

PLANS AND DOCUMENTS
referred to in the PDA APPROVAL

18 FEB 2016

MEDQ

Phase 2 - Stage 4 & 5:

Balcony Report

Rev D
16/02/16

Table of Contents

1. Site : Context, Vision & Guildelines	1
Context	
Vision	
Guildelines	
2. Response	2
Historical Context	
Modern Interpretation	
Economic Reality	
3. Proposal	3
4. Orientation and Edges	4
5. Matrix	8
6. Apartment Options	10
7. Climate and Environment	12
8. Glazing Strategy	14
9. Sun-hoods and Screens Strategy	16
10. Materials	20
11. Stages 4 & 5 Summary	21

1. Site: Context, Vision & Guidelines

Context

The development of land bounded by Water Street, Brunswick Street, Gregory Terrace and the RNA offers an opportunity for Brisbane to provide a connecting precinct that embraces the notion of high density living in an area that is close to transport and employment hubs, significant business and entertainment districts. The apartment mix within this project directly responds to the commercial requirement for compact affordable units with a range of living options. Affordability is the key focus in providing different apartment types with lower price points which is provided by the compact 'alfresco' and 'juliette' style apartments which combine dining and balcony into one flexible space. There is a varied mix of apartments throughout the plates with a mix of 'alfresco', 'juliette' and balcony apartments providing an assortment of price points and a diverse mix in the resulting end population.

Vision

The economic imperative of providing affordable housing raises many challenges for design to balance economic, social and environmental design aspects. The need to reevaluate the established norms and standards is compelling in order to drive such an outcome. The Vision for this document is to propose an alternative to balcony and/or outdoor space that responds to these imperatives and provides a liveable and affordable solution.

Guidelines

The ULDA Development Scheme calls for:

- Building forms that contribute individually and collectively to a distinctive character
- Best practice in urban design
- Design for Liveability
- Design that responds appropriately to the subtropical climate

2. Response

Historical Context

Our response is based on determining the practises and social functions of outdoor balcony and outdoor spaces in subtropical housing and to propose a relevant response for this project in the current economic climate. It is recognised that the covered deck with or without perimeter screen is the quintessential element that has evolved in Queensland in response to housing in this subtropical region. It provides a low maintenance space that functions for the user on many levels. Space to entertain, have a view, to have a few plants and have direct access to the breeze and sky are key elements of this space. The space must maintain safety and security and be private and comfortable. These are all expectations we have of our lifestyle in Queensland. The ability to open the dwelling space or unit up to the exterior is a very important social and environmental aspect to living in this climate.

Modern Interpretation

The role of the verandah and deck has changed over time where this space has become not just a physical but also a social part of the household. Its connection to living spaces means that it also provides a level of access to ventilation and light for inner spaces. In medium to high rise apartments this need for a social space 'connected with the outdoors' has evolved into a perceived 'need' within this user group to provide such spaces. We would propose that this need is a real response to the Queensland climate and social condition for users. The imperative of affordability demands that we explore alternatives to the deck or balcony to cater for this social and climatic need.

Economic Reality

The demand on living space and the challenges on affordability may make balconies an increased cost inclusion in an affordable market. Development companies argue that duplication of spaces, as in dining or living space, pushes up the sales price thereby greatly reducing the available market. The challenge then is to deliver the requirement for liveability with this approach.

3. Proposal

It is proposed that the contemporary apartment landscape of Brisbane requires new approaches to affordability through the provision of efficient use of space. In smaller apartments the additional cost of balconies can be disproportional to their value and impact on the user. This is particularly so when income and expenditure is a major social and behavioural driver.

The opportunity exists for an apartment design and development to cleverly address this social need in a way that ensures affordability and diversity in apartment design whilst addressing climate and liveability. We believe that, if properly considered and incorporated into a design, it is appropriate that a relatively large proportion of apartments in medium to high rise residential apartments would incorporate 'juliette' or 'alfresco' apartments.

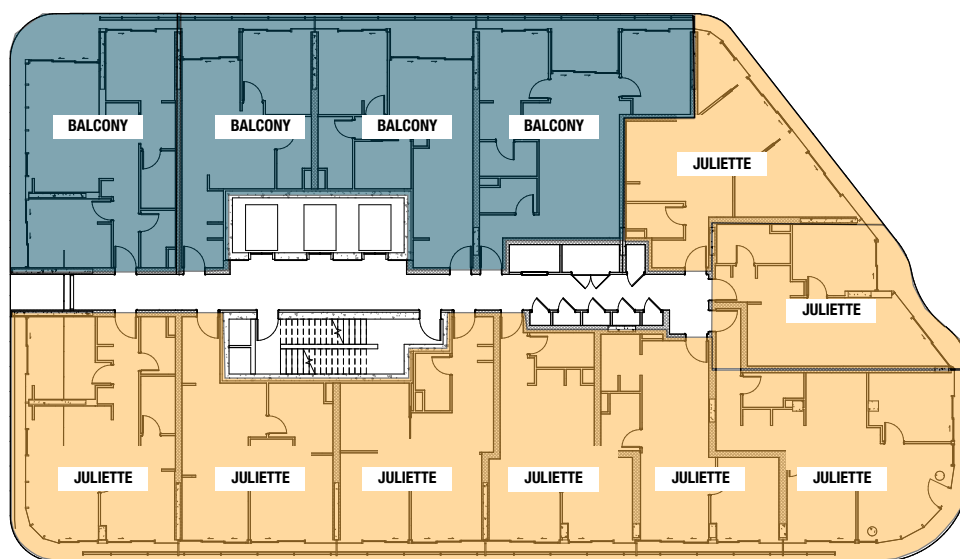
The following pages of this report propose an approach which provides balconies for at least 55% of the Water Street Apartments, and those designed without a balcony, or a reduced balcony less than 7m², incorporate the following qualities:

- Solar and rain protection to allow significant open-ability
- Surfaces that allow flexible use
- Maximised access to light and air
- Natural ventilation operability

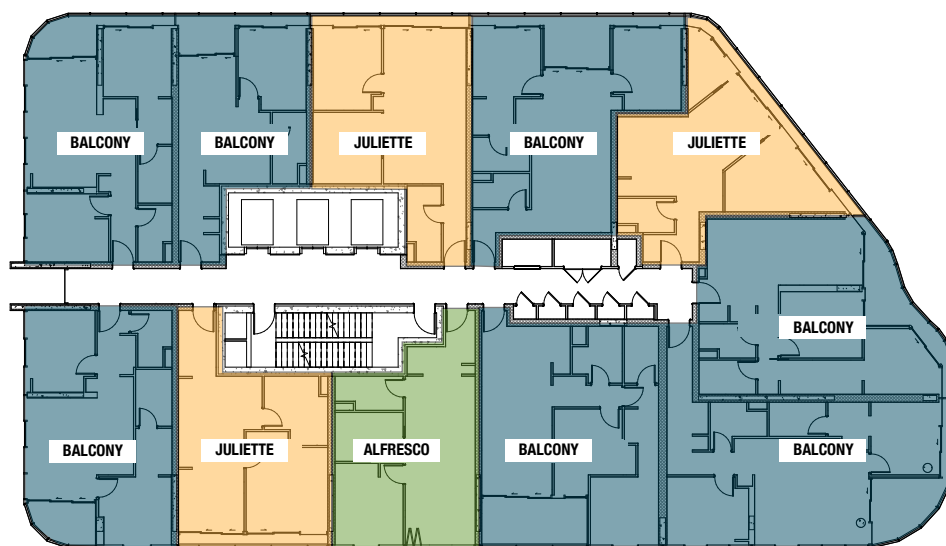
4. Orientation and Edges (stage 4)

Stage 4 Tower faces onto Brunswick Street and the Western property boundary, which forms the edge of the development's pedestrian entry. The East and Western facades are treated with an edge defined by solar shading with aluminium hood extensions and provide solar protection and privacy to the apartments along these edges. The East facade contains hood extensions to provide weather protection to the North-Eastern apartments and alfresco units.

