

18 December 2025

**Tom Clarke – Hansen Yuncken**

University of Newcastle Student Accommodation – City Campus

Re: Natural Ventilation Assessment

Dear Tom,

Please see below natural ventilation assessment associated with Sole Occupancy Units at the University of Newcastle Student Accommodation Building.

### 1.1 F6D6 – Ventilation of Rooms

In accordance with F6D6:

A habitable room, office, shop, factory, workroom, sanitary compartment, bathroom, shower room, laundry and any other room occupied by a person for any purpose must have—

- a. natural ventilation complying with F6D7; or
- b. a mechanical ventilation or air-conditioning system complying with AS 1668.2 and AS/NZS 3666.1.

**MBC Comment:** Each SOU has an option to have either natural ventilation **or** mechanical ventilation complying with the above. MBC note that each habitable room is provided with mechanical ventilation complying with AS1668.2. The provision of natural ventilation is therefore considered over and above what is required under BCA Clause F6D7.

### 1.2 F6D7 – Natural Ventilation

In accordance with F6D7:

Natural ventilation provided in accordance with F6D6(a) must consist of openings, windows, doors or other devices **which can be opened**—

- a. with a **ventilating area** not less than 5% of the floor area of the room required to be ventilated; and
- b. open to—
  - (i) a suitably sized court, or space open to the sky; or
  - (ii) an open verandah, carport, or the like; or
  - (iii) an adjoining room in accordance with F6D8.

**MBC Comment:** Each SOU is provided with openable windows which provide natural ventilation complying with this clause.

### 1.3 Ventilating area

In accordance with ABCB Protection of openable windows advisory note 2020 ([Protection of Openable Windows](#)), “the ventilation area of a window is measured as the size of the openable sash of the window, i.e. – whether it’s an awning, casement or sliding window and irrespective of the restriction on the openable sash”.

This is reflected in the below figures 2a and 2b which illustrate the correct area and incorrect area when measuring the “ventilating area” of a window.

Figure 2a Correct area

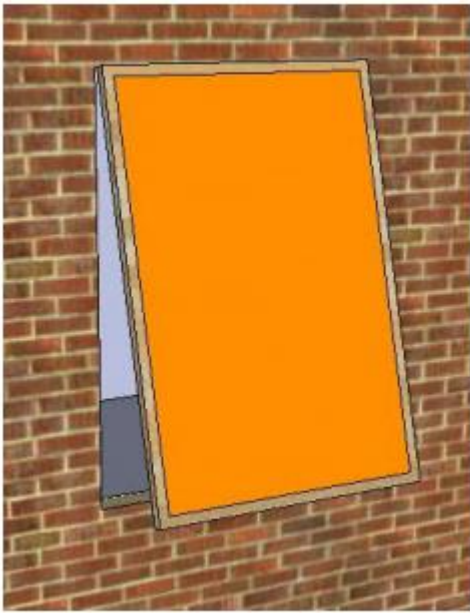


Figure 2b Incorrect area

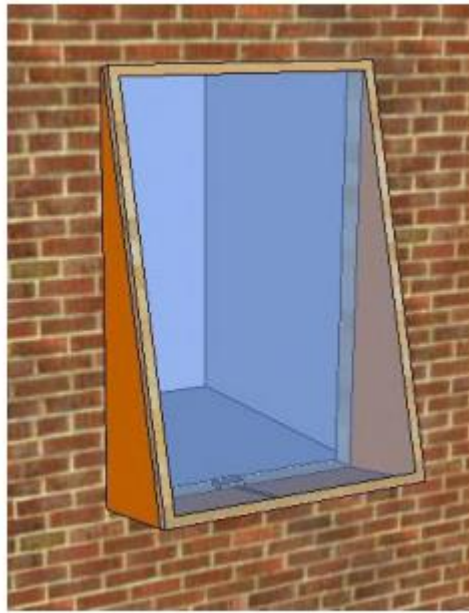


Figure 1 - Ventilation area of each sash (ACB Advisory note 2020)

## 1.4 Assessment

### Typical Window Elevation

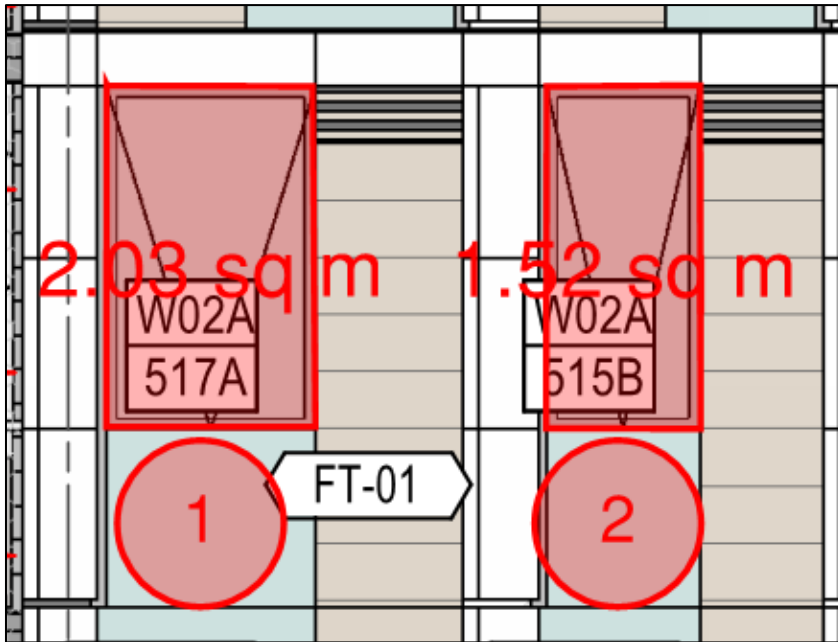


Figure 2 - Typical Window Elevation (A-CCSA-ELV-300001/C01 Prepared by Architectus)

