer	Bulk Insulation R 1.5
53.0 m <sup>2</sup>	PowerPanel	Bulk Insulation R 0.5
20.0 m <sup>2</sup>	PowerPanel to neighbour	No Insulation

### Internal Wall

63.7 m <sup>2</sup>	Cavity Panel	70mm gap	No Insulation
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### External Floor

10.7 m <sup>2</sup>	Concrete Slab, Unit Below	Ceramic Tiles 8mm	No Insulation
28.0 m <sup>2</sup>	Concrete Slab, Unit Below	Carpet 10mm	No Insulation
53.4 m <sup>2</sup>	Concrete Slab, Unit Below	60/40 Carpet 10mm/Ceramic	No Insulation

### External Ceiling

92.1 m <sup>2</sup>	Concrete, Plasterboard	No Insulation	Apartment above
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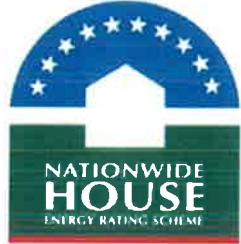
### Roof (Horizontal area)

92.1 m <sup>2</sup>	Concrete	No Insulation, Only an Air Gap	3° slope	Skillion roof
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 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 4.5 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U84\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 86.51 m<sup>2</sup>  
Unconditioned Area 5.60 m<sup>2</sup>  
Adjusted Cooling 11.4 MJ/m<sup>2</sup>  
Adjusted Heating 63.2 MJ/m<sup>2</sup>  
Adjusted Total 74.6 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 84  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U85 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	86.5 m <sup>2</sup>
Unconditioned Area	5.6 m <sup>2</sup>
Total Floor Area	92.1 m <sup>2</sup>
Total Glazed Area	30.6 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	33.2 %
Gross External Wall Area	158.8 m <sup>2</sup>
Net External Wall Area	126.3 m <sup>2</sup>

### Window

27.9 m <sup>2</sup>	GGG-05-013a	Generics	Uval 4.70	SHGC 0.63
			Glass Single Glazed	Low E Clear
			Frame	Aluminium
2.7 m <sup>2</sup>	GGG-05-001a	Generics	Uval 6.57	SHGC 0.74
			Glass Single Glazed	Clear
			Frame	Aluminium

### External Wall

53.4 m <sup>2</sup>	Brick Veneer	Bulk Insulation R 1.5
53.0 m <sup>2</sup>	PowerPanel	Bulk Insulation R 1.5
20.0 m <sup>2</sup>	PowerPanel to neighbour	No Insulation

### Internal Wall

63.7 m <sup>2</sup>	Cavity Panel	70mm gap	No Insulation
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### External Floor

10.7 m <sup>2</sup>	Concrete Slab, Unit Below	Ceramic Tiles 8mm	No Insulation
28.0 m <sup>2</sup>	Concrete Slab, Unit Below	Carpet 10mm	No Insulation
53.4 m <sup>2</sup>	Concrete Slab, Unit Below	60/40 Carpet 10mm/Ceramic	No Insulation

### External Ceiling

92.1 m <sup>2</sup>	Concrete, Plasterboard	No Insulation	Apartment above
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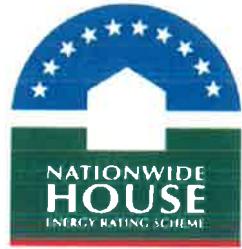
### Roof (Horizontal area)

92.1 m <sup>2</sup>	Concrete	No Insulation, Only an Air Gap	3° slope	Skillion roof
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 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation: <input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number <u>Dean Gorman VIC/BDAV/13/1645</u>	
Assessor Signature 	
Date <u>7 Sep 2015</u>	



# NatHERS Certificate New Dwelling



4.5 Stars

## Simulation Software

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

## Simulation Details

Project Name 140811\_U85\_1  
Date 28/10/2014  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 86.51 m<sup>2</sup>  
Unconditioned Area 5.60 m<sup>2</sup>  
Adjusted Cooling 10.9 MJ/m<sup>2</sup>  
Adjusted Heating 56.1 MJ/m<sup>2</sup>  
Adjusted Total 67.0 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

## Dwelling Address

DP Number 115903  
Unit Number 85  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

## Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

## Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U87 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	51.1 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	51.1 m <sup>2</sup>
Total Glazed Area	21.1 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	41.4 %
Gross External Wall Area	88.5 m <sup>2</sup>
Net External Wall Area	65.6 m <sup>2</sup>