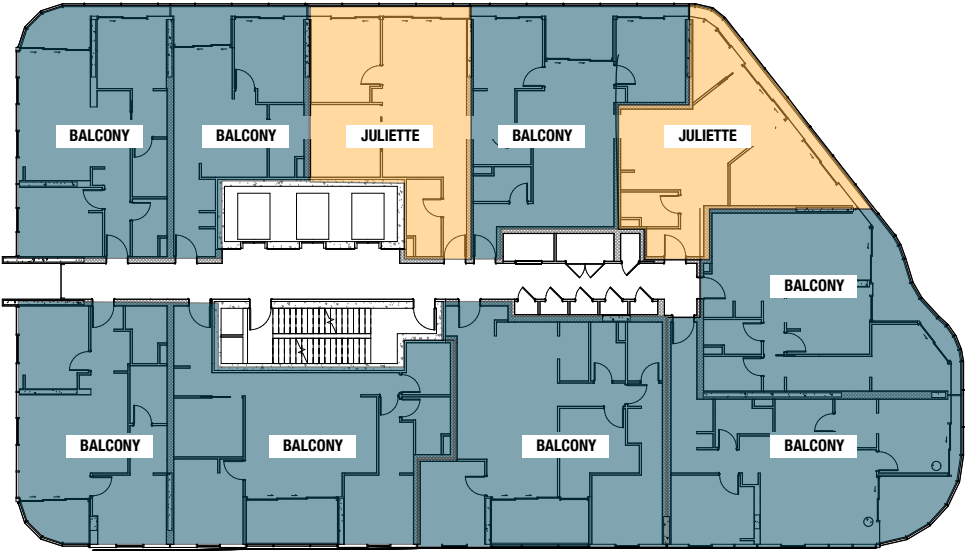
The 'Alfresco' apartments highlighted in green comprise at most 6% of the apartments, thereby lowering the price entry point providing diversity within the final product. The 'Juliette' apartments highlighted in yellow comprise at most 35% of the apartments.



LEVELS 5 - 11 - TYPICAL



LEVELS 12 - 28 - TYPICAL



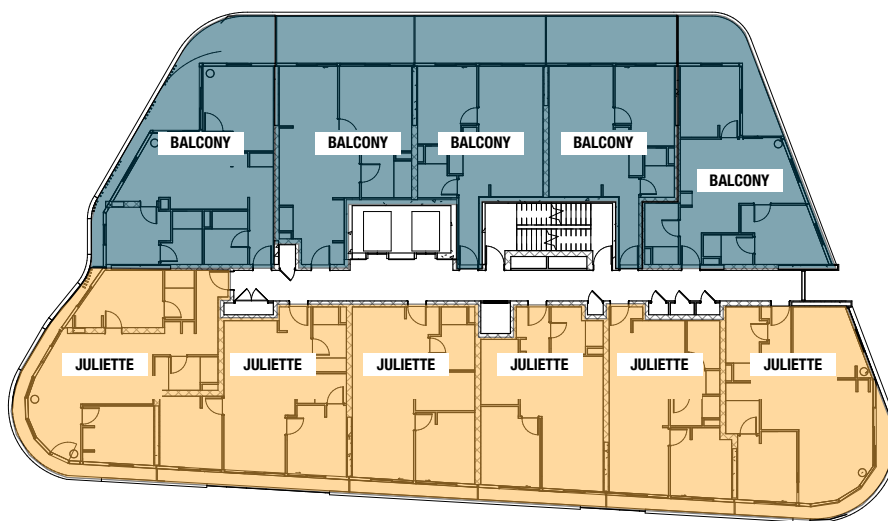
LEVELS 29 - 31 - TYPICAL



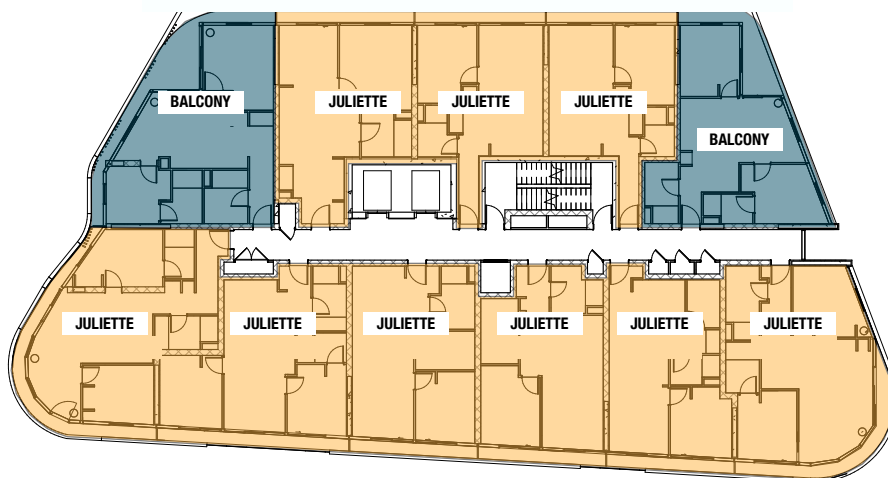
4. Orientation and Edges (stage 5)

Stage 5 faces onto Water Street and the Southern property boundary, which forms the edge of the development's pedestrian entry. The North facade is treated with an edge defined by solar shading with slab extensions and vertical screens providing solar protection and privacy to the apartments along these edges. The slab extensions to provide weather protection to the North-Eastern apartments.

The 'Alfresco' apartments highlighted in green comprise at most 14% of the apartments, thereby lowering the price entry point providing diversity within the final product. The 'Juliette' apartments highlighted in yellow comprise at most 37% of the apartments.

