

4.3 WORKPLACE

The top two levels of the northern wing will accommodate a new workplace creating a strong visual presence on the corner of Olympic Boulevard and Sarah Durack Avenue.

While the fitout is outside the scope of this development application, the workplace has been designed to be a sustainability exemplar and is proposed to achieve 6-star GreenStar using the Interiors rating tool.

Two large-span floorplates are designed to optimise sustainability and flexibility. At the centre of the floorplate a two storey lightwell provides vertical connectivity between levels and assists with the ventilation strategy.

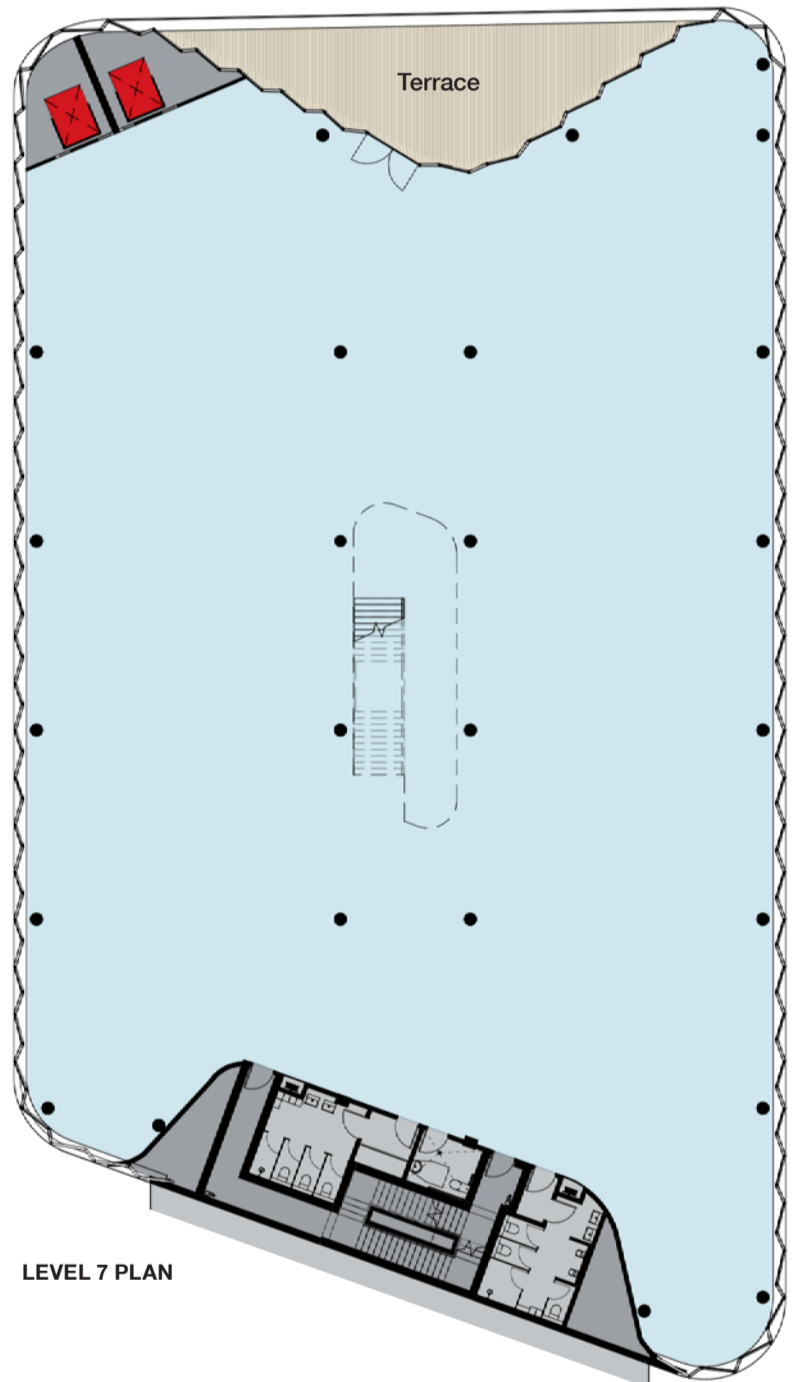
The northern edge of Level 7 accommodates a large north facing terrace, alongside which the staff breakout area is proposed. Level 8 will accommodate the reception and front of house meeting rooms, all located on the northern façade to enjoy views back up Olympic Boulevard to the main stadium. Smaller outdoor terraces are provided on the western and eastern facades to provide external breakout space.

The plans below show indicative layouts of the office fitout which will be developed and submitted as a separate development application. On both levels, the workspace will accommodate a mix of open plan workstations, enclosed offices, secondary work settings, collaborative areas and support spaces. The southern end of the floorplate accommodates toilets, services and escape stairs which act as a visual buffer to the carpark.

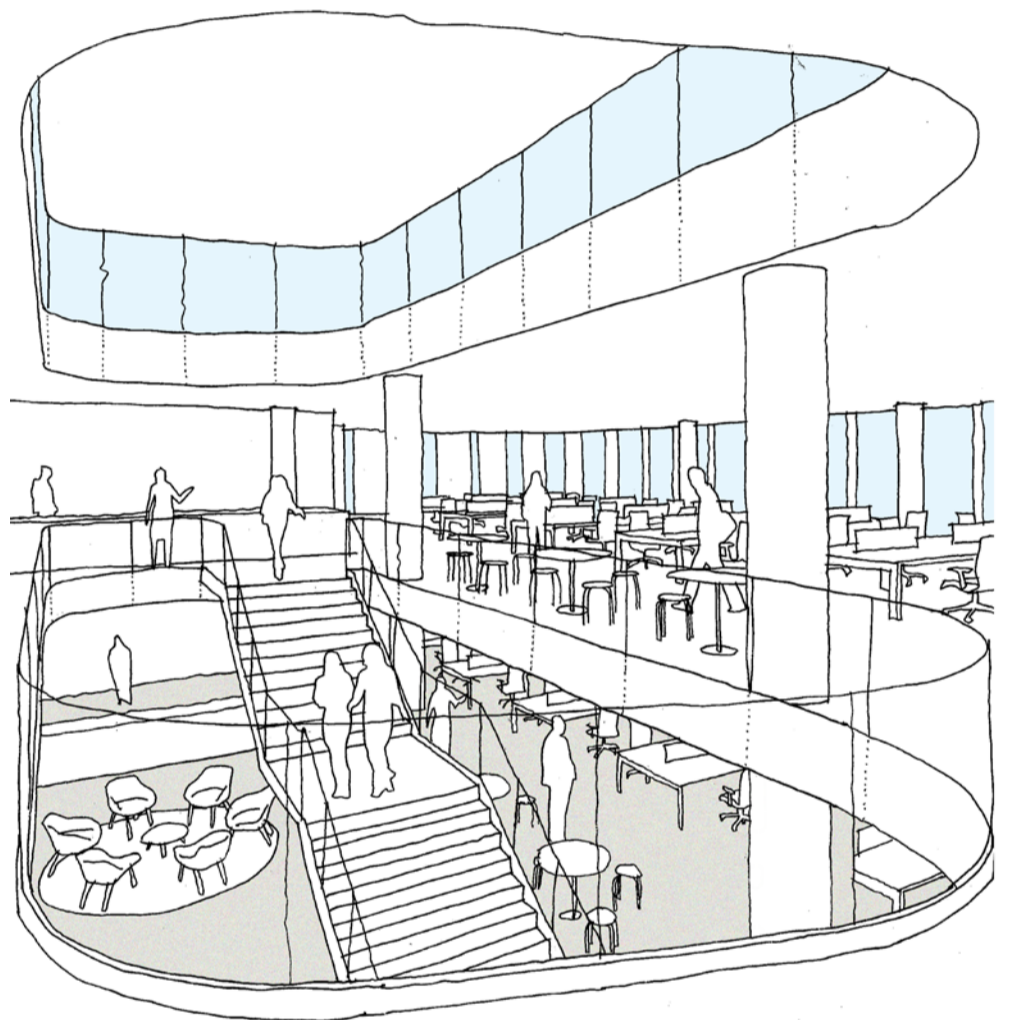
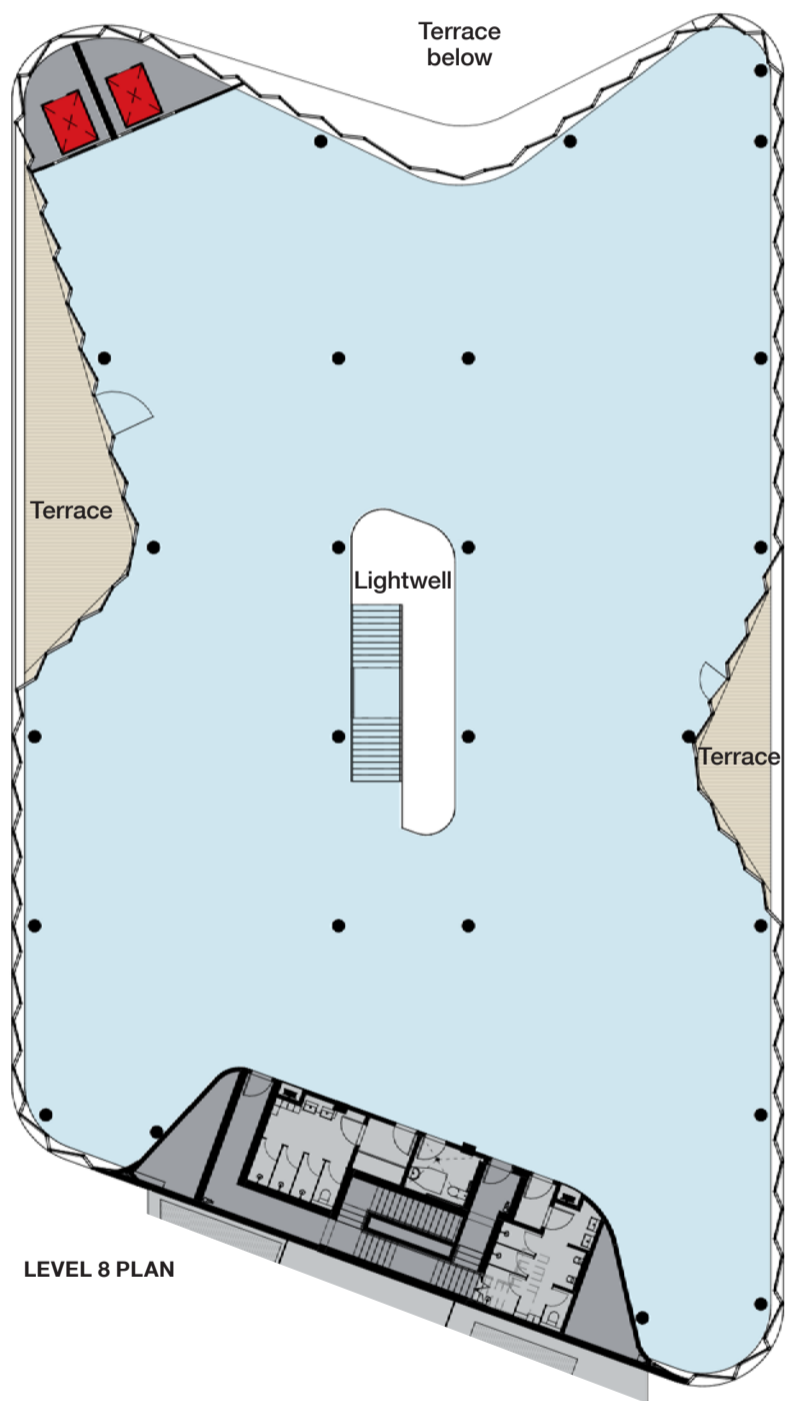


EXTERNAL TERRACES

The façade curves inward at key locations to provide outdoor terraces. The large north facing terrace on level 7 is located alongside the staff breakout area and can support outdoor meetings or breakout activities. The slab projects beyond the façade line to provide weather protection and shading.



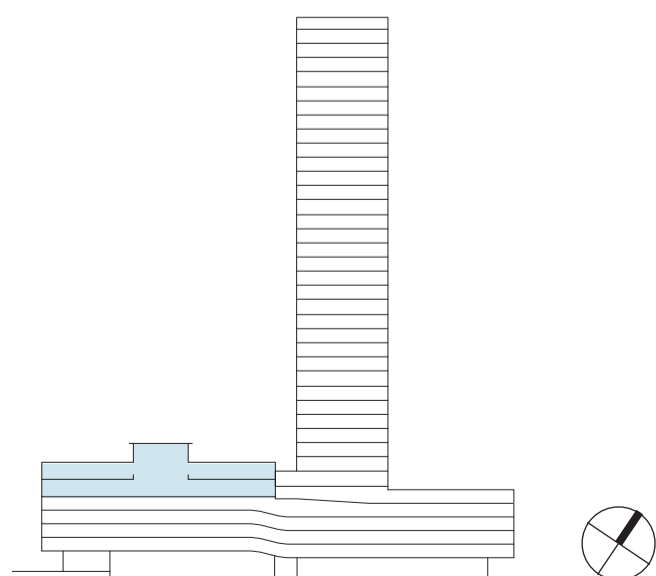
LEVEL 7 PLAN



INTERNAL LIGHTWELL

The lightwell at the centre of the office space acts as a social hub and anchors the ventilation strategy. An operable external façade combines with the stack effect created by the atrium to support a night purge system to minimise cooling loads.

An open circulation stair is located within the lightwell to provides a visual link between levels and enable staff to easily move around the office.



