

To	JBA	Date	20 May 2013
Attention	Stephen Gouge	Facsimile	
From	Katie Fallowfield	Project No	SYD1224200
Project	Block 4S	No. of pages	2
Subject	ESD Approach	Copies	Alex Sicari, Michael Goldrick, Alan Davis, Rob Beck, Michael Lam

Dear Stephen,

The purpose of this memo is to provide clarification on the ESD initiatives included in Block 4S at Central Park.

Section J Compliance

Block 4S has demonstrated compliance with both Section J of the NCC 2012 as well as the BASIX online assessment tool.

The objective of Section J of the NCC is to reduce greenhouse gas emissions by ensuring buildings are capable of using energy efficiently. For Class 1 and 2 buildings in NSW, this is demonstrated using the BASIX online tool. For Class 3 to 9 buildings, compliance with section J is demonstrated by meeting the DTS (Deemed To Satisfy) requirements of Parts J1-J8, or via an alternative compliance path such as JV3 modelling.

In the past, BASIX certificates have been requested by the regulatory authority for Class 3 developments to demonstrate the environmental performance of the building. However, the NSW Department of Planning has recently provided clarification that NatHERS certificates cannot be produced for Class 3 dwellings (see Appendix N of the SSDA). As a NatHERS certificate is required to demonstrate compliance with the thermal comfort section of BASIX, this means that BASIX certificates cannot be produced for Class 3 accommodation. Therefore, the provisions of Section J of the NCC apply to Block 4S.

However, although a formalised certificate cannot be produced, the project is still aiming to meet the intent of BASIX energy and water efficiency. In order to optimise the design and ensure the best outcome in terms of energy efficiency, as well as occupant comfort and cost-effectiveness in design, the following has been used to demonstrate Block 4S meets the intent of BASIX and the requirements of Section J:

- The building envelope has been assessed against Parts J1 and J2 of the NCC. A JV3 modelling approach was taken in accordance with specification JV, which demonstrated the building met the requirements of Parts J1 and J2. This will ensure the building envelope support the efficient use of energy for comfort cooling and space heating;
 - *This approach replaces the thermal comfort section of BASIX*
- Water efficiency in Block 4S has been assessed using the BASIX online tool achieving a score of 49%. This exceeds the minimum 40% BASIX water efficiency benchmark; and

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- Energy efficiency in Block 4S has been assessed using the BASIX online tool achieving a score of 36%, significantly exceeding the minimum 20% BASIX energy efficiency benchmark.

The BASIX report generated for the building is attached as Appendix K of the SSDA.

Natural Ventilation

In order to reduce energy consumption associated with air conditioning, the common corridors and typical common areas will be provided with natural ventilation. The diagrams below demonstrate how strategically placed openings will encourage air flow through these spaces to maintain air quality and improve comfort conditions.