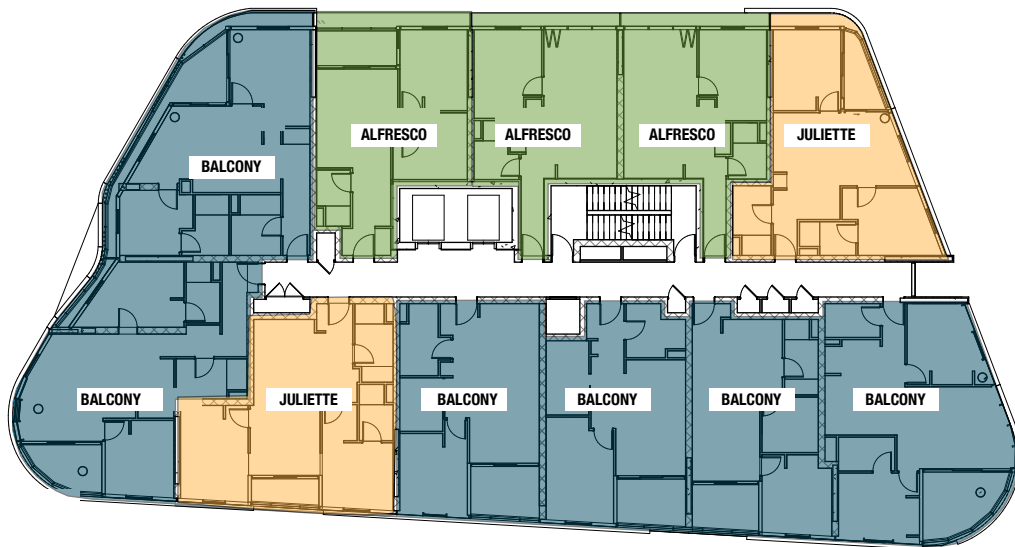


LEVELS 5

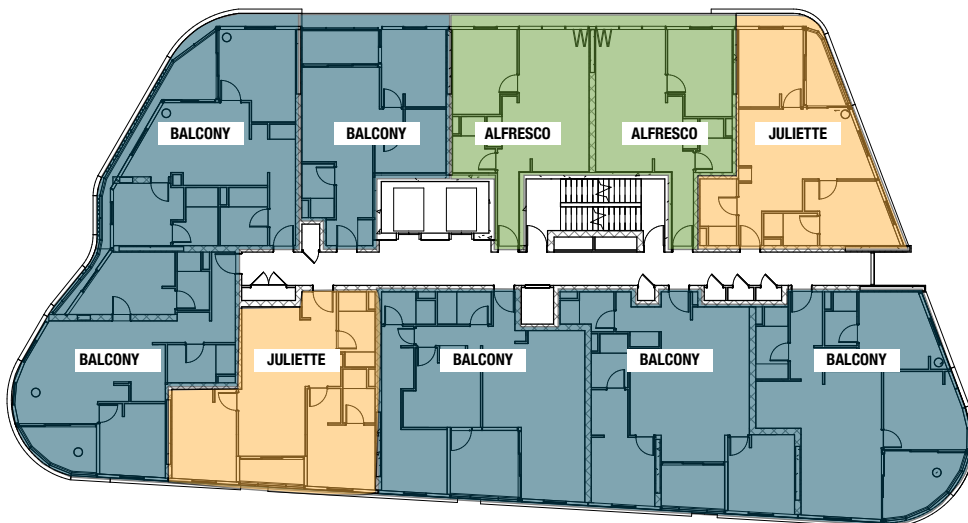


LEVELS 6 TO 9 - TYPICAL



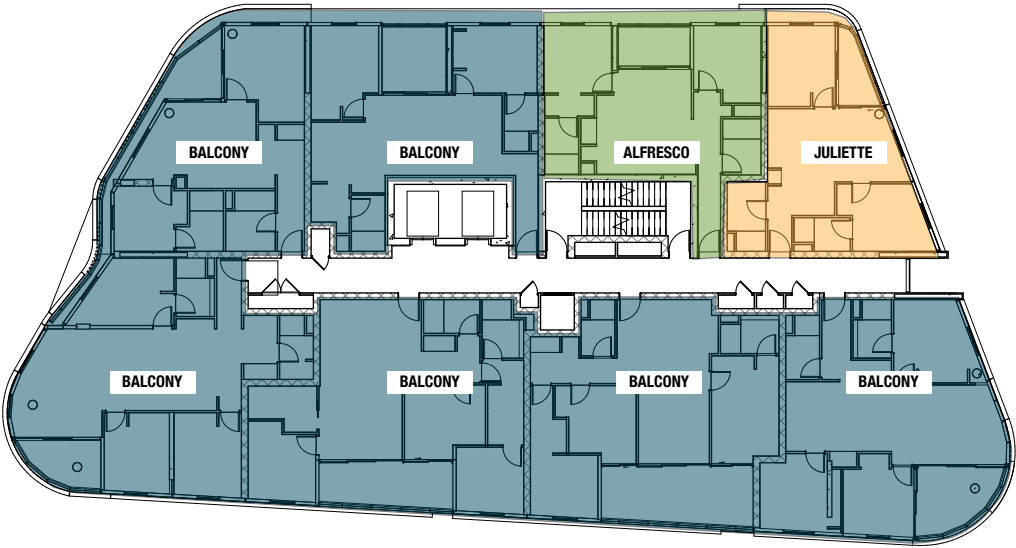


LEVELS 10 TO 13 - TYPICAL



LEVELS 14 TO 23 - TYPICAL





LEVELS
24 TO 25- TYPICAL

5. Matrix (stage 4)

WATER STREET - Stage 4 Development

APARTMENT MATRIX

16.02.16

		CITY/WEST ELEVATION/BRUNSWICK STREET										EAST ELEVATION									
Roof																					
Level 31	TOWER	2 BED		3 BED		3 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 30		2 BED		3 BED		3 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 29		2 BED		3 BED		3 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 28		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 27		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 26		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 25		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 24		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 23		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 22		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 21		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 20		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 19		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 18		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 17		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 16		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 15		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 14		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 13		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 12		2 BED		1 BED	1 BED (S)	2 BED		2 BED		2 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 11		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 10		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 9		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 8		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 7		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 6		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 5		2 BED		1 BED	1 BED (S)	1 BED	1 BED	2 BED		1 BED		1 BED (S)		2 BED		1 BED (S)		1 BED		2 BED	
Level 4	STRUCTURAL TRANSFER										STRUCTURAL TRANSFER										
LOBBY / CENTRE ACTIVITIES																					
PODIUM 3	PODIUM	CARPARKING / CENTRE ACTIVITIES																			
PODIUM 2		CARPARKING																			
PODIUM 1		CARPARKING																			
BASEMENT 1	BASEMENT	CARPARKING																			
BASEMENT 2		CARPARKING										CARPARKING									