4.4 APARTMENT TOWER

The plan form of the apartment tower has been arranged to maximise the number of apartments with the optimum orientation and maximise amenity outcomes. The boomerang shaped plan has been configured with the two primary frontages facing north and north east, providing 100% of living rooms and balconies benefiting not only from the optimum solar orientation but also having access to magnificent views of Homebush Bay and Parramatta River, Bicentennial Parklands, and the Sydney city skyline.

Generally, bedrooms are located at the façade line with inboard living rooms opening onto generous balconies. The three corner apartments have their balconies enclosed as wintergardens to minimise wind impact.

The southwest façade accommodates the vertical circulation elements, with natural light, ventilation and magnificent views provided from the lift lobby and the common areas.

The tower is stacked in five floorplate types: Low rise, Mid rise, High rise, Lower penthouse, and Upper penthouse.

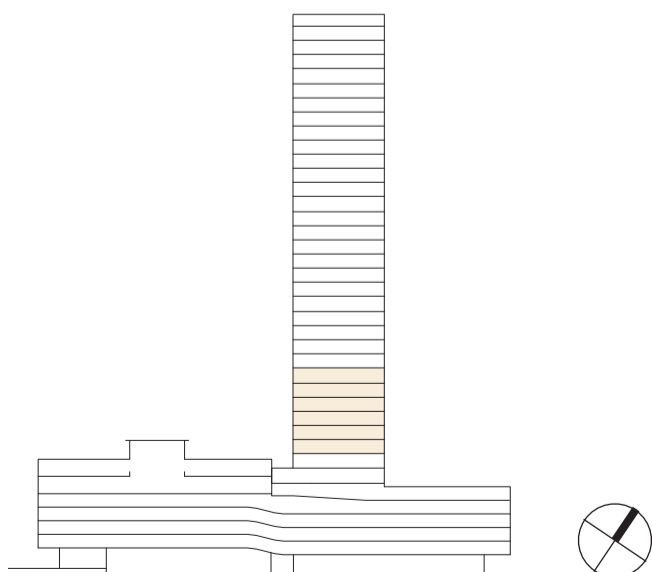
LOW RISE PLAN

The low rise floorplate has a GFA of 681m² and accommodates 8 residential apartments, consisting of 2 one bedroom apartments and 6 two bedroom apartments. The larger two bedroom apartments are generally located in the three curved corners of the floorplate, with glazed wintergardens providing protection from the higher wind speeds at the curved ends of the tower.

A mix of one and two-bedroom apartments are positioned on the north and northeast facing facade. The typical low rise plan includes two adaptable apartments (one 1-bed and one 2-bed two) both positioned on the northeast facade.

Four residential lifts are located in a core with the lift lobby oriented to the south. The proposed lift configuration is to be further developed in design development phase and may result in the provision of 3 lift cars in lieu of the 4 currently shown. If this is adopted the resultant area will be allocated to utility / plant purposes, with the changes having no impact on GFA. A glazed facade flanking the lobby ensures high quality outlook as well as views down to a landscaped podium roof below.

A compact scissor stair, garbage chute and recycling store is located to the south of the floorplate. A plant room housing condenser units for the 3 wintergarden apartments is located adjacent to the scissor stair and is ventilated directly through the facade.



LEVELS 9-14 PLAN

Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being.

Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

SOLAR ACCESS

The tower form has been driven by a desire to achieve 100% apartments with good solar access. All but one apartments achieve at least 3 hours of solar access to living rooms and balconies between 9am and 3pm on Winter Solstice.

Due to NE-NW aspect of the apartments the majority of living rooms have been set back behind a recessed balcony to provide shading during the summer months but admit low angle sun during winter.

VIEWS

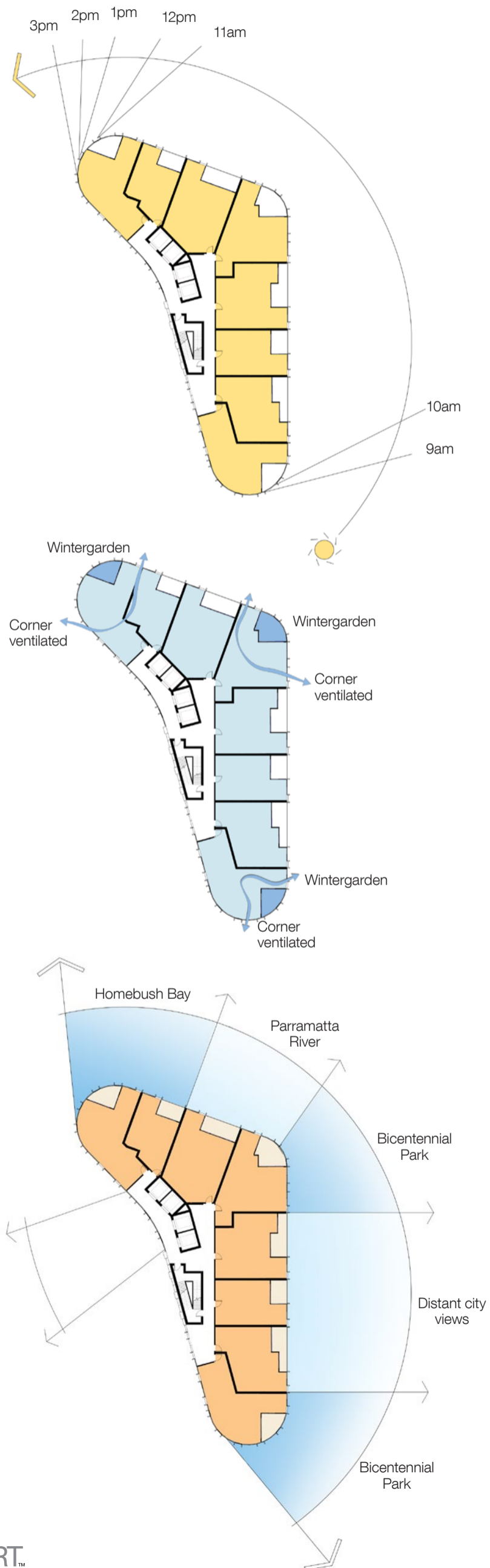
The optimum solar orientation coincides with the optimum views. Consequently all but three apartments benefit from magnificent views of Homebush Bay and Parramatta River to the north and/or Bicentennial Parklands and the Sydney city skyline to the east.

NATURAL VENTILATION

Natural ventilation of apartments has been considered using the principles described for high rise buildings (10+ storeys) in the SEPP65 Apartment Design Guide (ADG).

On the straight parts of the façade, open balconies are proposed, sliding doors and operable windows will provide all apartments with natural ventilation.

In order to mitigate the higher wind speeds at the corners and the top of the tower, both the three corner apartments on all levels and all apartments on the three penthouse levels, we have proposed to enclose the balconies with operable glazing so they function as wintergardens. Operable windows are proposed to the wintergardens to ensure good natural ventilation is achieved.

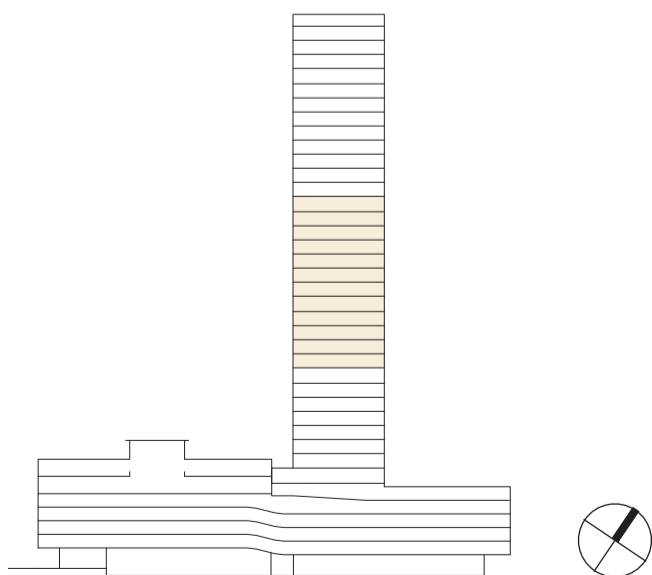


TYPICAL MID RISE PLAN

The typical mid rise floorplate comprises 8 residential apartments consisting of 3 one bedroom apartments, 4 two bedroom apartments and 1 three bedroom apartment.

The three bedroom apartment is located on the northern curved corner of the floorplate which enjoys sweeping panoramic views to the Sydney CBD to the northeast and Parramatta River to the northwest.

Recessed balconies are provided to all apartments located on the straight faces of the floorplate for wind protection.



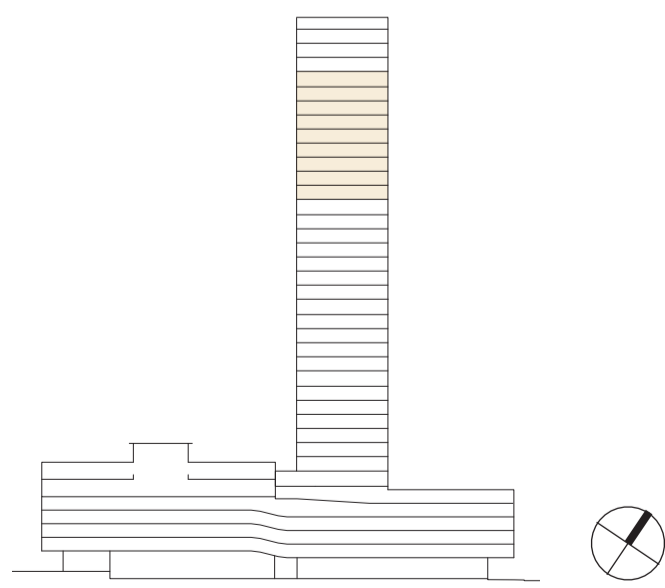
LEVELS 15-26 PLAN

TYPICAL HIGH RISE PLAN

The typical upper rise floorplate comprises 7 residential apartments, consisting of 1 one bedroom apartment, 4 two bedroom apartments and 2 three bedroom apartments.

The floorplate is similar to the typical mid rise plan with the exception of a three bedroom apartment replacing the two 1-bedroom apartments on the straight northeast facade.

This apartment benefits from a generous living and dining room set back behind a recessed balcony.

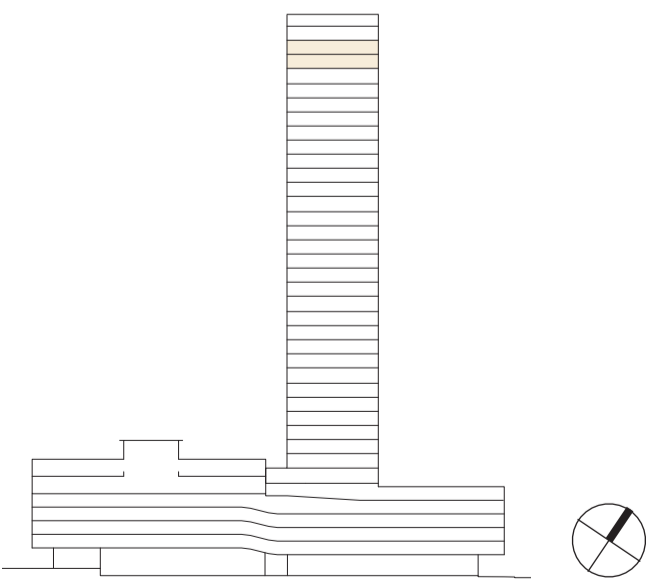


LEVELS 27-35 PLAN

LOWER PENTHOUSE PLAN

The typical high rise floorplate comprises four 4-bedroom apartments of 148 - 160m² internal area, including one adaptable apartment.

Each apartment is provided with a glazed wintergarden located on the curved tower corner to mitigate high wind impacts. The wintergardens are designed immediately adjacent to the living areas to afford panoramic outlook from both living rooms and wintergardens.

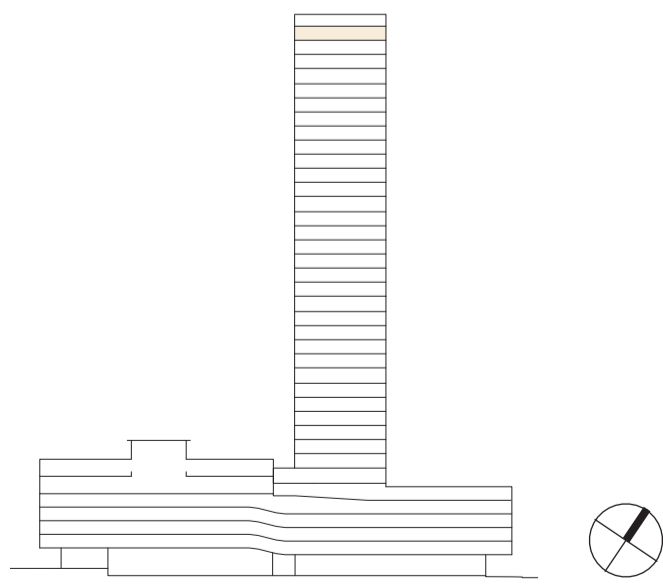


LEVELS 36-37 PLAN

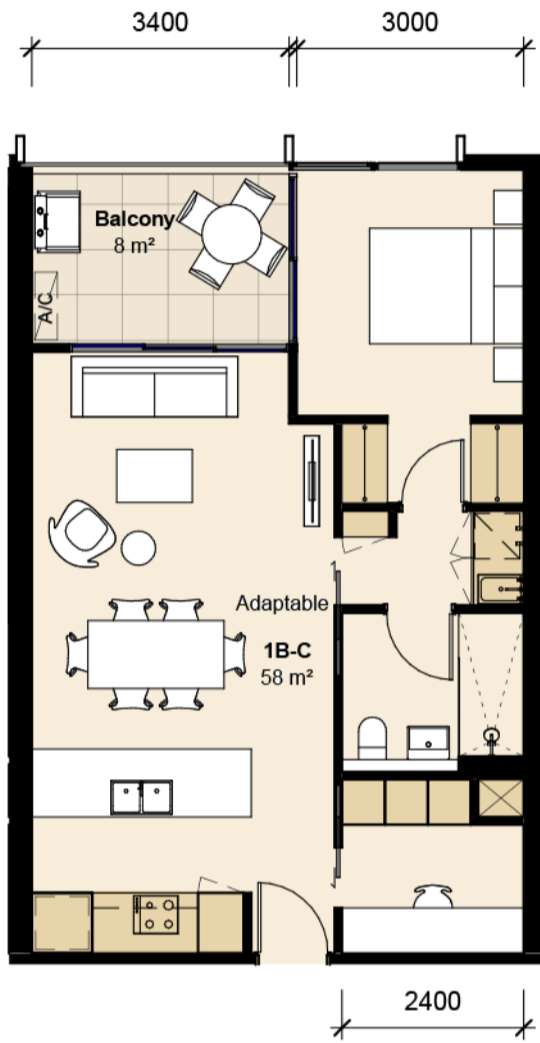
UPPER PENTHOUSE PLAN

The upper penthouse level comprises three 4-bedroom apartments ranging from 170 - 188m² in size. Similar to the apartments below the penthouses have been designed to orient the living and adjoining glazed wintergarden rooms to the curved tower corners to take advantage of panoramic views and dual orientation.