### Window

21.1 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

37.2 m<sup>2</sup> PowerPanel Bulk Insulation R 1.5  
23.1 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
5.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

23.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

4.9 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
11.2 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
35.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

51.1 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

51.1 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



**3.5 Stars**

### Simulation Software

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

### Simulation Details

Project Name 140811\_U87\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 3.5 Stars  
Conditioned Area 51.10 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 30.9 MJ/m<sup>2</sup>  
Adjusted Heating 62.3 MJ/m<sup>2</sup>  
Adjusted Total 93.2 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 87  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U88 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	44.5 m <sup>2</sup>
Unconditioned Area	4.6 m <sup>2</sup>
Total Floor Area	49.1 m <sup>2</sup>
Total Glazed Area	23.8 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	48.4 %
Gross External Wall Area	94.6 m <sup>2</sup>
Net External Wall Area	69.2 m <sup>2</sup>

### Window

23.8 m<sup>2</sup> GGG-05-013a Generics Uval 4.70 SHGC 0.63  
Glass Single Glazed Low E Clear  
Frame Aluminium

### External Wall

40.3 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
23.6 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
5.3 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

19.0 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

14.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
4.6 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
29.8 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

49.1 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

49.1 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>
	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate

## New Dwelling



### 4.0 Stars

#### Simulation Software

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

#### Simulation Details

Project Name 140811\_U88\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 44.52 m<sup>2</sup>  
Unconditioned Area 4.56 m<sup>2</sup>  
Adjusted Cooling 23.7 MJ/m<sup>2</sup>  
Adjusted Heating 59.9 MJ/m<sup>2</sup>  
Adjusted Total 83.6 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

#### Dwelling Address

DP Number 115903  
Unit Number 88  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

#### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

#### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U89 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	65.9 m <sup>2</sup>
Unconditioned Area	5.2 m <sup>2</sup>
Total Floor Area	71.1 m <sup>2</sup>
Total Glazed Area	17.3 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	24.3 %
Gross External Wall Area	118.2 m <sup>2</sup>
Net External Wall Area	99.2 m <sup>2</sup>

### Window

17.3 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

66.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
25.8 m<sup>2</sup> PowerPanel to neighbour No Insulation  
6.7 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

45.1 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

51.1 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
14.8 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
5.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation

### External Ceiling

71.1 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

71.1 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 6.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U89\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.0 Stars  
Conditioned Area 65.90 m<sup>2</sup>  
Unconditioned Area 5.22 m<sup>2</sup>  
Adjusted Cooling 14.1 MJ/m<sup>2</sup>  
Adjusted Heating 34.4 MJ/m<sup>2</sup>  
Adjusted Total 48.5 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6	MJ/m <sup>2</sup>
		cooling	18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

### Dwelling Address

DP Number 115903  
Unit Number 89  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U90 Run 1  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	69.0 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	69.0 m <sup>2</sup>
Total Glazed Area	22.4 m <sup>2</sup>
Total External Solid door Area	1.9 m <sup>2</sup>
Glass to Floor Area	32.4 %
Gross External Wall Area	109.2 m <sup>2</sup>
Net External Wall Area	84.9 m <sup>2</sup>

### Window

22.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

30.5 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
37.5 m<sup>2</sup> PowerPanel to neighbour No Insulation  
16.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

52.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

24.6 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
6.2 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
7.9 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
30.3 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

69.0 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

69.0 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

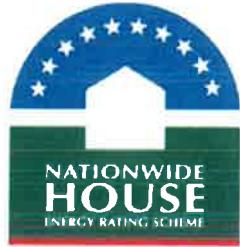
single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) heating 39.6 MJ/m<sup>2</sup>  
If selected, data specified is the average across the entire development cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 4.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U90\_1  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 69.01 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 22.6 MJ/m<sup>2</sup>  
Adjusted Heating 52.8 MJ/m<sup>2</sup>  
Adjusted Total 75.4 MJ/m<sup>2</sup>

		Energy Rating	Certificate Number	16450037
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6	MJ/m <sup>2</sup>
		cooling	18.7	MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without	
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645		
Assessor Signature				
		Date 7 Sep 2015		

### Dwelling Address

DP Number 115903  
Unit Number 90  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U91 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	81.7 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	81.7 m <sup>2</sup>
Total Glazed Area	15.4 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	18.8 %
Gross External Wall Area	118.3 m <sup>2</sup>
Net External Wall Area	101.1 m <sup>2</sup>

