

# Solar Access Report

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Residential Flat Building  
17-23 Merriwa Street, Gordon  
**November 2013**

For

**Meissen Properties**  
Meissen Properties IB Pty Ltd



**Brewster Murray Pty Limited**

Architects, Interior and Urban Designers

# Solar Access Report

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Gordon

## Introduction

This report is submitted as a requirement of the Ku-Ring-Gai Council. The requirement is to demonstrate the achievement of solar access to internal and external residential areas should be demonstrated. The guide recommends that where possible, sun access should be for a minimum of 2 hours per day on the winter solstice (21 June) measured on the main window of the living room, or at the front edge of the open space. The guide also recommends that buildings should be designed to maximize the number of dwelling units with sun access to the principle windows.

## Methodology

This report has been generated using the architectural software, Autodesk Revit 2013. This program is designed to produce accurate diagrams of solar access and overshadowing. The software has been programmed to cast shadows as they would at the latitude of the listed address. In keeping with the recommendations of the guide, shadows have been recorded at hourly intervals between the hours of 9am and 3pm on June 21st. Achievement of solar access has been recorded for each unit in a 'yes/no' format adjacent each plan for the primary living room window and the private open space.

## Findings

The project has been designed in a way that the living areas of all dwelling units is oriented north to maximize direct solar access as well as ambient solar access. The following is a summary of the findings demonstrated on the following pages:

Building A	Living Room Window	Private Open Space
A0.01	1.5 hours	2.0 hours
A0.02	1.5 hours	2.0 hours
A0.03		2.0 hours
A0.04	4.0 hours	4.0 hours
A0.05	2.5 hours	2.5 hours
A0.06		
A0.07		
A0.08	2.0 hours	2.0 hours
A0.09	2.0 hours	2.0 hours
A0.10	4.0 hours	4.0 hours
A0.11	2.0 hours	2.0 hours
A0.12		
A0.13		
A0.14		
A1.01	2.0 hours	2.0 hours
A1.02	1.0 hours	2.0 hours
A1.03	1.0 hours	2.0 hours
A1.04	4.0 hours	4.0 hours
A1.05	2.5 hours	2.5 hours
A1.06		
A1.07		
A1.08	2.0 hours	2.0 hours
A1.09	2.0 hours	2.0 hours
A1.10	4.0 hours	4.0 hours
A1.11	2.0 hours	2.0 hours
A1.12		
A1.13		
A1.14		
A2.01	2.0 hours	2.0 hours
A2.02	1.0 hours	2.0 hours
A2.03	1.0 hours	2.0 hours
A2.04	4.0 hours	4.0 hours
A2.05	2.5 hours	2.5 hours

A2.06		
A2.07	2.0 hours	2.0 hours
A2.08	2.0 hours	2.0 hours
A2.09	2.0 hours	2.0 hours
A2.10	4.0 hours	4.0 hours
A2.11	2.0 hours	2.0 hours
A2.12		
A2.13		
A2.14		
A3.01	2.0 hours	2.0 hours
A3.02	1.0 hours	2.0 hours
A3.03	1.0 hours	2.0 hours
A3.04	4.0 hours	4.0 hours
A3.05	2.5 hours	2.5 hours
A3.06	2.0 hours	2.0 hours
A3.07	4.0 hours	4.0 hours
A3.08	4.0 hours	4.0 hours
A3.09	4.0 hours	4.0 hours
A3.10	4.0 hours	4.0 hours
A3.11	2.0 hours	2.0 hours
A3.12		
A3.13		
A3.14		
A4.01	2.0 hours	2.0 hours
A4.02	2.0 hours	2.0 hours
A4.03	4.0 hours	4.0 hours
A4.04	4.0 hours	5.0 hours
A4.05	5.0 hours	5.0 hours
A4.06	5.0 hours	5.0 hours
A4.07	5.0 hours	5.0 hours
A4.08	2.0 hours	2.0 hours
A4.09		
A4.10		
A4.11		
A5.01	2.0 hours	2.0 hours
A5.02	2.0 hours	2.0 hours
A5.03	4.0 hours	4.0 hours
A5.04	4.0 hours	5.0 hours
A5.05	5.0 hours	6.0 hours
A5.06	5.0 hours	6.0 hours
A5.07	5.0 hours	6.0 hours
A5.08	2.0 hours	2.0 hours
A5.09		
A5.10		
A5.11		
A6.01	2.0 hours	2.0 hours
A6.02	2.0 hours	2.0 hours

A6.03	4.0 hours	4.0 hours
A6.04	4.0 hours	5.0 hours
A6.05	5.0 hours	6.0 hours
A6.06	5.0 hours	6.0 hours

### Building B

B0.01	5.0 hours	6.0 hours
B0.02	3.0 hours	3.0 hours
B1.01	6.0 hours	6.0 hours
B1.02	6.0 hours	6.0 hours
B1.03	6.0 hours	6.0 hours
B1.04	6.0 hours	6.0 hours
B1.05	6.0 hours	6.0 hours
B1.06	3.5 hours	3.5 hours
B2.01	6.0 hours	6.0 hours
B2.02	6.0 hours	6.0 hours
B2.03	6.0 hours	6.0 hours
B2.04	6.0 hours	6.0 hours
B2.05	6.0 hours	6.0 hours
B2.06	3.5 hours	3.5 hours
B3.01	6.0 hours	6.0 hours
B3.02	6.0 hours	6.0 hours
B3.03	6.0 hours	6.0 hours
B3.04	6.0 hours	6.0 hours
B3.05	6.0 hours	6.0 hours
B3.06	3.5 hours	3.5 hours
B4.01	6.0 hours	6.0 hours
B4.02	6.0 hours	6.0 hours
B4.03	6.0 hours	6.0 hours
B4.04	6.0 hours	6.0 hours
B4.05	2.0 hours	3.0 hours
B5.01	6.0 hours	6.0 hours
B5.02	6.0 hours	6.0 hours
B5.03	6.0 hours	6.0 hours
B5.04	6.0 hours	6.0 hours
B5.05	2.0 hours	3.0 hours
B6.01	6.0 hours	6.0 hours
B6.02	6.0 hours	6.0 hours

### Summary

Number of units achieving  $\geq 2$  hours solar access to living room windows is 84.  
Number of units achieving  $\geq 2$  hours solar access to private open space is 93.

**Therefore 71.8% of the units achieve greater than 2 hours direct solar access to the primary window of the living room and 79.5% of the units achieve greater than 2 hours direct solar access to their private open space.**