	ALFRESCO	NO. 17
	JULIETTE	NO. 106
	BALCONY	NO. 178

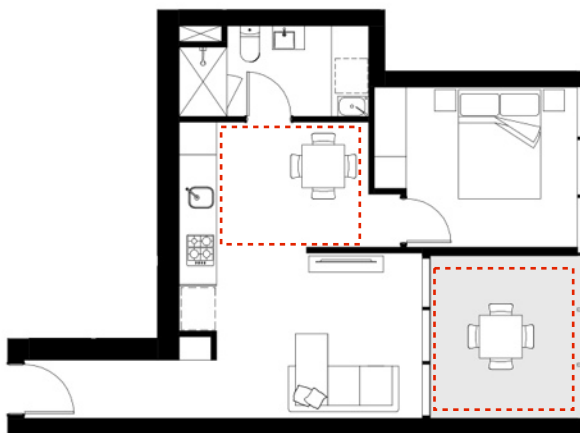
APARTMENT MATRIX

16.02.16

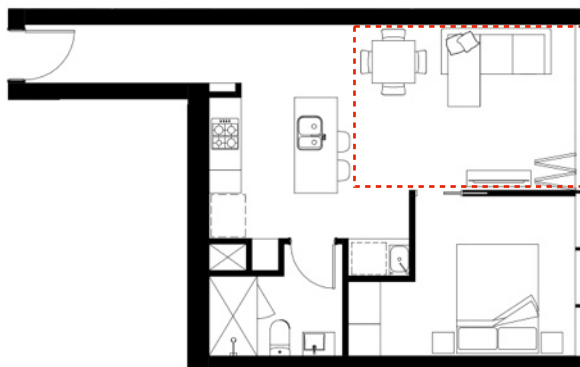
ALFRESCO	NO. 32
JULIETTE	NO. 84
BALCONY	NO. 118

6. Apartment Options

Type 1: External Balcony and Internal Dining. Market forces drive the need for a variety of compact living options, therefore it is not always an option to include a balcony due to greater build and final cost. In addition this typical response results in a duplication of the dining function as highlighted below.

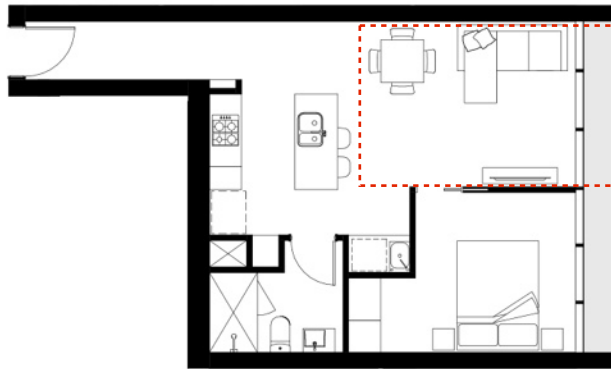


Type 2: 'Alfresco' with a flexible internal/external dining and living space and reduced circulation area with full width bi-folding doors above a glazed facade to increase the external experience.



6. Apartment Options

Type 3: 'Juliette' with a flexible internal/external dining space and reduced circulation area with full height sliding doors opening onto a 600mm deep balcony to increase the external experience.

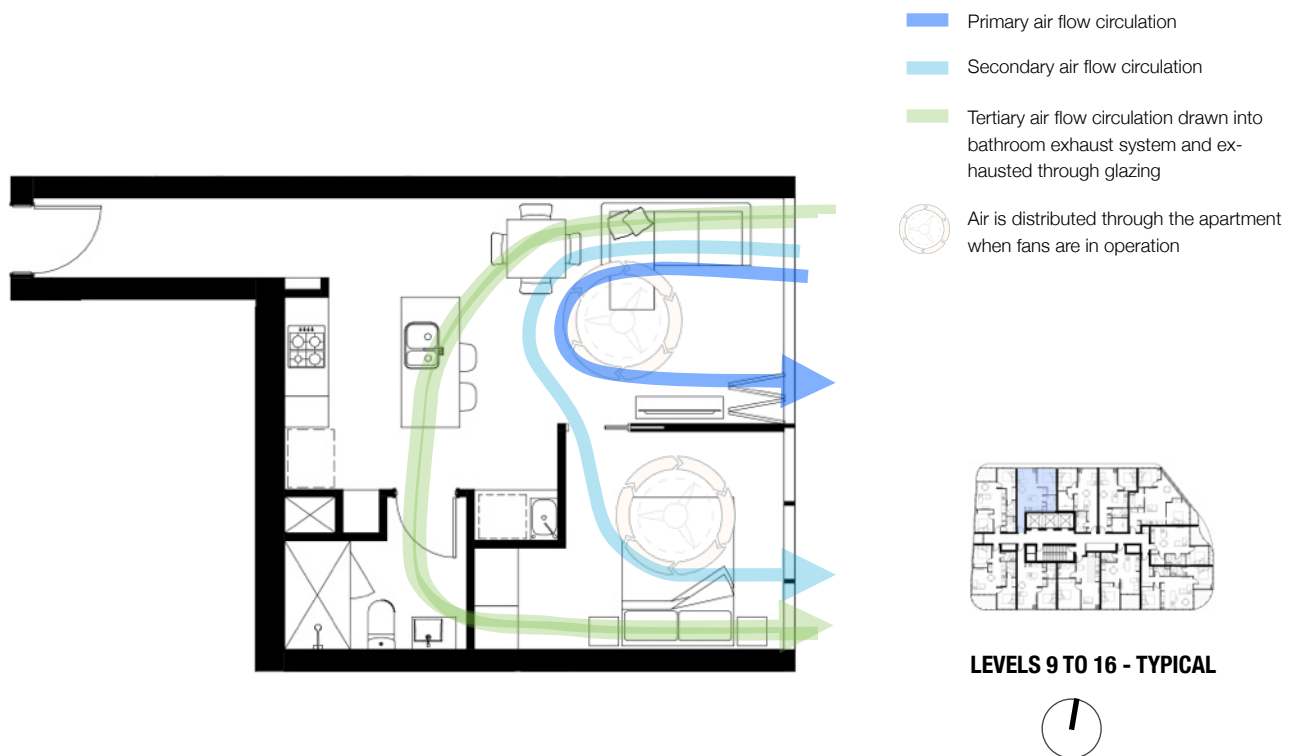


7. Climate and Environment (alfresco)

Traditionally the use of deck/balcony space around a dwelling had the effect of setting up a thermal buffer to reduce solar gain. In this scheme it is proposed to use a horizontal metal hoods or slab extensions to increase the effective depth of the adjacent 'Alfresco' space to recreate this buffer. Additionally the hoods/slab extensions will provide weather protection from the living edge creating a flexible balcony like zone with the alfresco edge to include openable panels. Weather protection required as per conditions of approval.

The use of of a restrained lower awning hopper under bi-folding windows provides users the opportunity for natural ventilation, whilst bi-folds are in the closed position (refer glazing strategy).