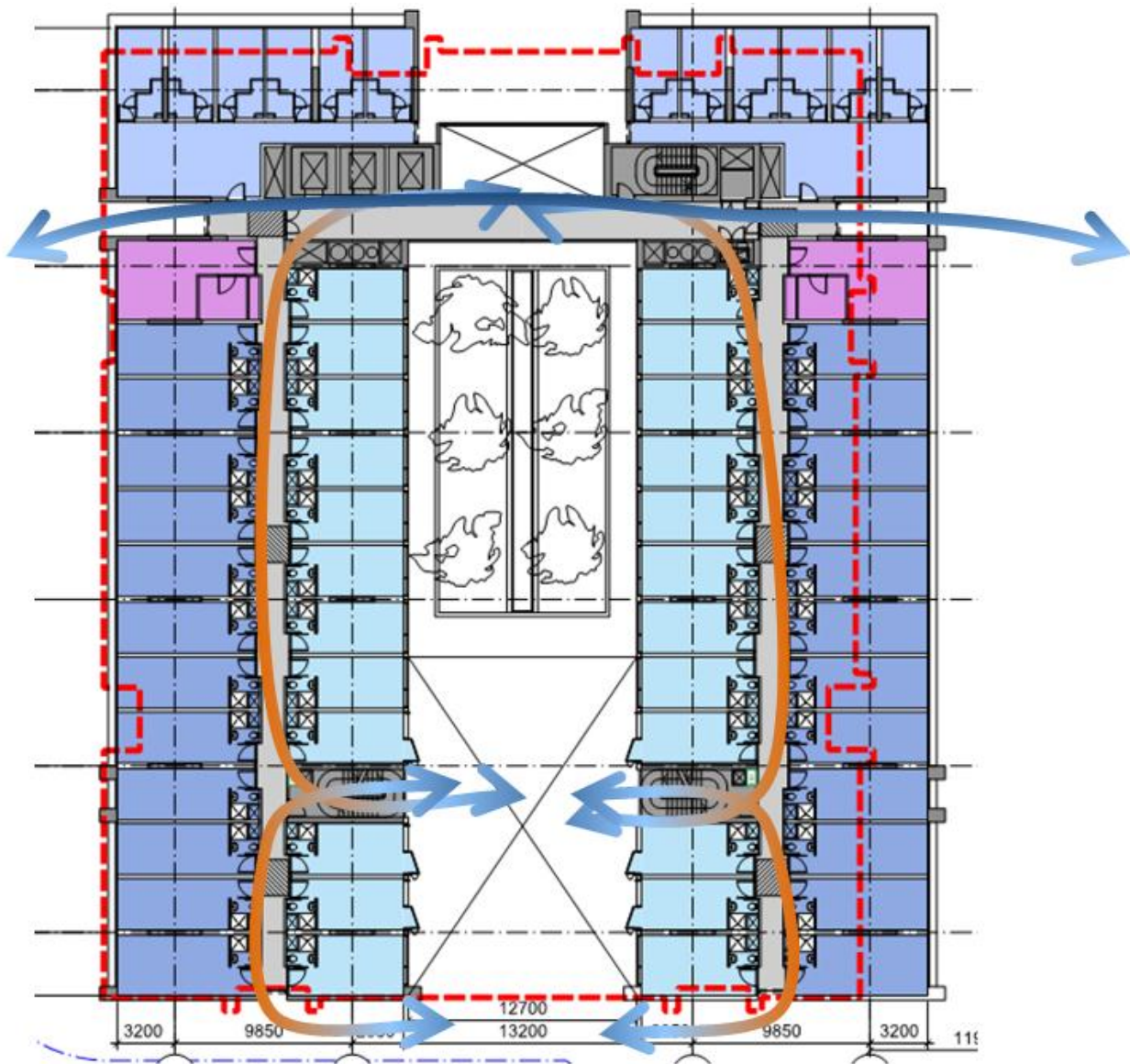


Figure 1: Natural ventilation through the corridors

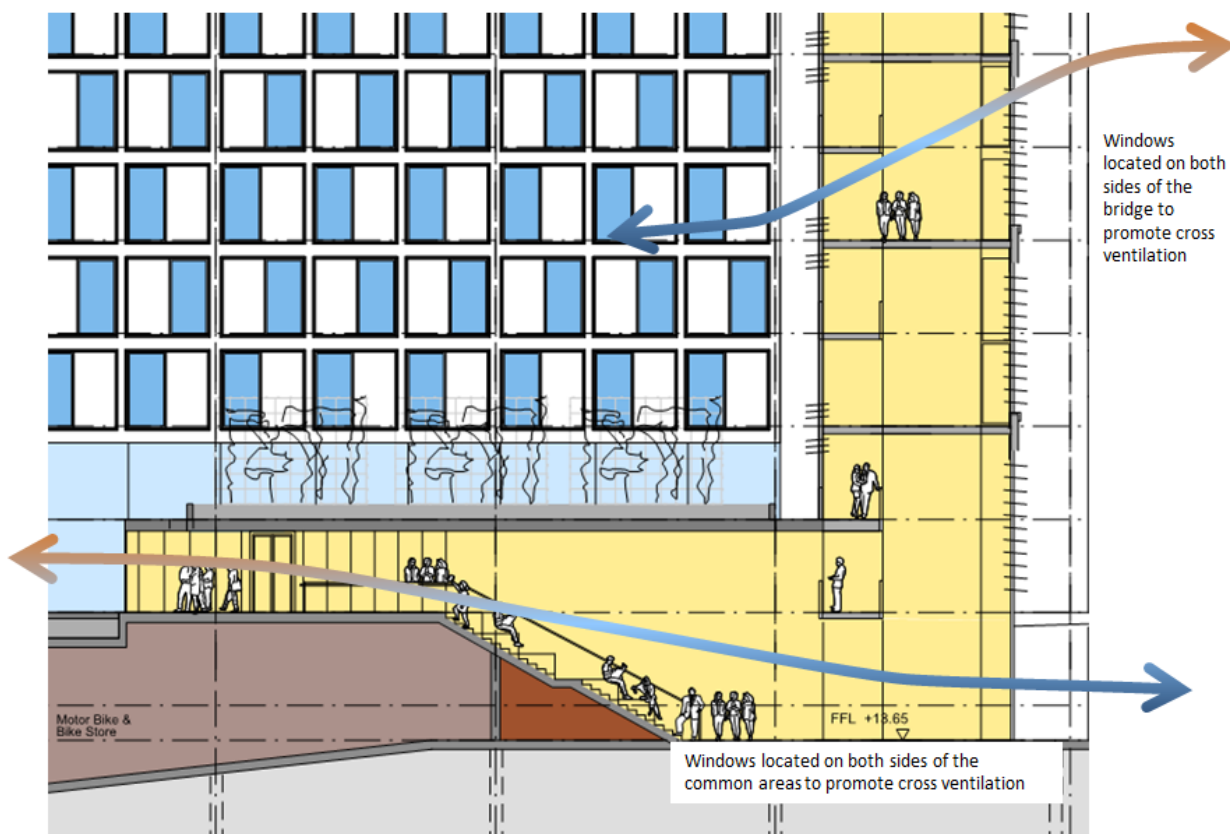


Figure 2: Natural ventilation through the bridge common areas and the ground and level 1 common areas

In addition, the apartments have been designed to maximise natural ventilation either via cross flow air paths (in the cluster apartments) or single sided ventilation (in the studio apartments).