Provision has been made for hot water, AC condenser and stair pressurization plant on this top level.



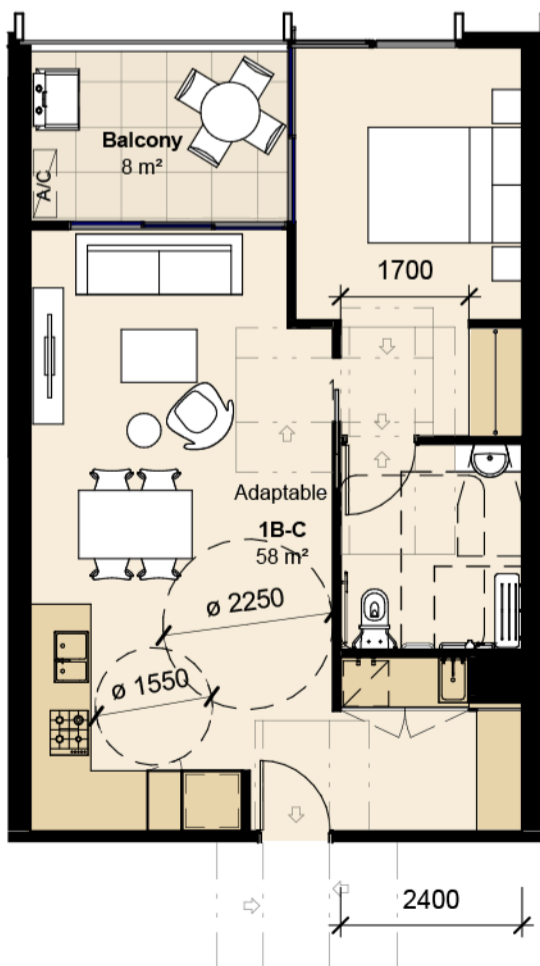
LEVELS 38 PLAN



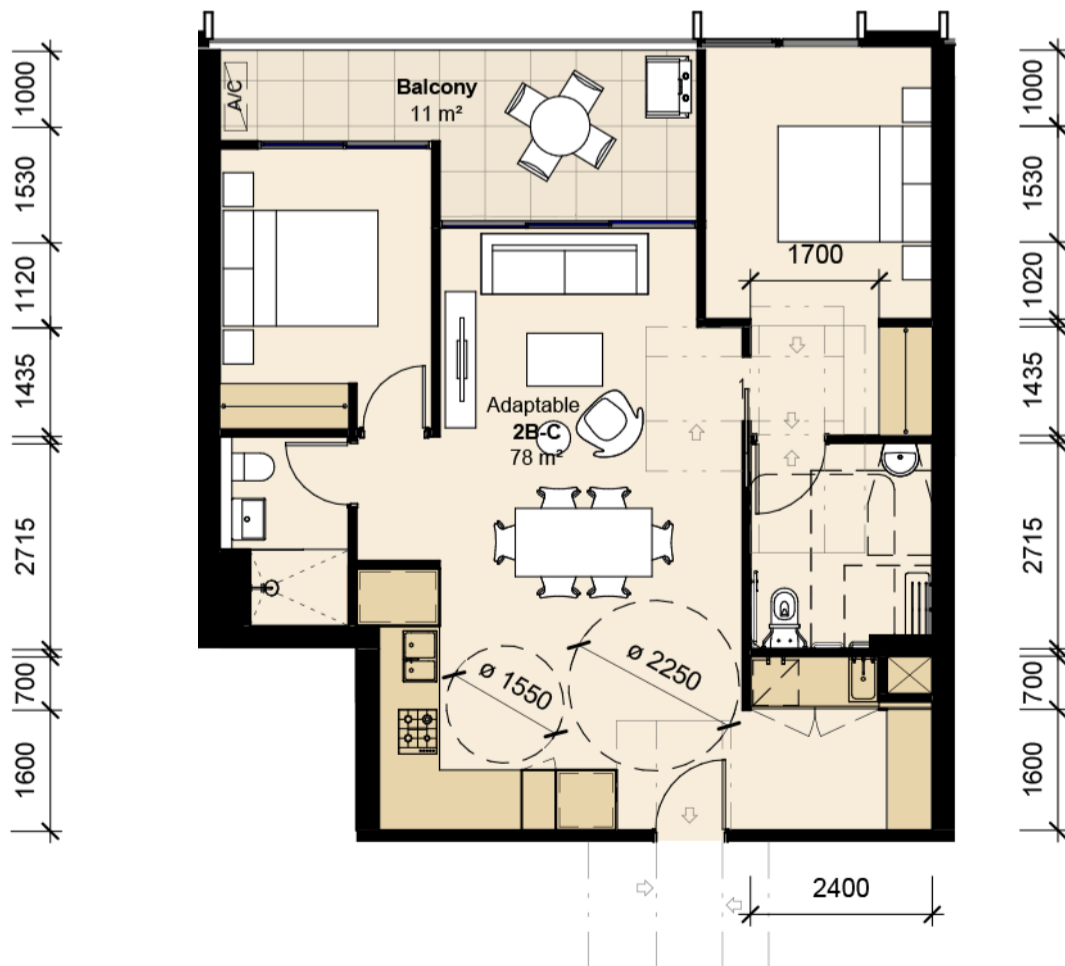
**1 BEDROOM APARTMENT:
PRE ADAPTION**



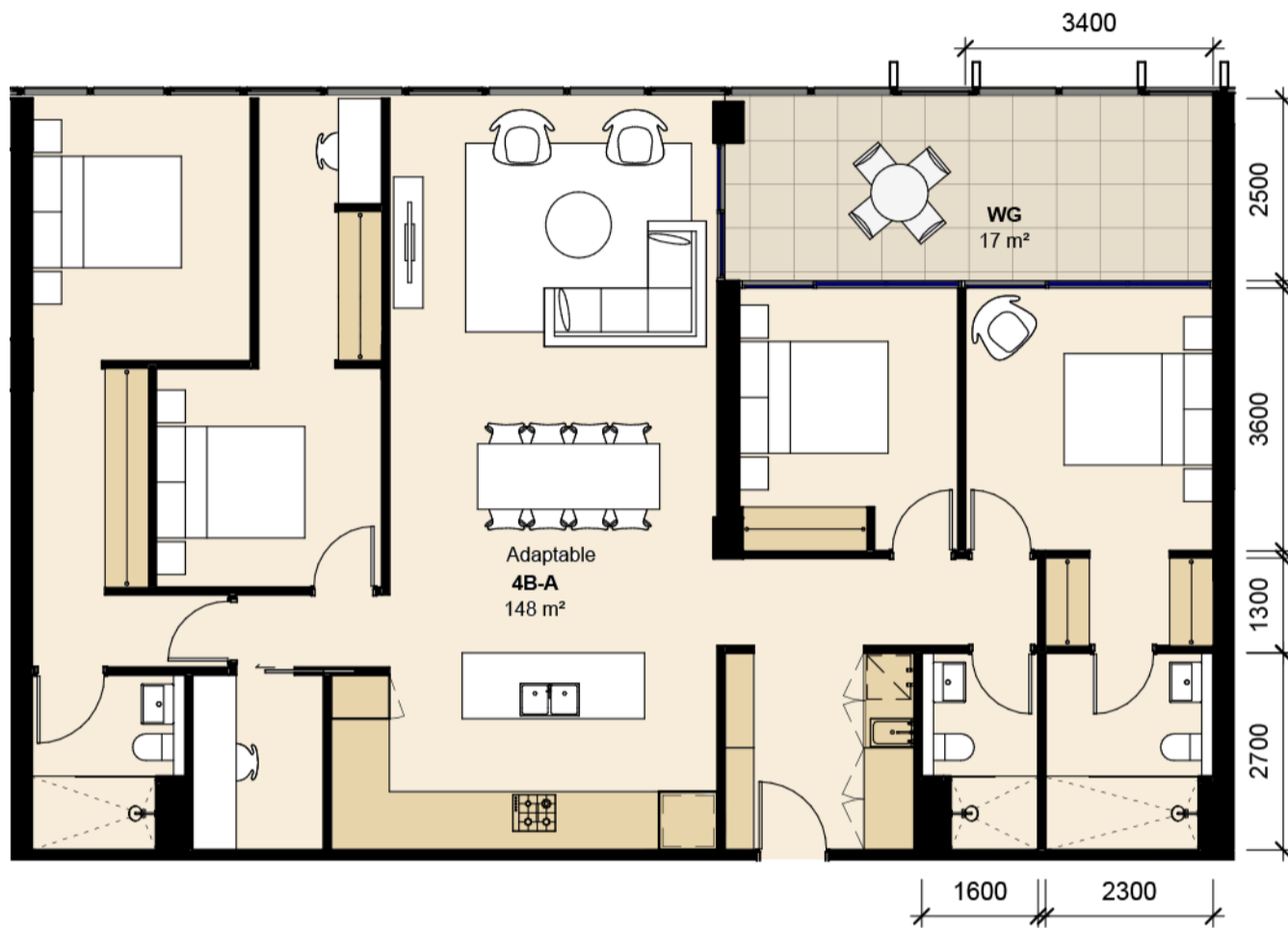
**2 BEDROOM APARTMENT:
PRE ADAPTION**



**1 BEDROOM APARTMENT:
POST ADAPTION**



**2 BEDROOM APARTMENT:
POST ADAPTION**



ACCESSIBILITY - ADAPTABLE APARTMENTS

New residential developments are to include continuous accessible paths of travel and circulation spaces and should be designed with universal design principals so as to be visitable by people with disabilities, as well as to provide a diverse mix of adaptable apartments.

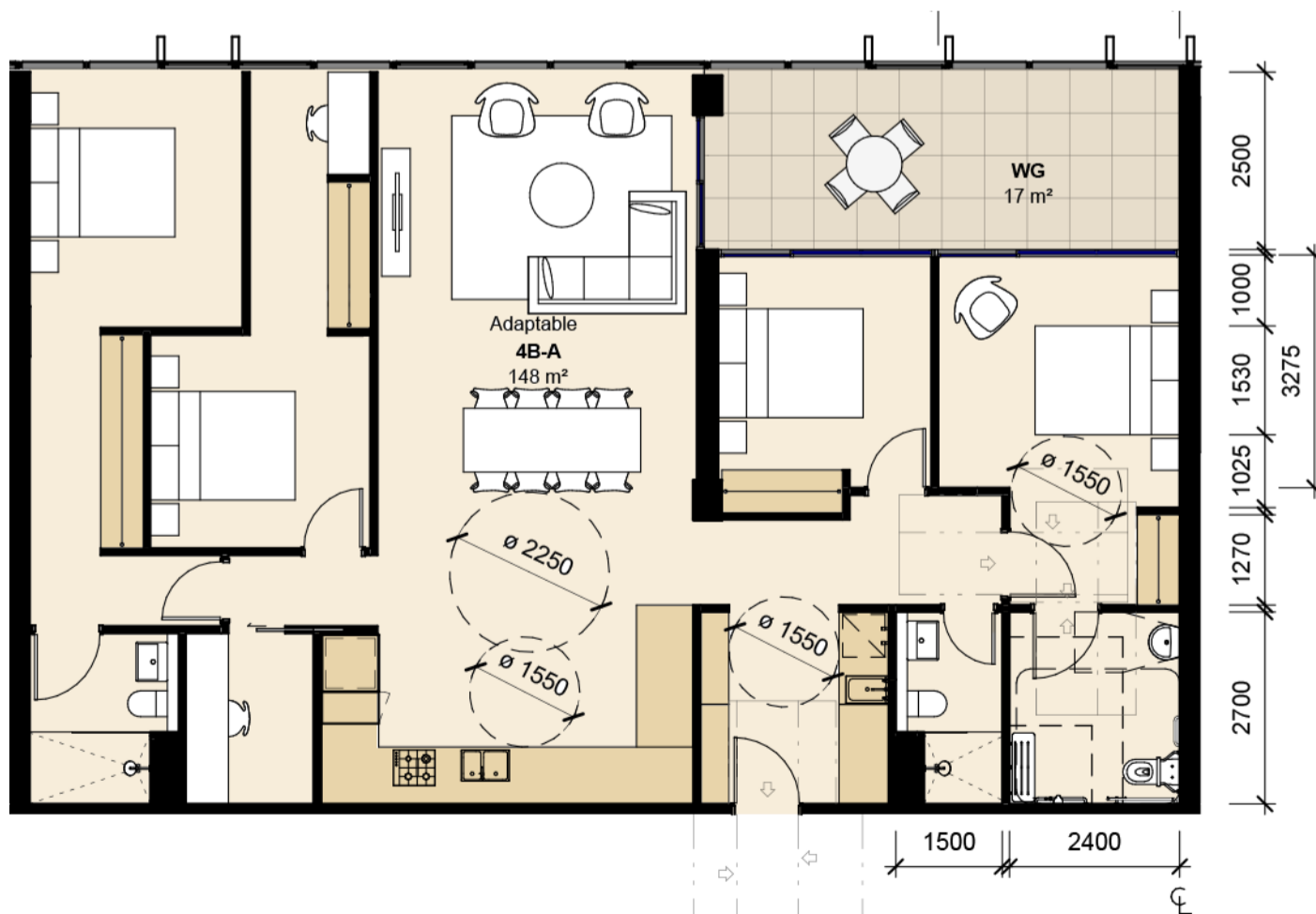
All 229 residential apartments include a visitable toilet with a 1250x900mm clear zone to the front of pan and clear entry door widths of 920mm. Further details are provided in the accessibility report.