### Window

15.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

13.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
85.1 m<sup>2</sup> PowerPanel to neighbour No Insulation  
2.2 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

44.3 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

70.6 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation  
11.1 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation

### External Ceiling

81.7 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

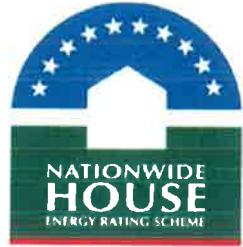
### Roof (Horizontal area)

81.7 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 6.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U91\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 6.0 Stars  
Conditioned Area 81.67 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 21.1 MJ/m<sup>2</sup>  
Adjusted Heating 29.8 MJ/m<sup>2</sup>  
Adjusted Total 50.9 MJ/m<sup>2</sup>

		<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating		5.3	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	39.6 MJ/m <sup>2</sup>
		cooling	18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645	
Assessor Signature			
		Date <u>7 Sep 2015</u>	

### Dwelling Address

DP Number 115903  
Unit Number 91  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U92 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	98.0 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	98.0 m <sup>2</sup>
Total Glazed Area	25.6 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	26.1 %
Gross External Wall Area	137.8 m <sup>2</sup>
Net External Wall Area	110.4 m <sup>2</sup>

### Window

25.6 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

24.8 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
62.7 m<sup>2</sup> PowerPanel to neighbour No Insulation  
22.9 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5

### Internal Wall

77.8 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

26.4 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
34.9 m<sup>2</sup> Concrete Slab, Unit Below 80/20 Carpet 10mm/Ceramic No Insulation  
6.8 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
30.0 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

98.0 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

98.0 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 **Energy Rating** Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings)  
If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup>  
cooling 18.7 MJ/m<sup>2</sup>

Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate New Dwelling



## 4.5 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U92\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.5 Stars  
Conditioned Area 98.00 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 23.4 MJ/m<sup>2</sup>  
Adjusted Heating 46.1 MJ/m<sup>2</sup>  
Adjusted Total 69.4 MJ/m<sup>2</sup>

Energy Rating		Certificate Number
<input type="checkbox"/>	single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup> cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		Dean Gorman VIC/BDAV/13/1645
Assessor Signature		
		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 92  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor ..... Date ..... / ..... / .....

*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 140811 U94 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	100.6 m <sup>2</sup>
Unconditioned Area	0.0 m <sup>2</sup>
Total Floor Area	100.6 m <sup>2</sup>
Total Glazed Area	34.4 m <sup>2</sup>
Total External Solid door Area	1.7 m <sup>2</sup>
Glass to Floor Area	34.2 %
Gross External Wall Area	174.7 m <sup>2</sup>
Net External Wall Area	138.6 m <sup>2</sup>

### Window

34.4 m<sup>2</sup> GGG-05-001a Generics Uval 6.57 SHGC 0.74  
Glass Single Glazed Clear  
Frame Aluminium

### External Wall

101.1 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
19.6 m<sup>2</sup> PowerPanel Bulk Insulation R 0.5  
17.9 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

75.6 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

51.7 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
10.9 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
38.0 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

100.6 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

### Roof (Horizontal area)

100.6 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating Certificate Number 16450037

single-dwelling rating 5.3 stars  
 multi-unit development (attach listing of ratings) If selected, data specified is the average across the entire development heating 39.6 MJ/m<sup>2</sup> cooling 18.7 MJ/m<sup>2</sup>

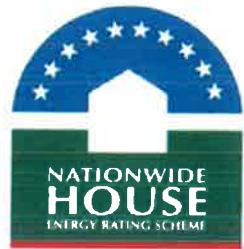
Recessed downlights confirmation:  Rated with  Rated without

Assessor Name/Number Dean Gorman VIC/BDAV/13/1645  
Assessor Signature   
Date 7 Sep 2015



# NatHERS Certificate

## New Dwelling



5.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U94\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 5.0 Stars  
Conditioned Area 100.64 m<sup>2</sup>  
Unconditioned Area 0.00 m<sup>2</sup>  
Adjusted Cooling 14.5 MJ/m<sup>2</sup>  
Adjusted Heating 44.0 MJ/m<sup>2</sup>  
Adjusted Total 58.5 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number <u>16450037</u>
<input type="checkbox"/>	single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup> cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:		<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number		<u>Dean Gorman VIC/BDAV/13/1645</u>
Assessor Signature		
		Date <u>7 Sep 2015</u>

### Dwelling Address

DP Number 115903  
Unit Number 94  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
Development Name  
Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
Email felipe@mainternational.com.au  
Postal Address 4/3 The Postern Castlecrag NSW 2068  
Street Details

### Assessor Details

Name Dean Gorman  
Phone 9575 7043 Fax  
Email dean@greenview.net.au  
Postal Address 35 Riverview Rd Oyster Bay  
Street Details 35 Riverview Rd Oyster Bay

Signed by the Assessor..... Date...../...../.....