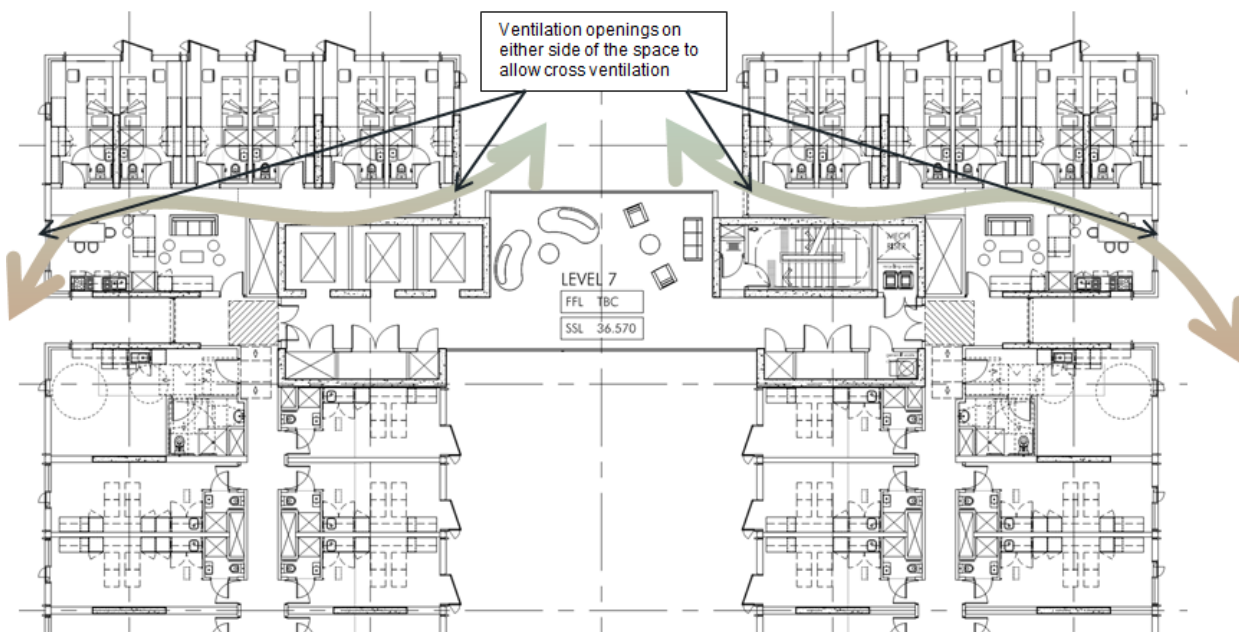


Figure 3: Cross ventilation through the cluster apartments

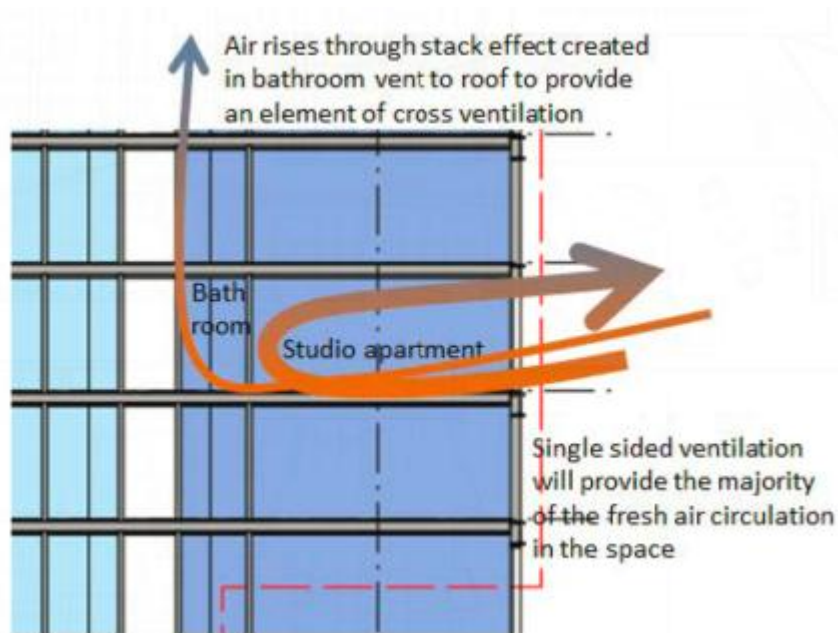


Figure 4: Ventilation through the studio apartments

If you have any comments or queries regarding the above, please feel free to contact me.

Regards,

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