The proposed development provides 23 adaptable apartments comprising 10% of the total development. The mix of adaptable apartments consists of 13 one bedroom apartments, 8 two bedroom apartments and 2 four bedroom apartments.

The one and two bedroom apartments are provided on the low and mid rise apartment levels located on the northeast facade of the tower. The adaptable four bedroom apartments are located on the lower penthouse levels.

All common internal and external areas will be accessible as required. Each adaptable apartment is provided with an accessible carspace in compliance with either AS4299 or AS2890.6 within close proximity to the lifts in the carpark podium.

**4 BEDROOM APARTMENT:
PRE ADAPTION**



**4 BEDROOM APARTMENT:
POST ADAPTION**

5.0 LANDSCAPE + PUBLIC REALM

5.1 PUBLIC DOMAIN

This proposal creates a public domain that is equally functional and comfortable both for the everyday user and during major events.

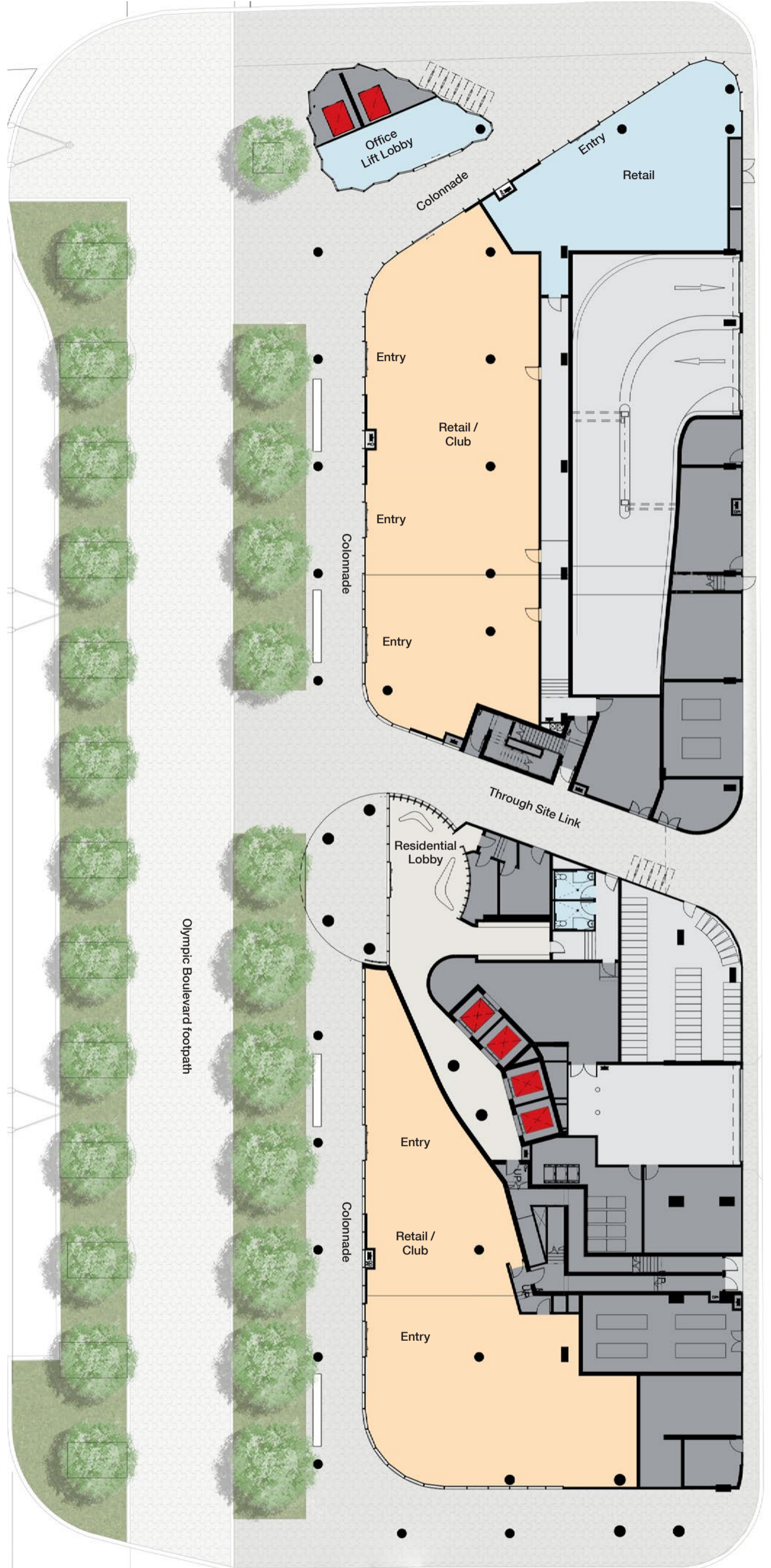
Fluid and legible connections are established through the site, and the landscape character contributes to the greater SOP aesthetic.

All public domain elements will be designed/detailed in accordance with SOPA requirements. The proposed public domain paving (Trihex) is in accordance with SOP UEDM, and will extend under the colonnade to meet the building line. Refer accompanying landscape report for proposed materials & finishes.

The public domain design ensures open views are retained to maximise passive surveillance. In the planting design, low-growing grasses are proposed and all trees will be underpruned to maintain a crown height above 2m.

Gently graded pathways will provide accessibility for all age groups and degrees of mobility; ensuring that workers and patrons can access site amenities comfortably.

Lighting of external spaces will be provided to ensure access points are well lit, improving visibility and the sense of safety. Importantly, the through-site link will be well-lit to provide safe passage through and around the site at all hours. Public domain light fittings to be confirmed with SOPA to ensure consistency with current precinctwide preferences.



PUBLIC DOMAIN PLAN

Principle 7: Safety

Good design optimises safety and security within the development and the public domain.

It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety.

A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.



Trihex interlocking unit paving to match existing. Installed in accordance with SOP UEDM Section 3.1 Pavements.



Insitu Concrete Retaining Seat Walls in accordance with SOP UEDM Section 3.1 Pavements, P5.



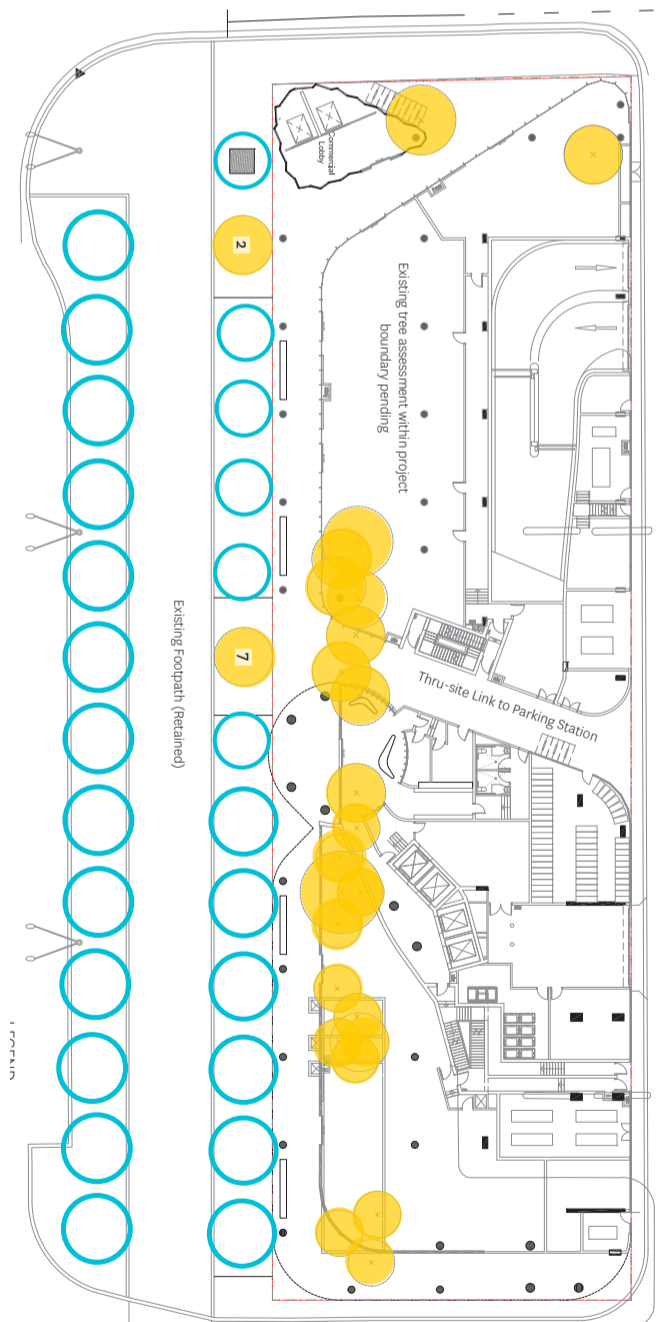
Off-form Concrete Bleacher Steps

LANDSCAPE PRECEDENT IMAGES

5.2 TREE REMOVAL

The Site 9 Site Development Guidelines require that the podium be built to the boundary of Olympic Boulevard and Sarah Durack Avenue for a minimum of 80% of the frontage.

This necessitates the removal of the existing trees within site boundary. Further to this two existing Araucaria trees T2 and T7 located immediately outside the site to the east of the public footpath are proposed to be removed, in order to promote pedestrian connectivity through the site in response to the site development guidelines. The row of existing Araucaria trees to the west of the public footpath are to be retained.



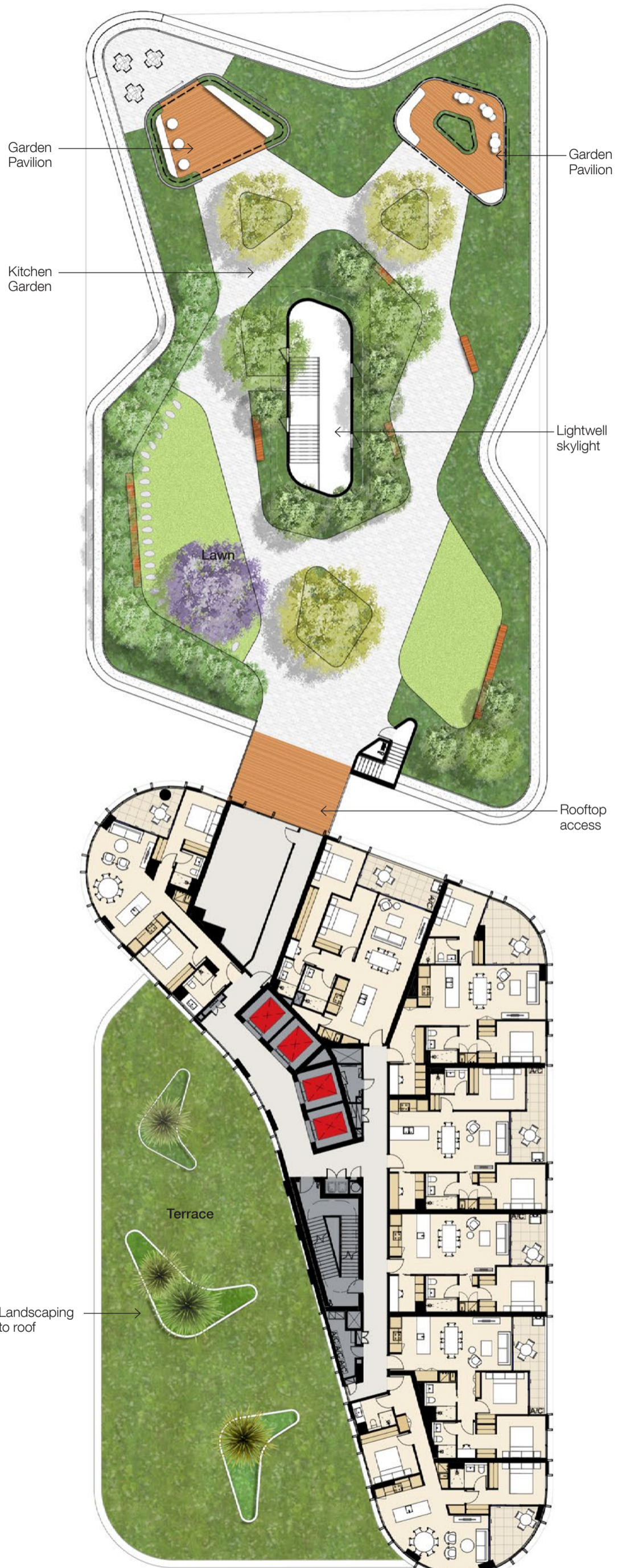
TREE REMOVAL DIAGRAM

Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood.

Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, co-ordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks.

Good landscape design optimises useability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.



5.3 LEVEL 7 ROOFTOP GARDEN

The rooftop garden on level 7 is a diverse mix of particularly hardy and low maintenance species and provides residents with an attractive overlook from their apartments above.

Generally a range of species including local native and exotic will be used to promote biodiversity and robustness within the planting scheme. Low-growing plant species will be located where appropriate to ensure clear views and site lines.

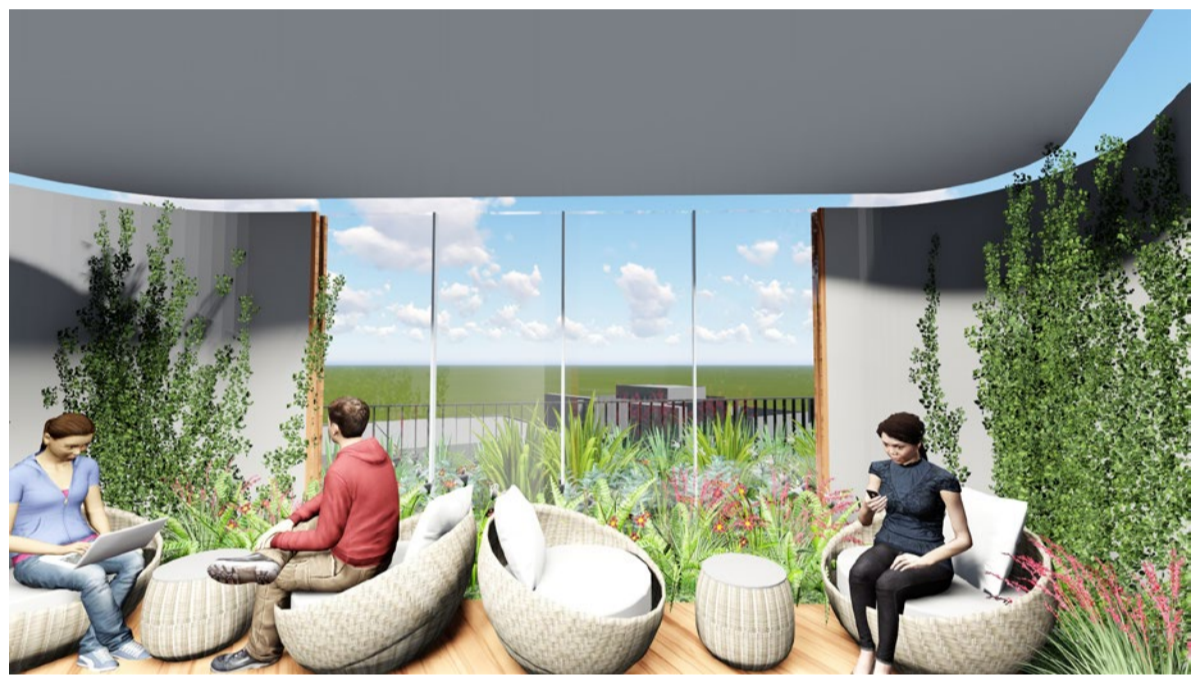
Consideration has been given to the incorporation of low water demand and low maintenance plant species in all areas to reduce mains consumption and fertiliser contamination of drainage water.

5.4 COMMUNAL OUTDOOR SPACE

The level 9 communal outdoor space is a place people can inhabit regardless of the weather with the inclusion of 2 garden pavilions. A series of spaces, from a generous open lawn to small seating nooks creates a landscape that can be enjoyed simultaneously by many user groups. Social interaction and private contemplation are equally catered for.

Effective mitigation of wind is key to achieving amenity for the users of level 9 podium. Several techniques have been used, including:

- / planting of densely foliageing trees to the southern and western edges (source of prevailing winds);
- / using the central rooflight structure (in combination with planting as a windbreak
- / creating garden pavilions with impermeable walls to the prevailing wind edges



6.0 FACADE + MATERIALS

6.1 FACADE APPROACH

The tower and podium facades have been developed to respond to their programme and environmental conditions. They aim to complement each other while simultaneously reinforcing their individual identity.

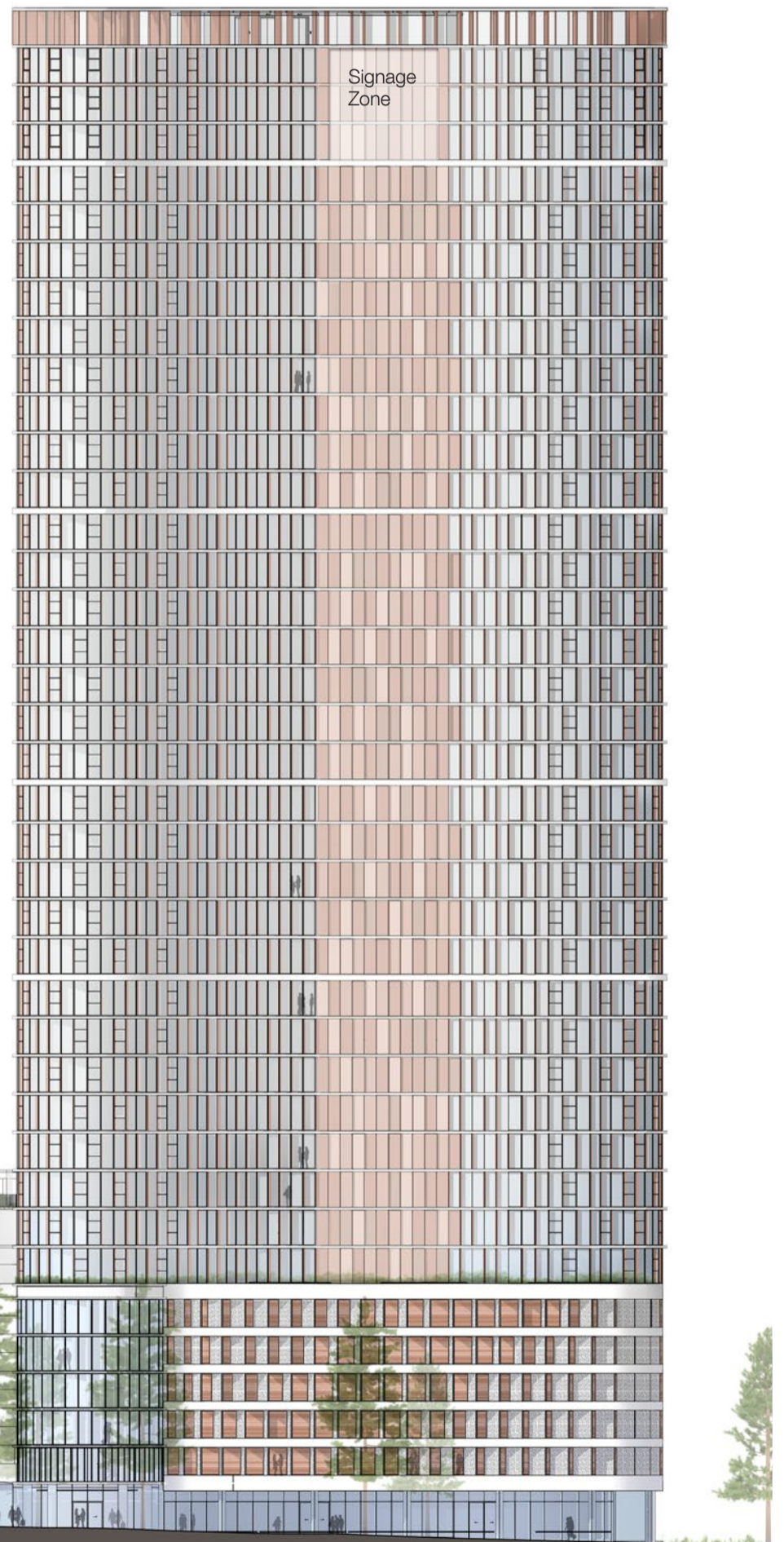
Both buildings are articulated vertically into six stacked volumes that are separated by expressed horizontal bands. These bands define a single storey scale to the podium building that reinforces the podium's horizontality.

The residential tower proposes a unifying texture of staggered vertical fins which reinforce the tower's verticality. The slender fins span between expressed floor levels which increase in thickness where the apartment mix changes as a subtle expression of larger multi-storey volumes. Set back from the leading edge of floors and fins, is a skin of fixed and operable glazing, colour-back glass and open balconies. The stacks of balconies provide a break in the texture of fins, further reinforcing the verticality of the tower.

The podium design aims to utilise the scale of the carpark to enhance the presence and identity of the office while simultaneously suppressing the identity of the above ground parking. To achieve this we have developed a facade design that blurs the boundary of the office space and the parking. It aims to seamlessly transition from a more solid facade that visually conceals the cars to an open facade that provides natural light and outlook to the office space.

The facade line zigzags in plan behind a consistent slab edge. Staggered panels alternate between solid and 'void': glass in the occupied areas and aluminium mesh in the carpark. A consistent solid panel is used across all of the proposed uses.

The proportion of solid and void varies across the facade to provide more openness to the occupied areas and more enclosure to the carpark. The proportion changes subtly from panel to panel and between levels to provide a soft, ever changing wave of texture. The proportion of glazing increases at the corner to emphasise the entrance to the commercial offices.



WEST ELEVATION

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures.

The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.