ALFRESCO

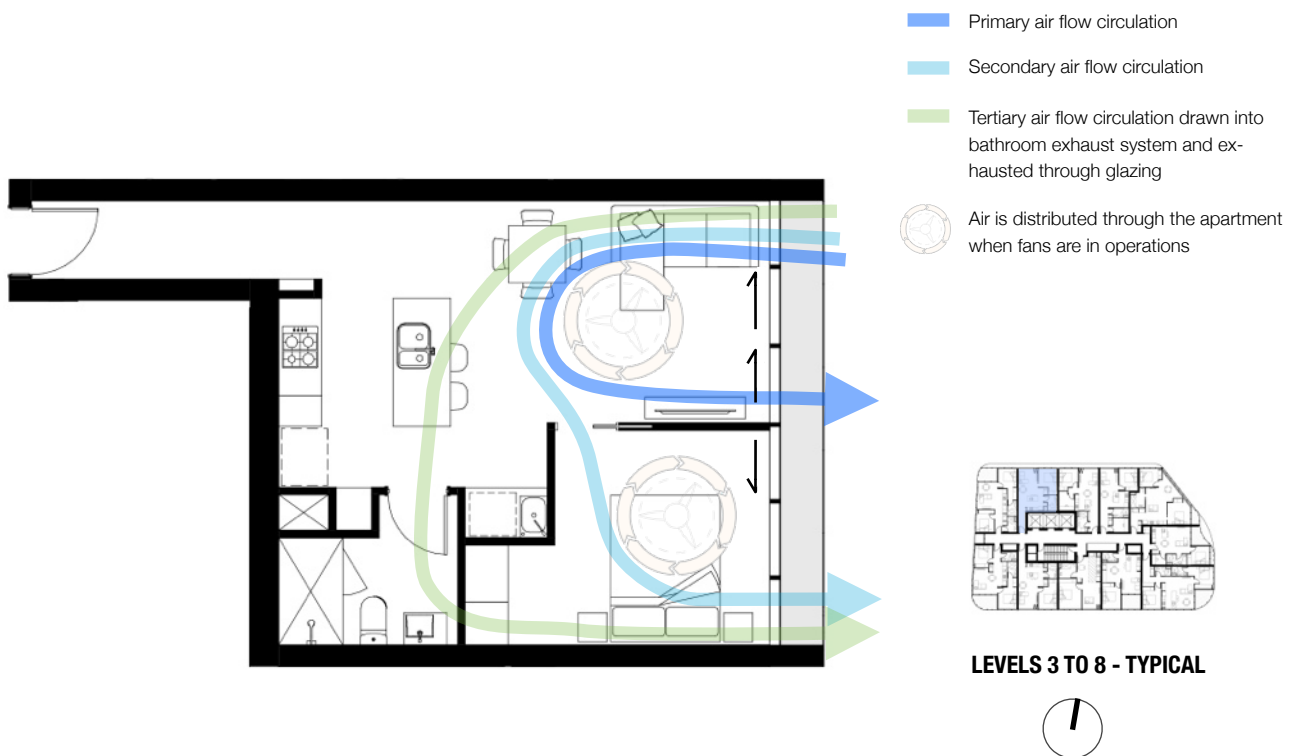


7. Climate and Environment (juliette)

Traditionally the use of deck/balcony space around a dwelling had the effect of setting up a thermal buffer to reduce solar gain. In this scheme it is proposed to use a 600mm deep balcony zone to increase the effective depth of the adjacent internal space to recreate this buffer. Additionally the Juliette apartment over/slab extension will provide weather protection from the living edge creating a flexible balcony like zone via the full height sliding doors. Weather protection required as per conditions of approval.

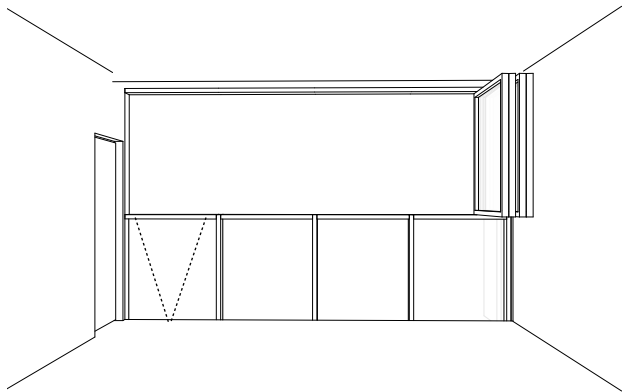
The use of a drop pin sliding door restrictor provides users the opportunity for natural ventilation without the need for full operation (refer glazing strategy).