*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 140811 U95 Run 2  
CANTERBURY PC 2193 Lat -33.90 Long 151.10 Climate File climat56.TXT

### Summary

Conditioned Area	86.5 m <sup>2</sup>
Unconditioned Area	5.6 m <sup>2</sup>
Total Floor Area	92.1 m <sup>2</sup>
Total Glazed Area	30.6 m <sup>2</sup>
Total External Solid door Area	1.8 m <sup>2</sup>
Glass to Floor Area	33.2 %
Gross External Wall Area	158.8 m <sup>2</sup>
Net External Wall Area	126.3 m <sup>2</sup>

### Window

30.6 m<sup>2</sup> GGG-05-013a Generics Uval 4.70 SHGC 0.63  
Glass Single Glazed Low E Clear  
Frame Aluminium

### External Wall

53.4 m<sup>2</sup> Brick Veneer Bulk Insulation R 1.5  
53.0 m<sup>2</sup> PowerPanel Bulk Insulation R 1.5  
20.0 m<sup>2</sup> PowerPanel to neighbour No Insulation

### Internal Wall

63.7 m<sup>2</sup> Cavity Panel 70mm gap No Insulation

### External Floor

10.7 m<sup>2</sup> Concrete Slab, Unit Below Ceramic Tiles 8mm No Insulation  
28.0 m<sup>2</sup> Concrete Slab, Unit Below Carpet 10mm No Insulation  
53.4 m<sup>2</sup> Concrete Slab, Unit Below 60/40 Carpet 10mm/Ceramic No Insulation

### External Ceiling

92.1 m<sup>2</sup> Plasterboard No Insulation No roofspace cavity

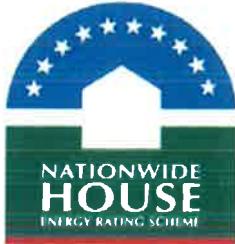
### Roof (Horizontal area)

92.1 m<sup>2</sup> Concrete Bulk Insulation, No Air Gap Above R 3.0 3° slope Skillion roof

 Energy Rating	Certificate Number <u>16450037</u>
<input type="checkbox"/> single-dwelling rating	5.3 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>39.6</u> MJ/m <sup>2</sup>
	cooling <u>18.7</u> MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with <input checked="" type="checkbox"/> Rated without
Assessor Name/Number	<u>Dean Gorman</u> <u>VIC/BDAV/13/1645</u>
Assessor Signature	
Date	<u>7 Sep 2015</u>



# NatHERS Certificate New Dwelling



## 4.0 Stars

### Simulation Software

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

### Simulation Details

Project Name 140811\_U95\_2  
Date 7/09/2015  
Location CANTERBURY PC 2193  
Climate file climat56.TXT  
Adjusted Star Rating 4.0 Stars  
Conditioned Area 86.51 m<sup>2</sup>  
Unconditioned Area 5.60 m<sup>2</sup>  
Adjusted Cooling 19.7 MJ/m<sup>2</sup>  
Adjusted Heating 63.8 MJ/m<sup>2</sup>  
Adjusted Total 83.5 MJ/m<sup>2</sup>

	<b>Energy Rating</b>	Certificate Number 16450037
<input type="checkbox"/> single-dwelling rating	5.3 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 39.6 MJ/m <sup>2</sup>	cooling 18.7 MJ/m <sup>2</sup>
Recessed downlights confirmation:	<input type="checkbox"/> Rated with	<input checked="" type="checkbox"/> Rated without
Assessor Name/Number	Dean Gorman VIC/BDAV/13/1645	
Assessor Signature		
		Date 7 Sep 2015

### Dwelling Address

DP Number 115903  
Unit Number 95  
Lot Number 1  
House Number 364-374  
Street Name Canterbury Rd  
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Suburb Canterbury NSW 2194

### Client Details

Name Mackenzie Architects International  
Phone 9967 9966 Fax  
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Street Details

### Assessor Details

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Signed by the Assessor ..... Date ..... / ..... / .....

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