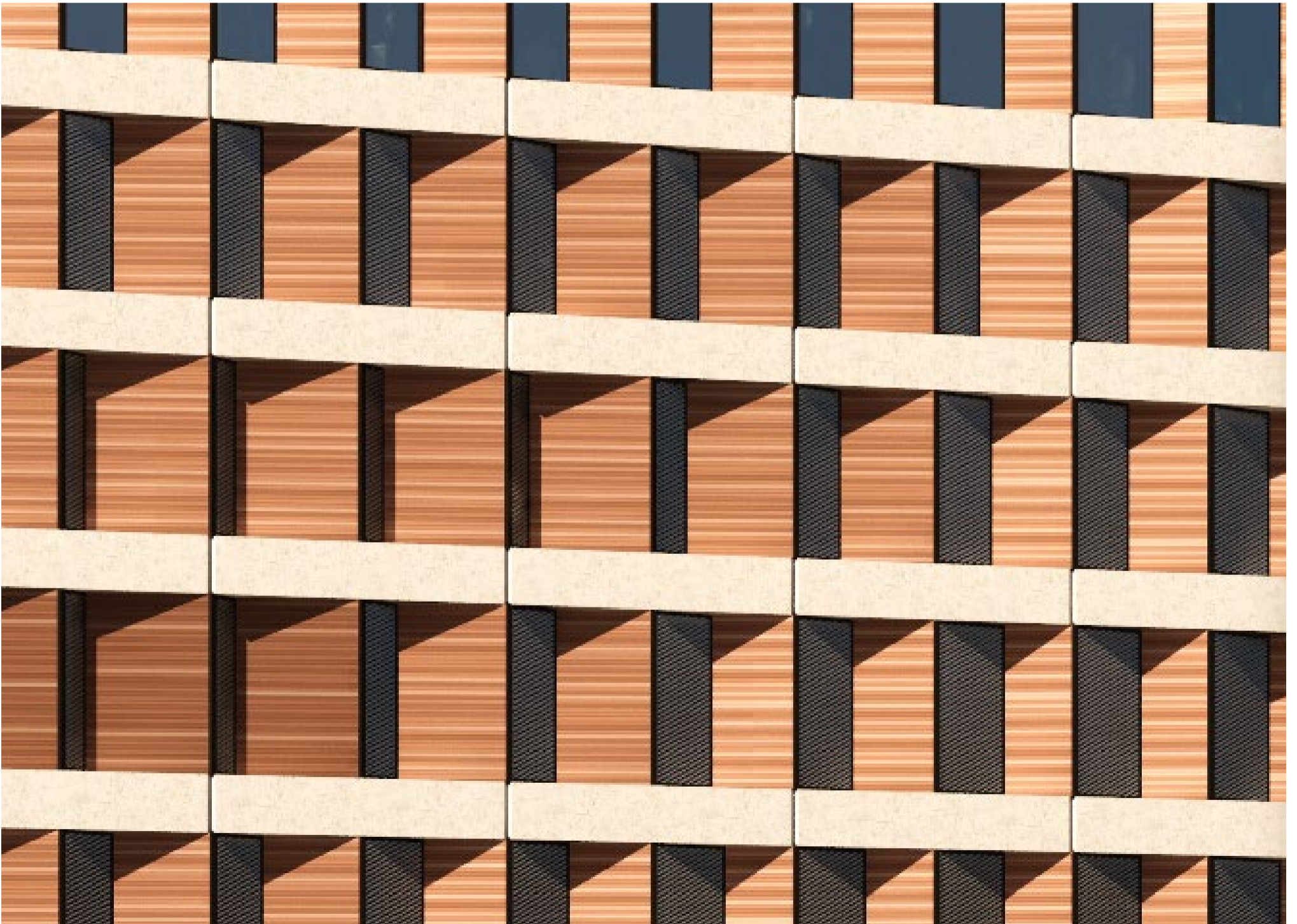


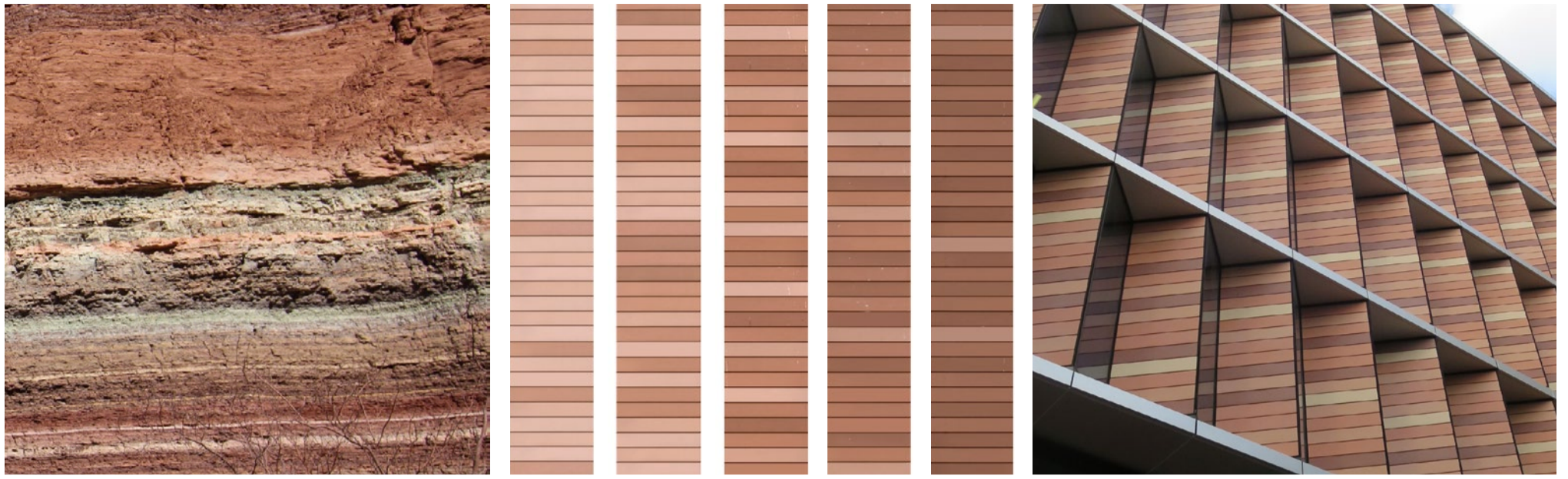
6.2 MATERIAL CONCEPT

The material palette is inspired by the site's industrial history, taking inspiration from the NSW State Brickworks which was located at Sydney Olympic Park from 1911 until its closure in 1988.

The podium facade is clad in terracotta panels that provide a contemporary interpretation of the bricks that were once quarried on site. The terracotta varies in colour both vertically and horizontally to create a tonal gradation across the facade. This gradation is an abstraction of the layered geological profiles found on the site.

The tower facade proposes the same colour palette in an arrangement suited to high rise construction. Staggered aluminium fins in a range of terracotta colours span between expressed slab edges faced with either concrete or aluminium cladding. The fins and projecting slabs provide shading to a layer of fixed and operable glazing, colour-back glass and open balconies which are all set back 300mm from the leading edge.



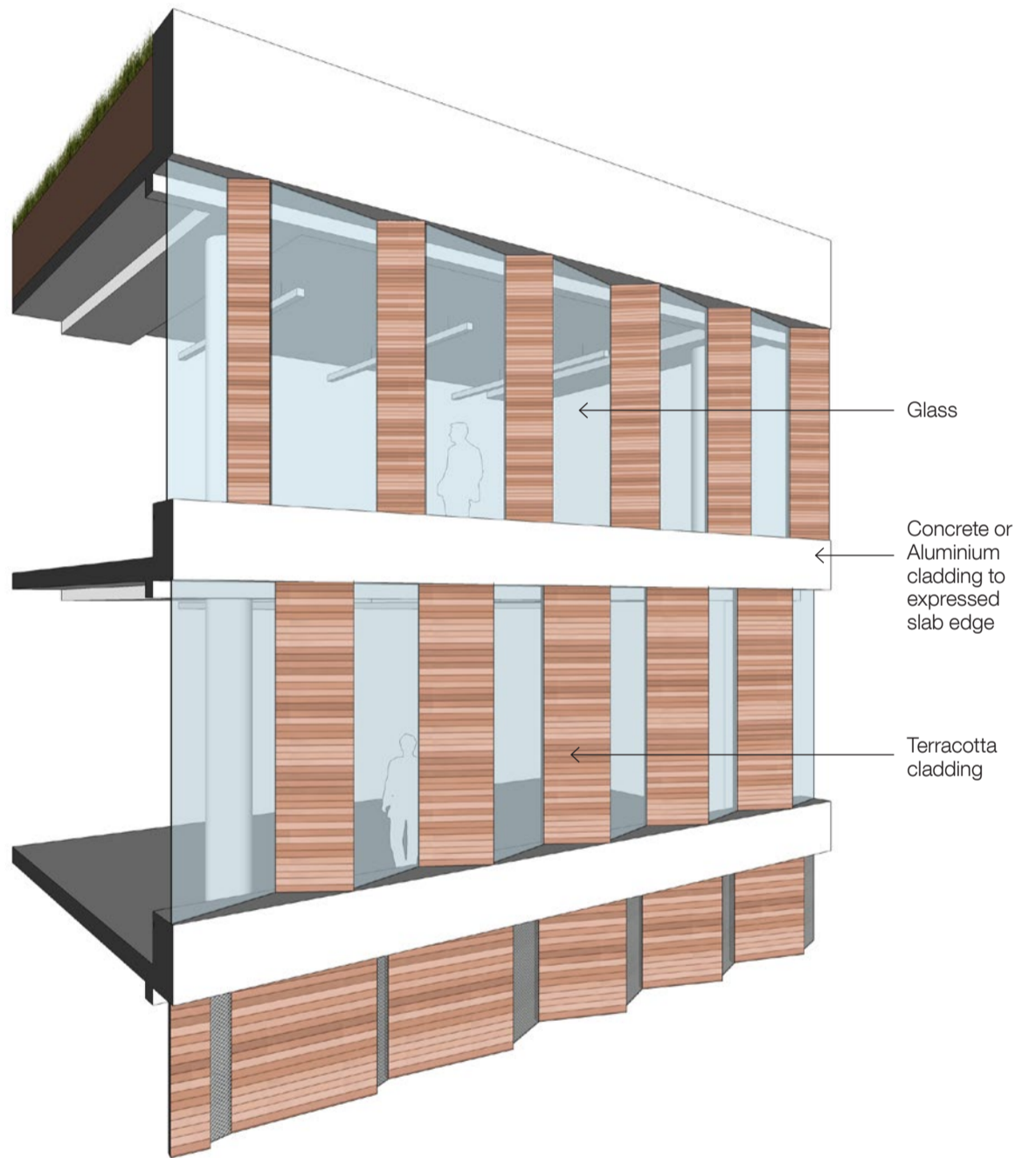
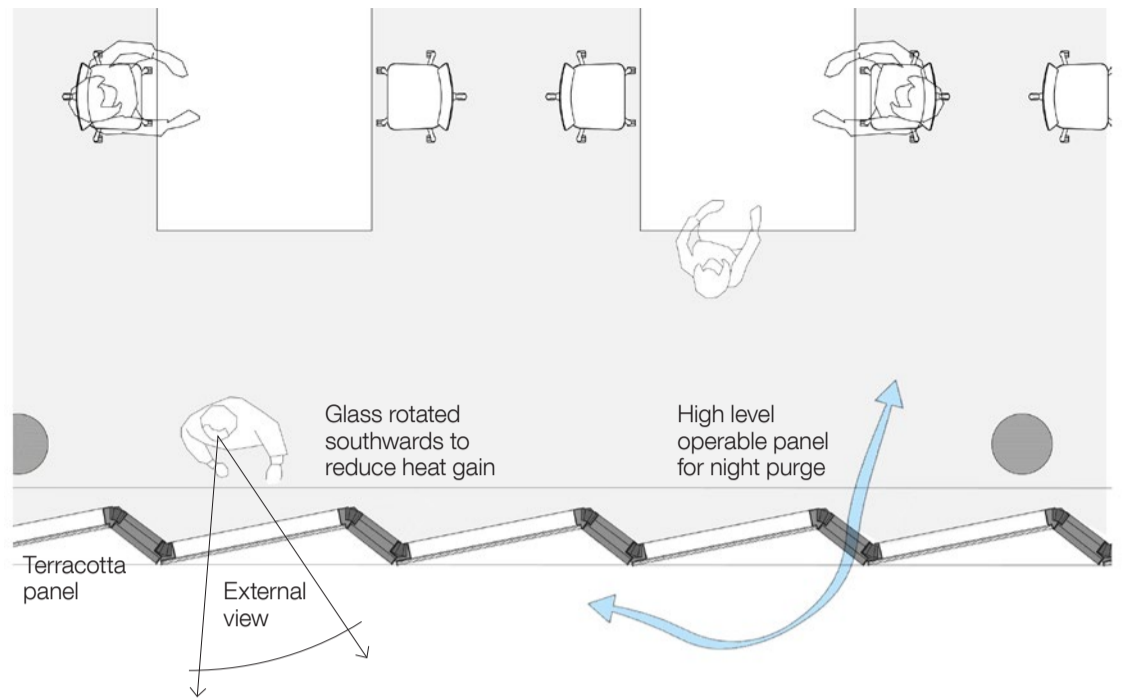


6.3 OFFICE FACADE

The zigzag façade, with its alternating panels of terracotta and glass, has been designed to minimise solar heat gain while maximising outlook. The wider glass panels are orientated southwards to reduce solar gain while the narrower solid panels are orientated east and west to provide effective sunshading.

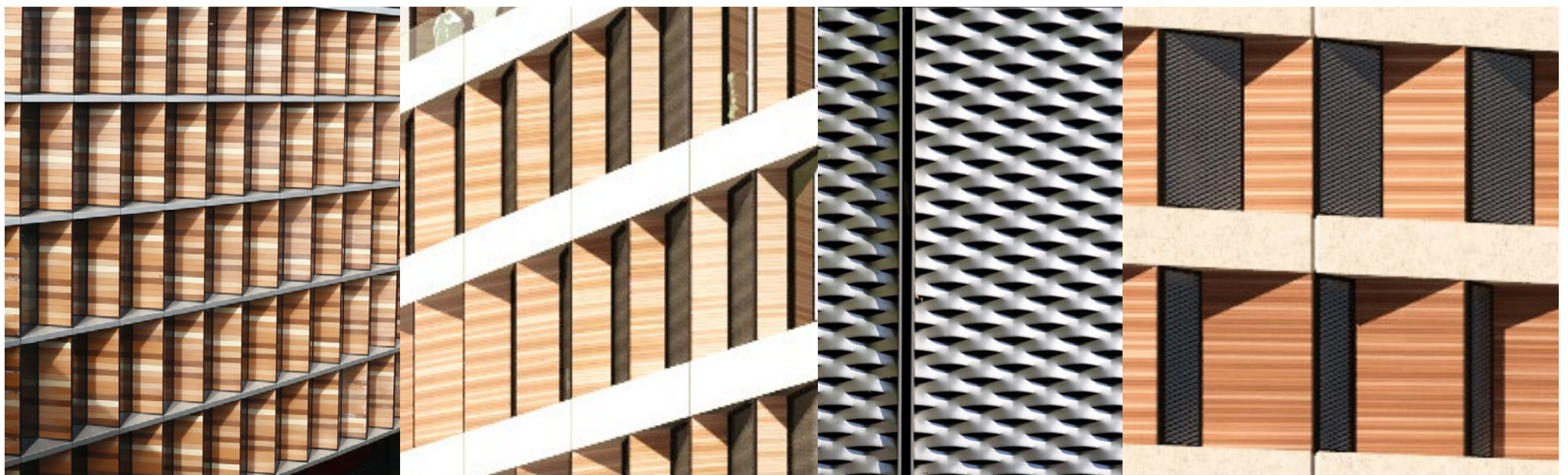
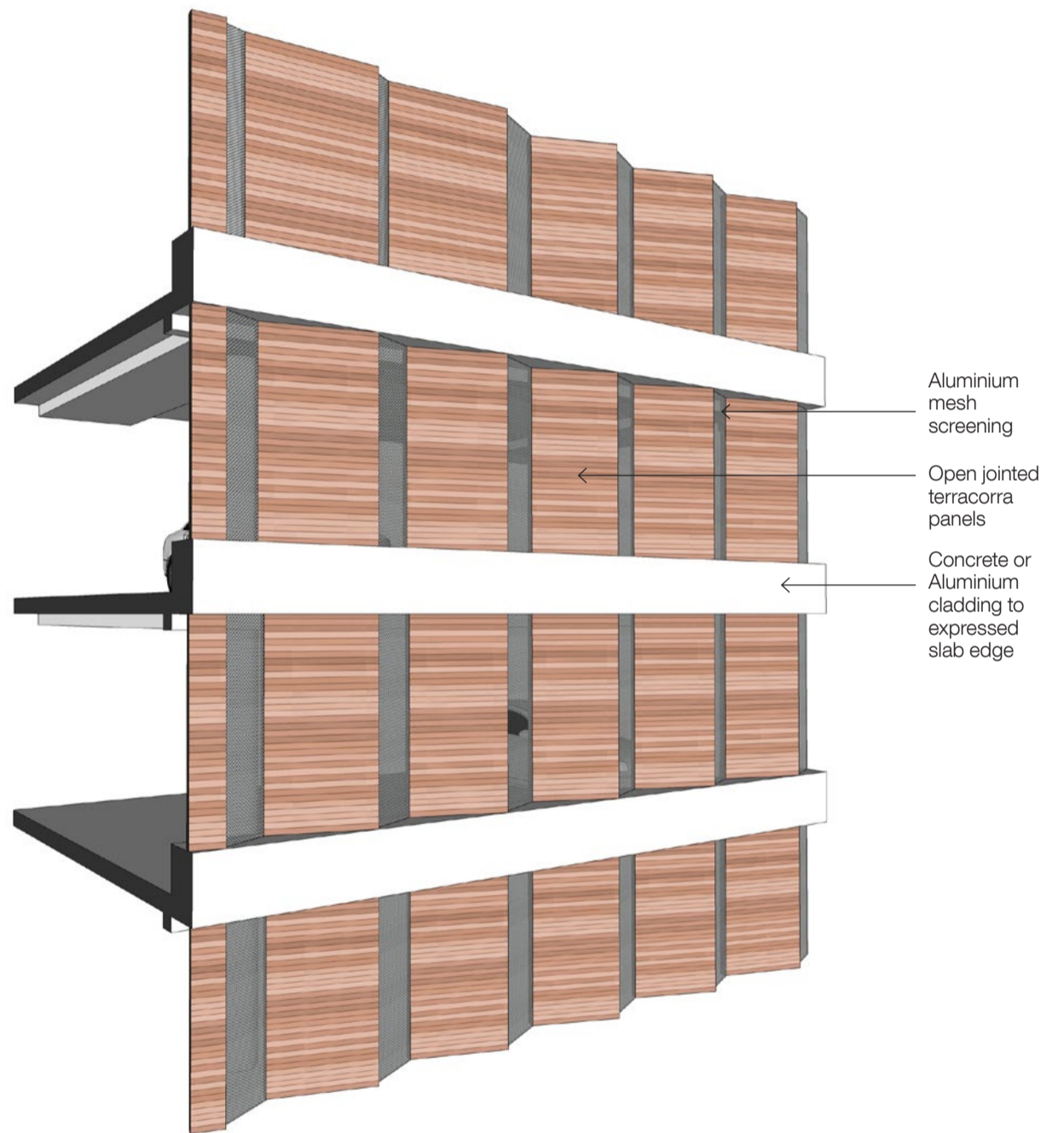
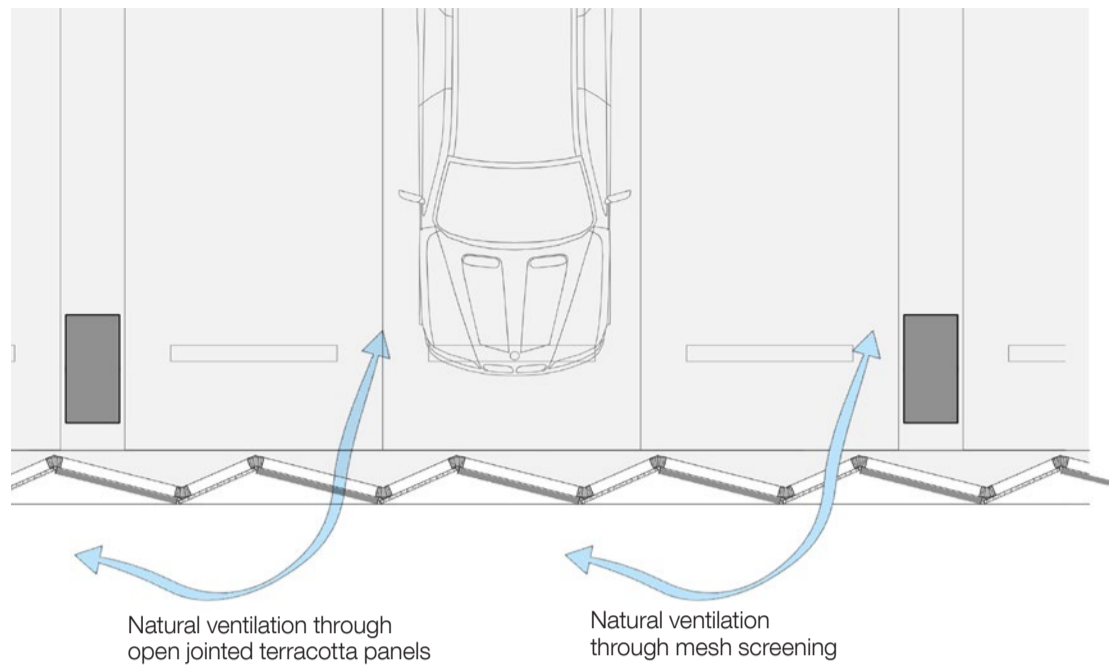
In some locations, the terracotta panels incorporate an operable panel at high level to assist with naturally ventilated night purge of the office.