JULIETTE

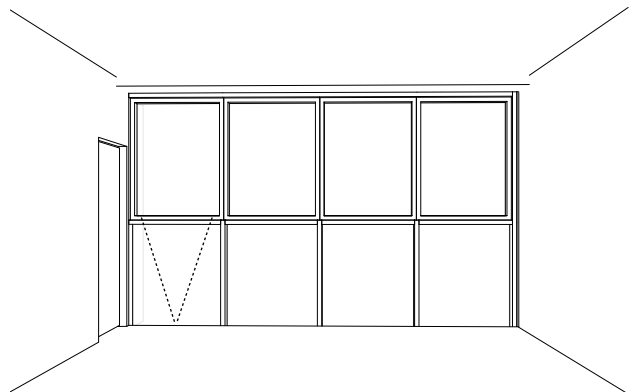


8. Glazing Strategy (alfresco)

BI-FOLD



bi-fold alfresco open



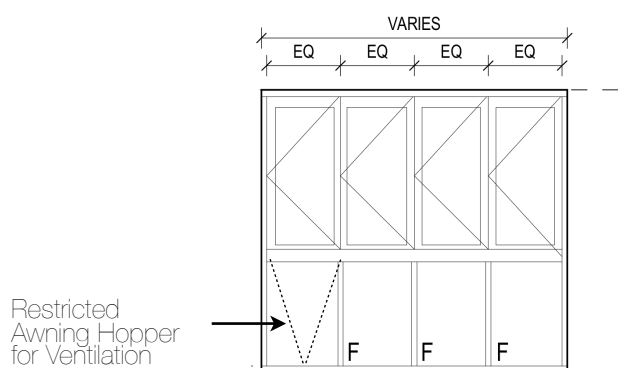
bi-fold alfresco closed



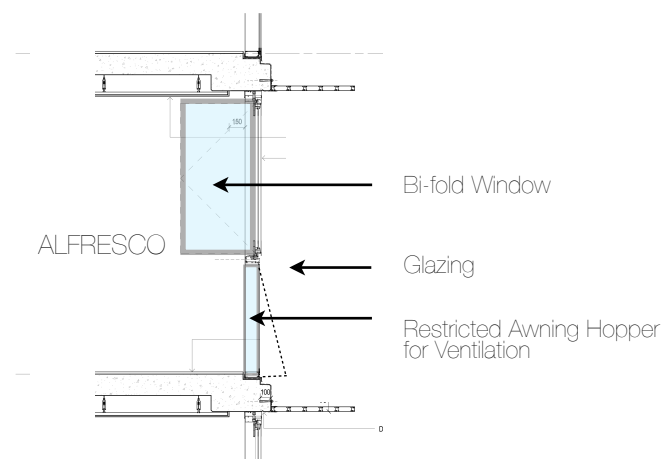
exemplar bi-fold alfresco



exemplar bi-fold alfresco



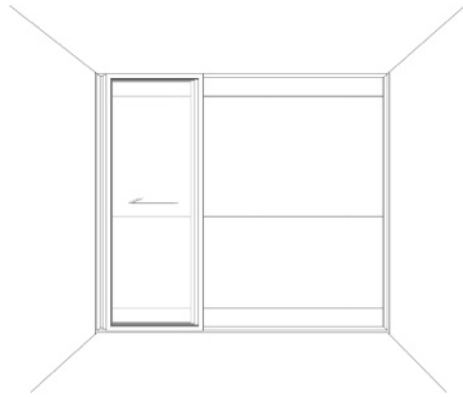
bifold detail elevation



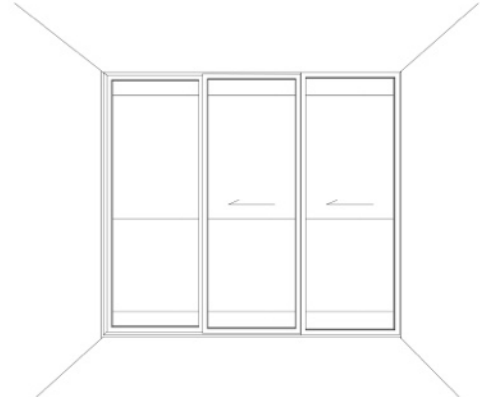
glazing detail

8. Glazing Strategy (juliette)

SLIDING DOOR



sliding door juliette open



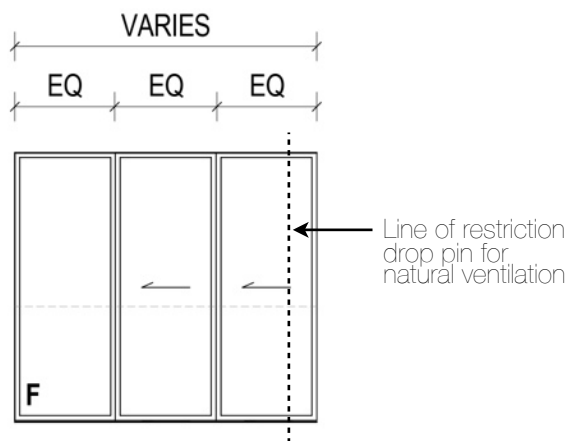
sliding door juliette closed



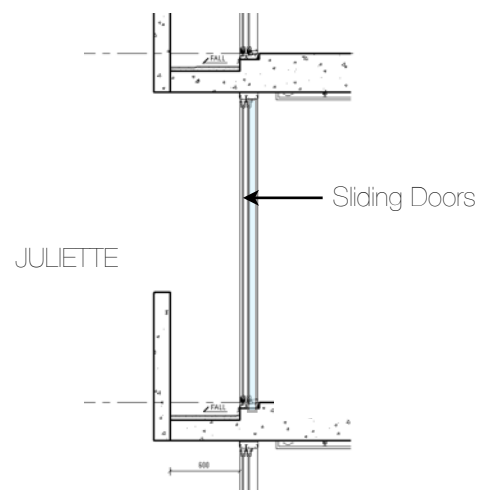
exemplar sliding door juliette



exemplar sliding door juliette



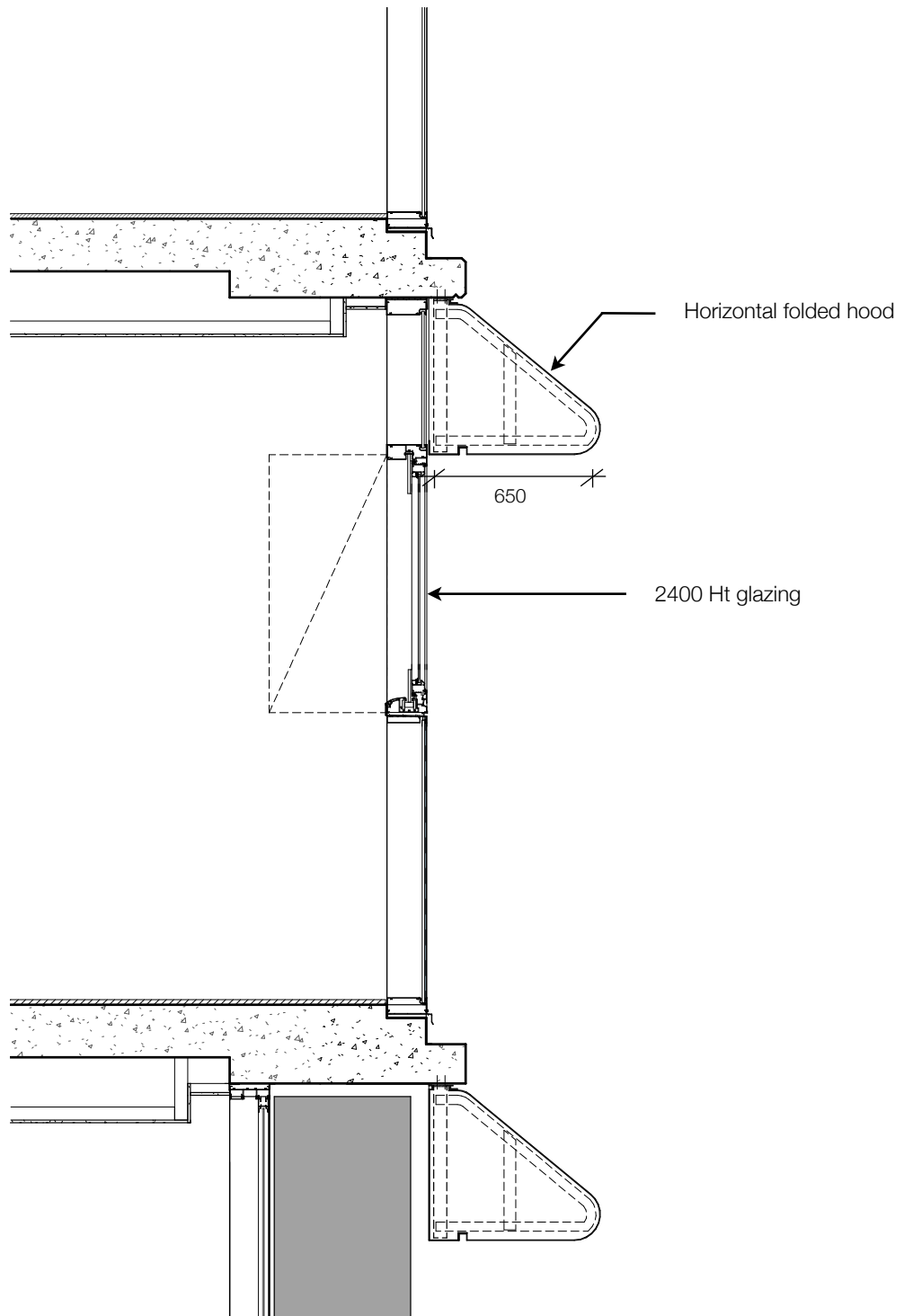
sliding door detail elevation



glazing detail

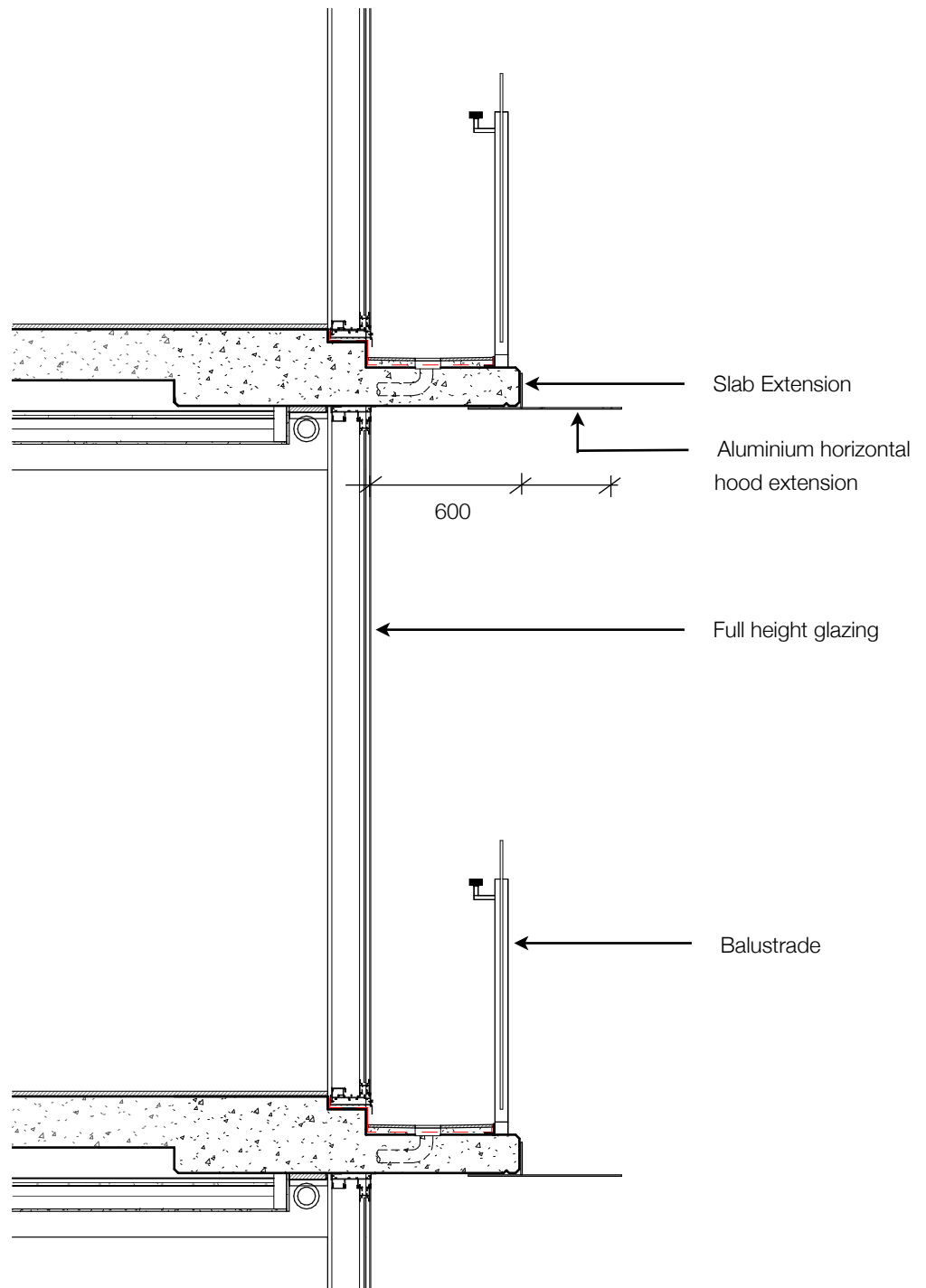
9. Sunhoods and Screens Strategy

WEST STAGE 4 SECTION



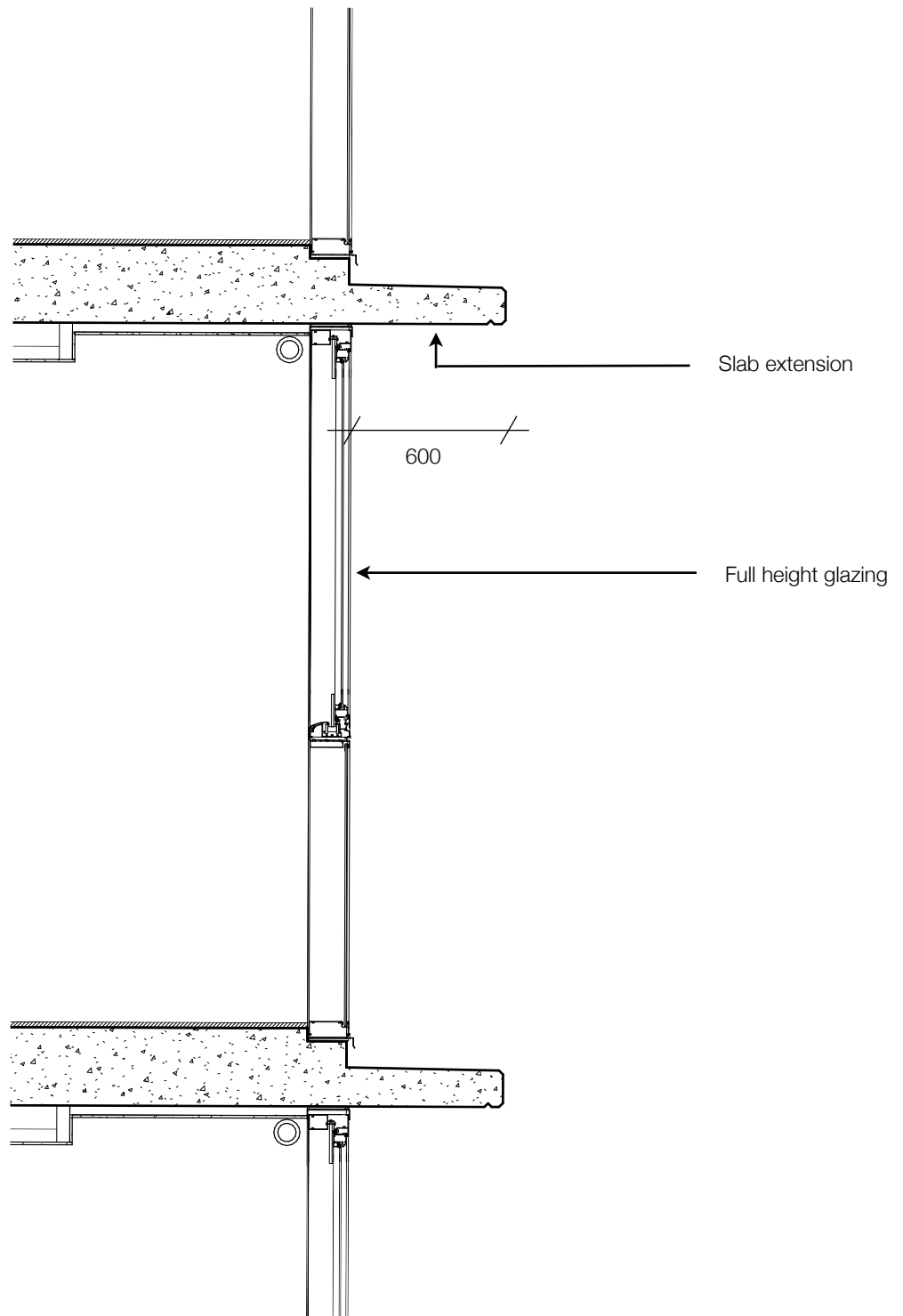
9. Sunhoods and Screens Strategy

EAST STAGE 4 SECTION