### Typical SOU Layout

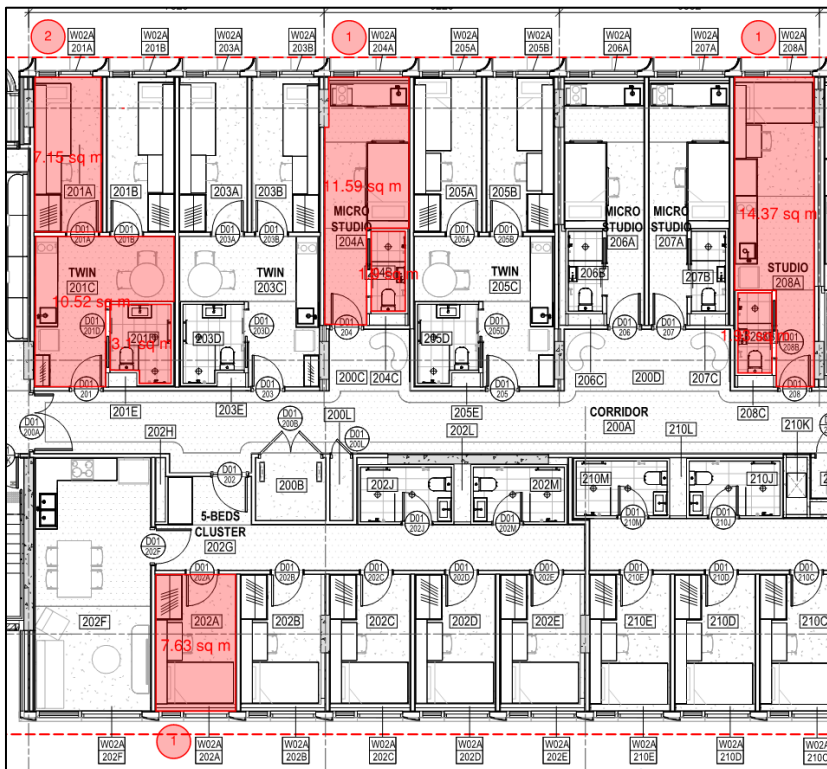


Figure 3 - Typical SOU Layout (A-CCSA-GA-200200/P09 Prepared by Architectus)

### Studio SOU

- Floor area = 14.37m<sup>2</sup>
- 5% of floor area = 0.72m<sup>2</sup>
- Ventilation area = 2.0m<sup>2</sup>
- Status: Complies

### Micro Studio SOU

- Floor area = 11.6m<sup>2</sup>
- 5% of this = 0.58m<sup>2</sup>
- Ventilation area = 2.0m<sup>2</sup>
- Status: Complies

### Cluster SOU

- Floor area = 7.63m<sup>2</sup>
- 5% of this = 0.38m<sup>2</sup>
- Ventilation area = 2.0m<sup>2</sup>
- Status: Complies

### Twin Room SOU

- Floor area = 7.15m<sup>2</sup>
- 5% of this = 0.36m<sup>2</sup>
- Ventilation area = 1.5m<sup>2</sup>
- Status: Complies

### Twin Room including common area

- Floor area = 7.15m<sup>2</sup> + 10.52m<sup>2</sup> = 17.67m<sup>2</sup>
- 5% of total floor area = 0.89m<sup>2</sup>
- Ventilation area = 1.5m<sup>2</sup> (actually 3m<sup>2</sup> when both bedrooms are accounted for).
- Status: Complies

## 1.5 Comparison

When comparing the approved SSD design (left in Figure 4 below) against the proposed S4.55 modified design (right in figure 4 below), it is determined that there is an increase in “ventilating area” when assessed against F6D7 of the BCA. Given:

- SSD Approved design effective height of windows being 0.6m and 1.2m (combined 1.8m height),
- Proposed Modification design effective height 1.84m, and
- Consistent window widths.

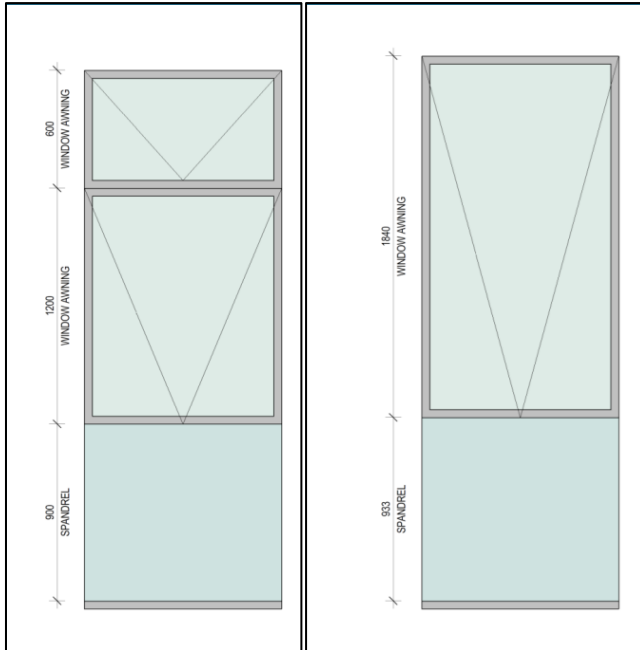


Figure 4 - Window comparison (Architectus)

Should you require any further information, please don't hesitate to contact MBC Group.

Kind regards,



Matthew Marks  
Associate Director  
MBC Group