The expressed slab edge is proposed with a concrete or aluminium finish.



6.4 CARPARK FACADE

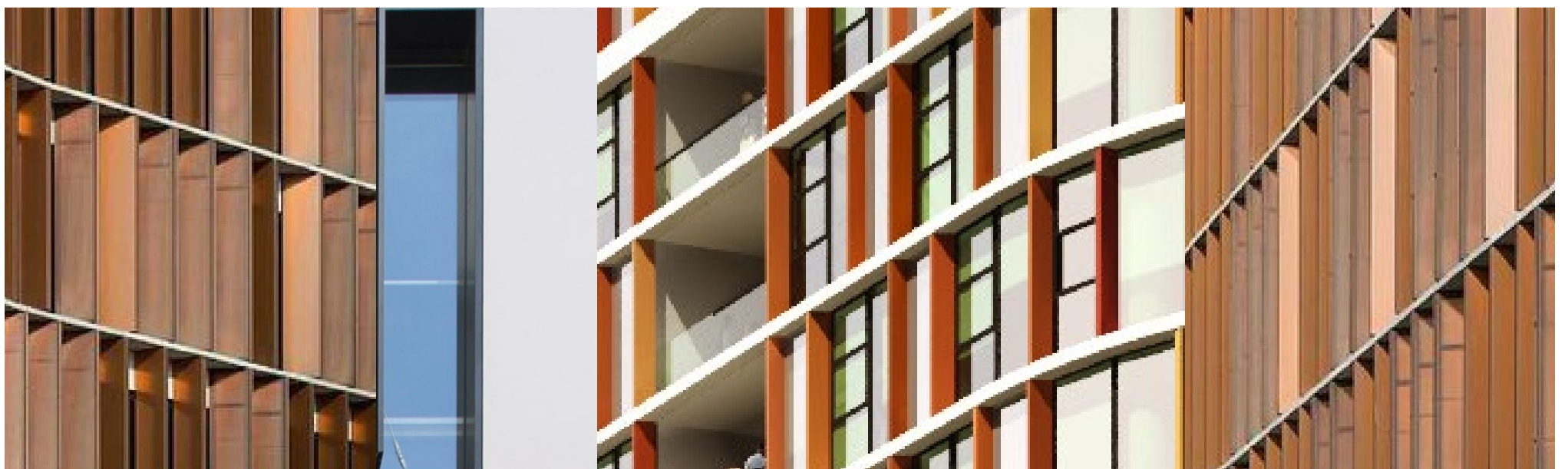
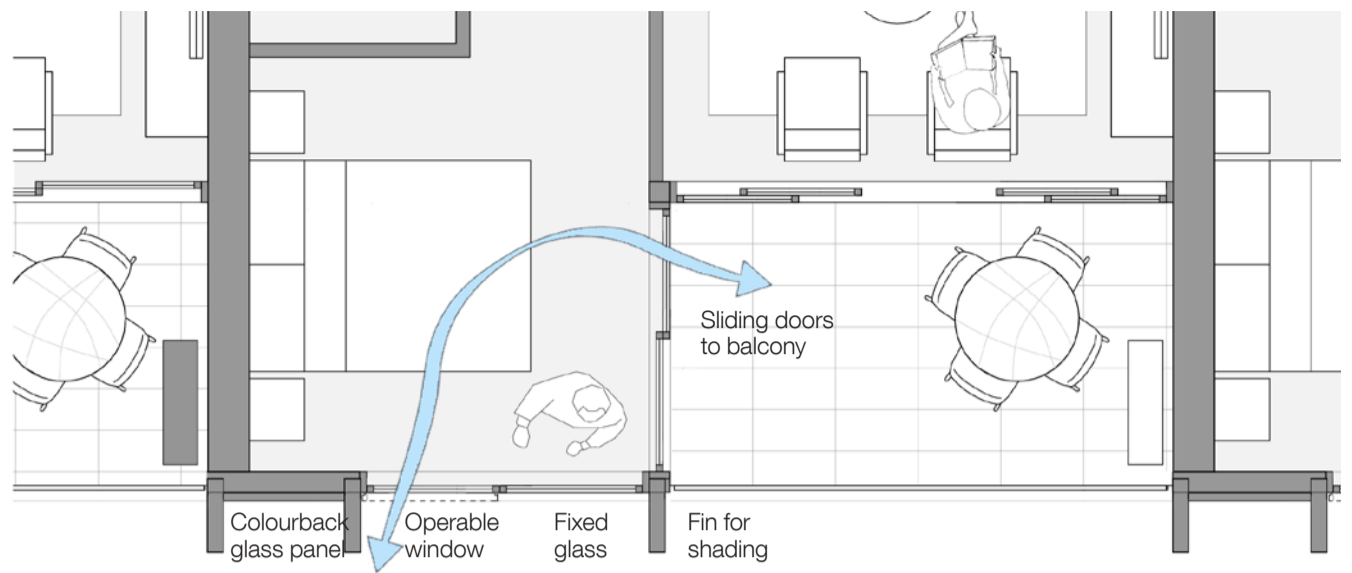
The zigzag façade has an alternating pattern of terracotta and aluminium mesh panels. The façade is designed to effectively conceal the car park while maintaining its ability to be naturally ventilated. The terracotta panels have open joints to allow for air movement. They are separated by panels of aluminium mesh which read as 'voids' while providing screening and accommodating air movement.



6.5 RESIDENTIAL FACADE

A series of projecting vertical fins combine with expressed slab edges to provide a unifying texture to the residential façade and shading from the high summer sun. The fins are arranged in a 2:1 rhythm, combined with a staggered window arrangement to provide animation and movement to the façade.

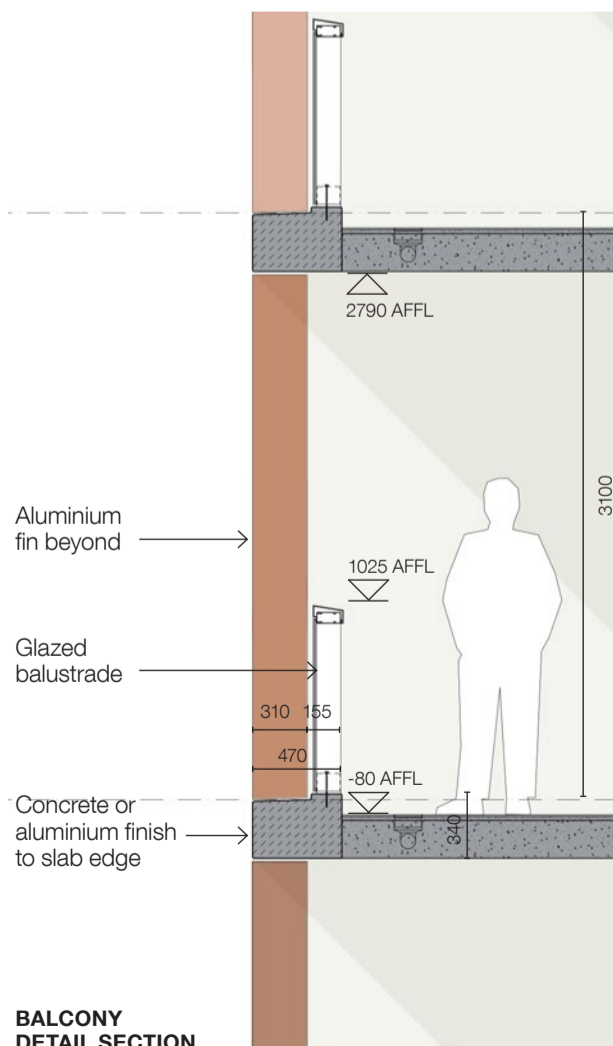
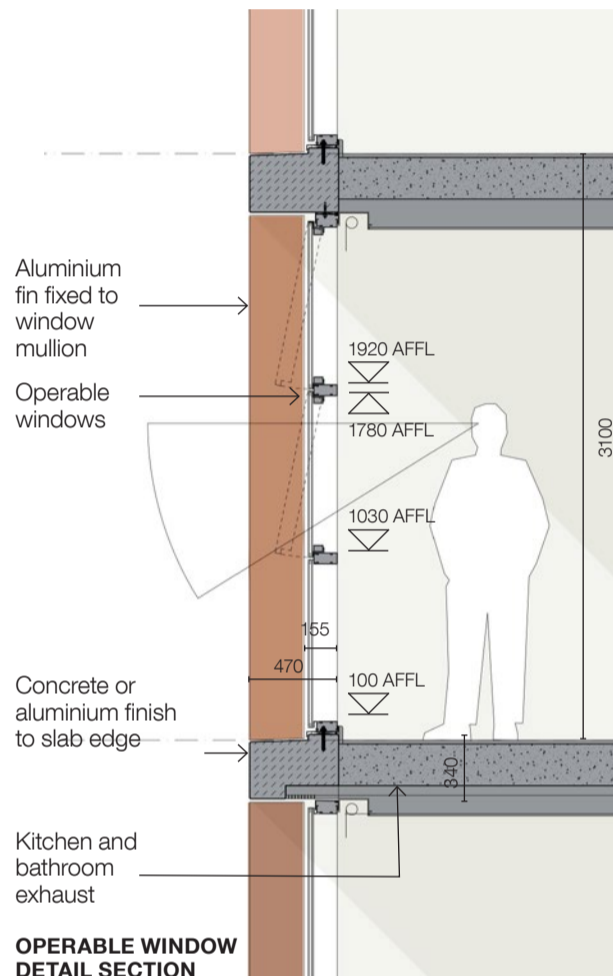
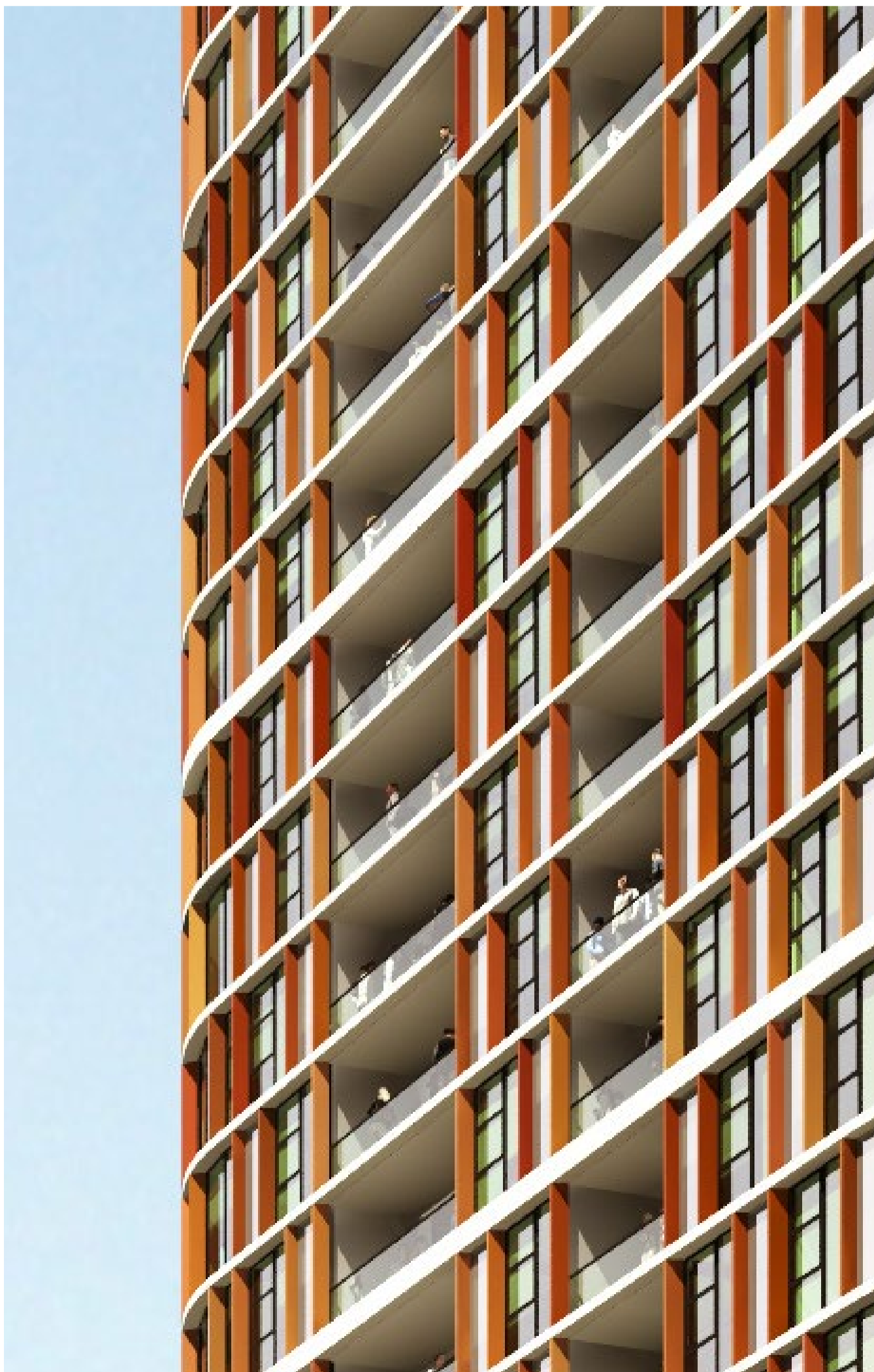
Where the residential mix and balcony positions change, the expressed slab is increased in thickness to subtly reinforce sense of the tower as a series of multistorey volumes.