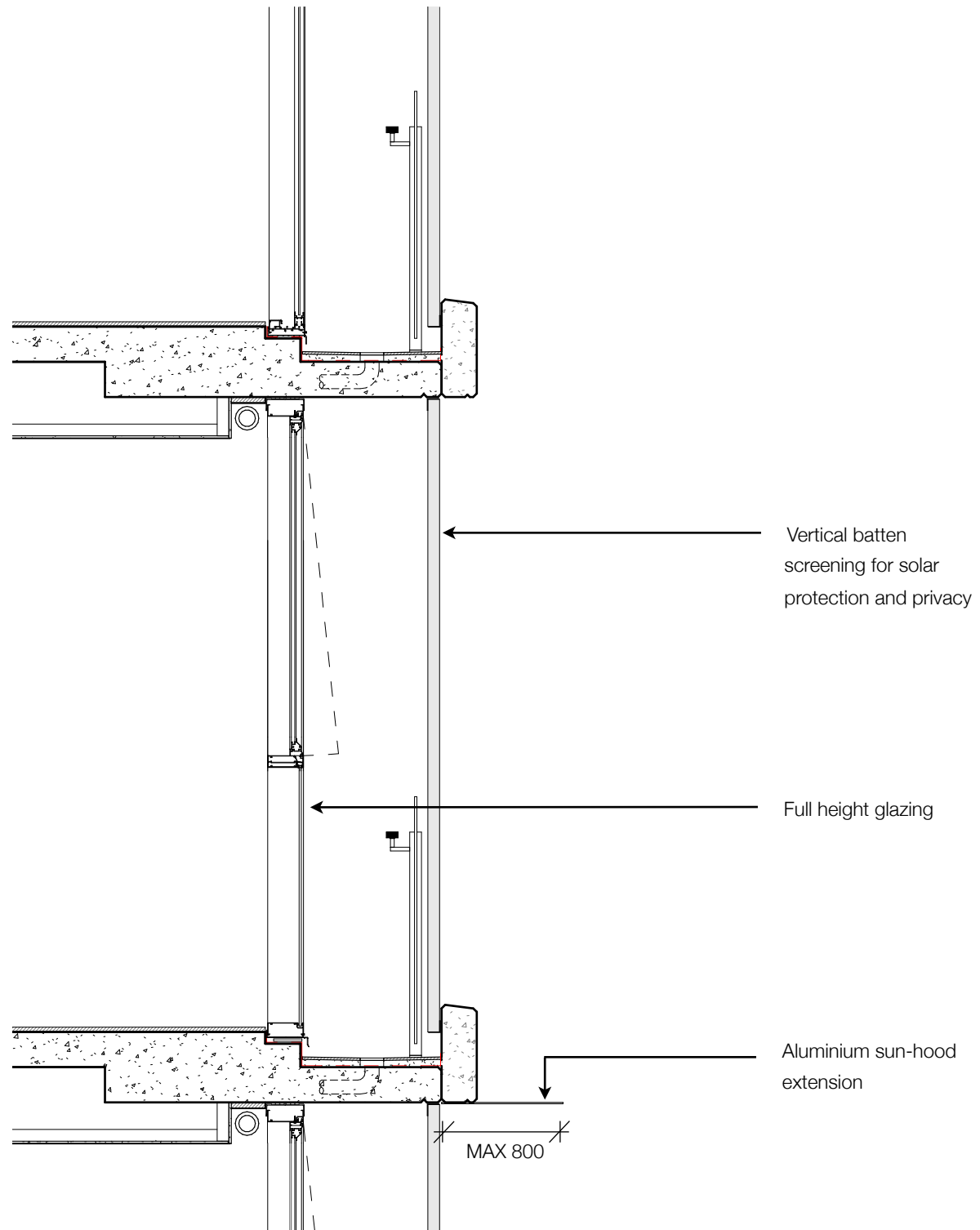
9. Sunhoods and Screens Strategy

NORTH STAGE 5 SECTION



9. Sunhoods and Screens Strategy

WEST STAGE 5 SECTION



10. Materials

The careful selection of materials will affect the external feel / ambience within the 'Alfresco' and 'Juliette' space. Material selection must respond to the market and user preference as well the overall building performance.

Floors:	External	
	& Alfresco:	10mm Vitrified Tile
	Internal:	Engineered Timber flooring with Underlay or Carpet with underlay or 10mm Vitrified Tile
Walls:	External	External Facade System or concrete
	Alfresco:	Painted plasterboard wall lining
	Internal:	Painted Plasterboard wall lining
Windows/Sliders:		Anodised / Powder-coated Aluminium Window System to manufacturers specification
Handrails:		Semi Frameless Glass Balustrade / Precast Balustrade (balconies)
Solar Control Blades:		Alpolic/Aluminium/Concrete

TOWER 4

North Facade

Vertical:	Colour-back Glass
Horizontal:	Concrete Slab Extension

West Facade

Vertical:	None
Horizontal:	Aluminium profile hood extensions

South Facade

Vertical:	None
Horizontal:	Aluminium profile hood extensions

East Facade

Vertical:	None
Horizontal:	Aluminium profile hood extensions

TOWER 5

North Facade

Vertical:	Pre-cast up-stand
Horizontal:	Concrete slab extensions

West Facade

Vertical:	Aluminium batten screening
Horizontal:	Aluminium profile hood / concrete slab extensions

South Facade

Vertical:	Pre-cast up-stand
Horizontal:	Concrete slab extensions

East Facade

Vertical:	Pre-cast Up-stand
Horizontal:	None

11. Stages 4 & 5 Summary

- At least 60% of the apartments provide balconies greater than 7m² in size.
- The current proposal is for 296 of the 535 apartments (55%) to include balconies at least 7m² in size.
- A further 190 of the 535 apartments (36%) include balconies which are 6m² in or less, and have a minimum depth of 600mm.
- The current proposal is for 49 of 535 (9%) to be alfresco style.