FLAT FACADES

Bedrooms located at the façade line are divided into three panels approximately 1m wide: a full height fixed window, an operable window broken into three vertical panels, and a colourback glass panel providing some solidity and reducing heat gain.

Recessed living rooms have full width glazing with sliding doors opening out onto north and northeast facing balconies.



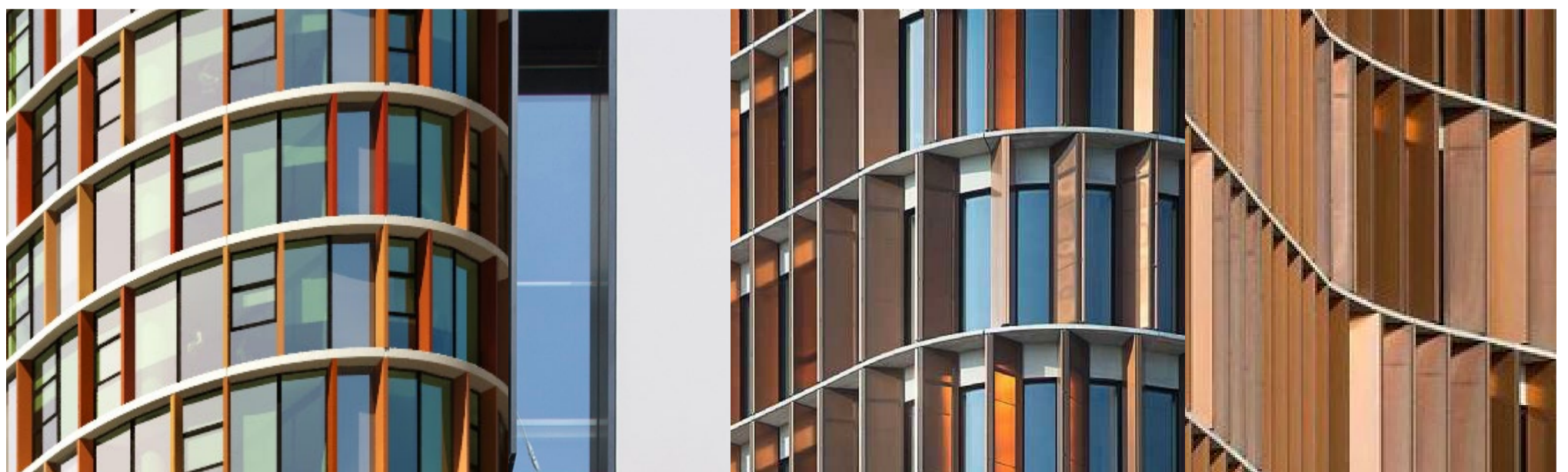
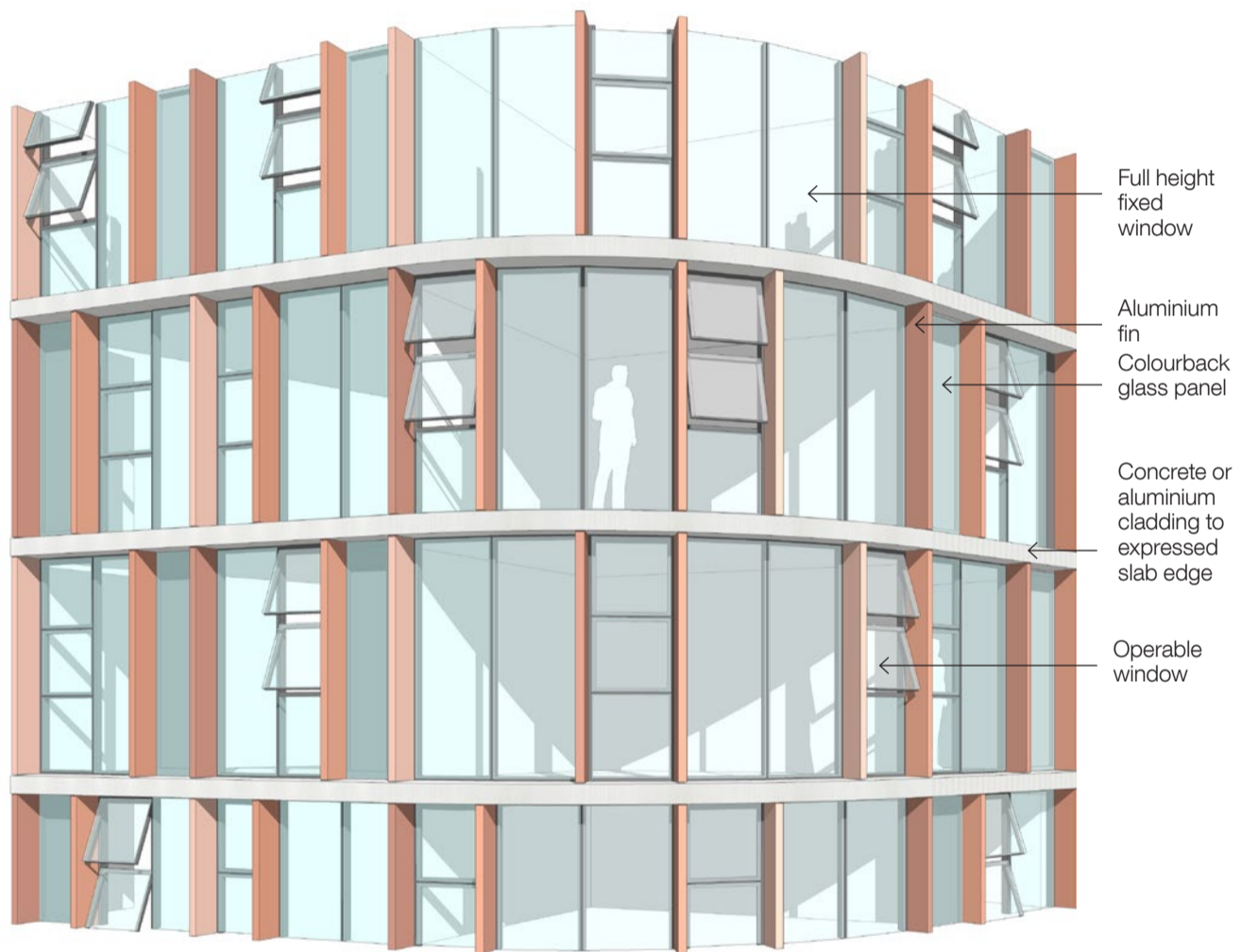
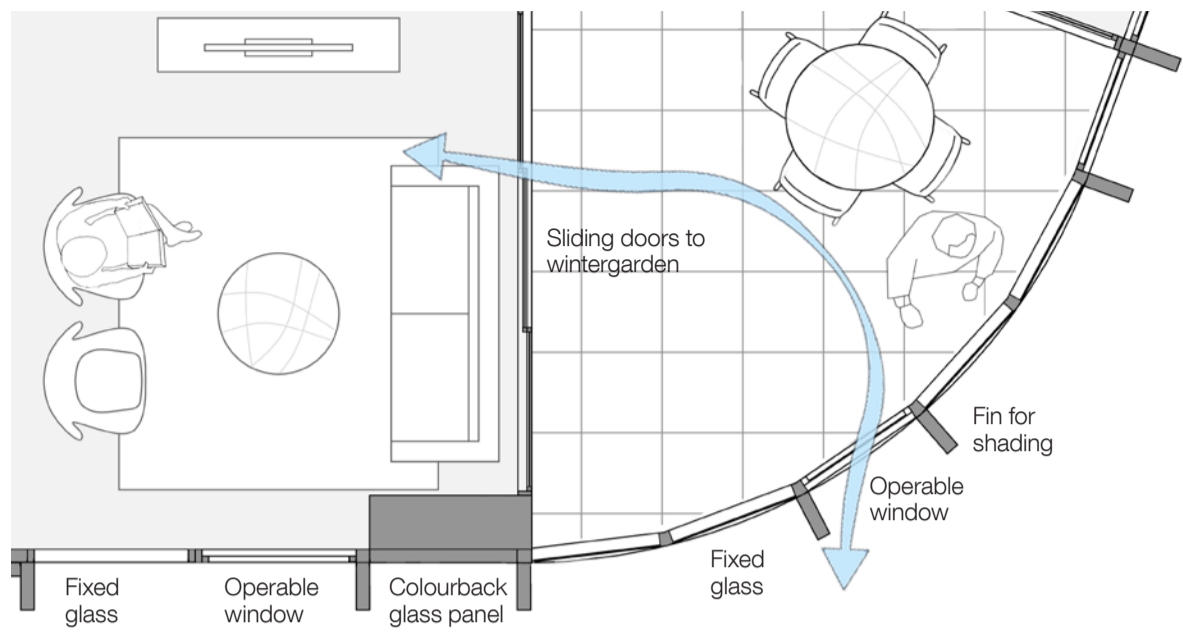
CORNER FACADES

At the three corners of the building, balconies are proposed to be enclosed as wintergardens, providing outdoor space which is sheltered from the increased wind speeds.

The façade turns the corner in 1m wide bays, with the alternating pattern of fins combining with the curved slab edge to minimise the perception of faceting.

Each wintergarden is provided with at least two large operable windows to provide natural ventilation

All living rooms which have access to wintergardens also have direct access to natural ventilation via an operable window at the façade line.



SOUTH FACADE

On the southern façade, the staggered fins continue in front of the lift lobby glazing which provides panoramic views from the lift waiting area. Adjacent to this, the stair core is clad in 1m wide panels which shift in depth to mimic the patterning of the fins. Further south, the fin pattern is reinstated to conceal the weatherproof louvres which enclose the AC condenser room.

At the top of the building, the fins extend upward by one level to form an open crown which conceals the lift overrun. The crown is proposed to have feature lighting.

A building signage zone is proposed on the top three levels of the south western façade in front of the lifts.

