

5.7 APPEARANCE - FACADE DESIGN

5.7.1 DESIGN PRINCIPLES

The facade articulation and materiality have been carefully developed to ensure the facade complements the Stadium, Tottenham Experience, and historic High Road buildings, whilst establishing a landmark building with its own identity.

In developing the architectural expression of the building façades, it has been the desire to establish a language that: -

- Creates an articulation with interest, depth, texture, and materiality that responds to the built and cultural context, ensuring it is a landmark rooted in this part of Tottenham.
- Is distinctive and visually interesting, given the scheme's visibility and the location marking the Stadium destination.
- Integrates a more tactile and approachable materiality at the lower levels to soften the human experience of the building at the base whilst anchoring the building to its context.
- Offers a lighter tone and expression at the tower top given their visibility against the sky.
- Provides a fully integrated design that meets the performance requirements of shading, daylight, fabric energy efficiency and creates high quality shared and residential amenity.

At the ground level, the detailing of the glazed entrance works in tandem with the Tottenham Experience, with a 'clear glass nose' as an extension into the public realm, further enhancing the building's street level activation.

A recessive plinth at the base of the blades creates a 'shadow gap' between the primary facade 'blade' elements and the ground interface at podium level, and within the portico / canopy entrance area at ground level. The recessed plinth finished in pre-cast concrete elements at ground level is a response to the high volume of pedestrian traffic on the stairs that bisect the Tottenham Experience and Hotel. The selected materiality of the plinth is robust and solid in comparison to the lightness of the facade 'planar blades' and has also been identified as a location for creative arts interventions.

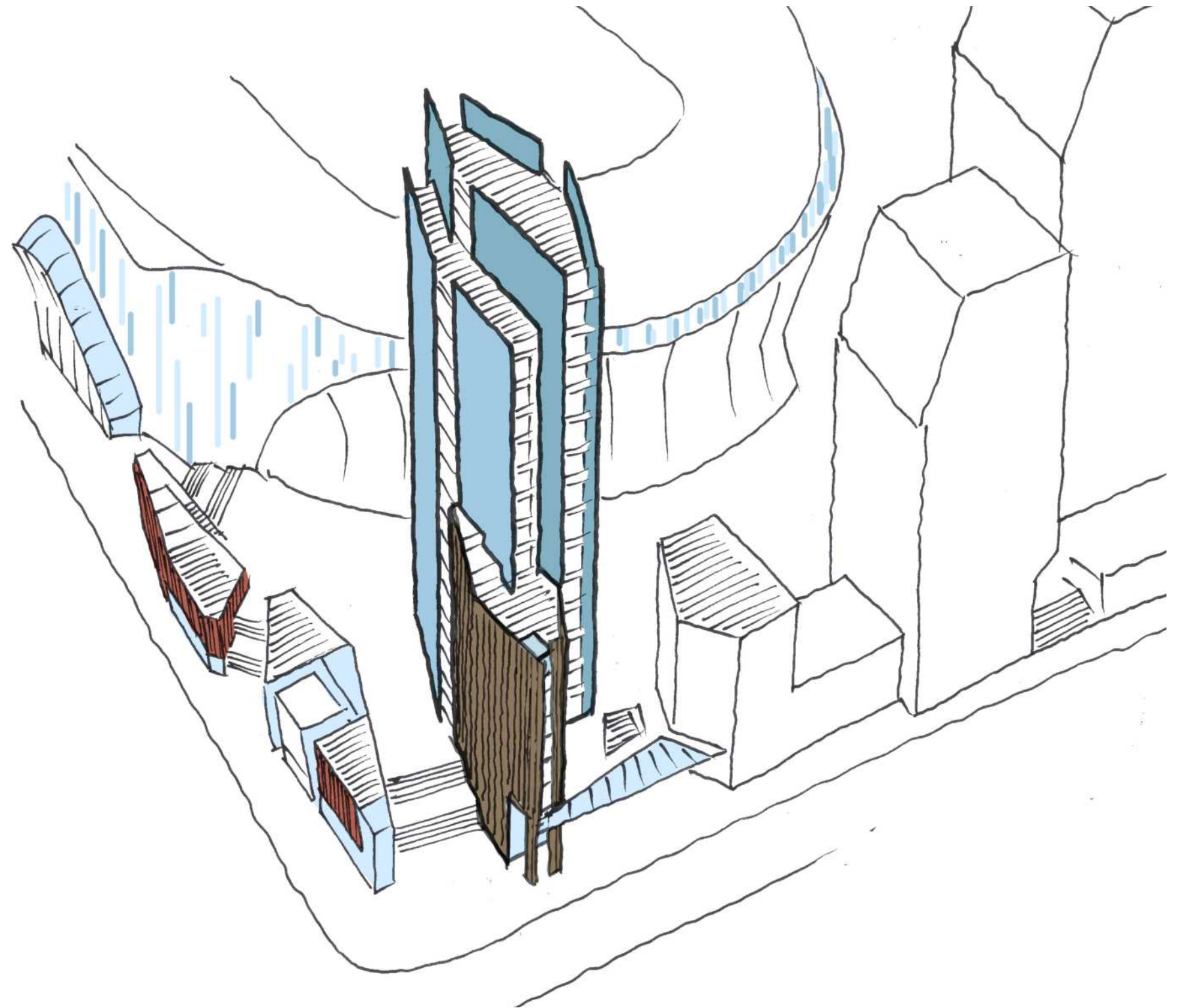


FIGURE 168. Facade Relationships Concept Sketch

5.7 APPEARANCE - FACADE DESIGN

5.7.1 DESIGN PRINCIPLES (CONTINUED)

Given the mediating role of the 'folding blades' to reference the High Road 'kink' and geometries of the Tottenham Experience, the facade cladding is finished with a bronze reeded profile metallic tone picking up the gun metal grey and umbers of the Tottenham Experience cast iron cladding and historic High Road masonry building. At ground level, the metallic cladding transitions into matching colour pre-cast concrete panels to provide a tactile and durable finish at the street / podium level.

The upper most portions of building are formed by the crisp and light 'planar blades'. Tonally referencing the colour and movement of the stadium wrap, these planes are formed of glazed panels within subtly projecting mullions accentuating the verticality of the overall composition. The glazing adds a reflective layer, further lightening the effect of the light bronze / grey and clear panels against the sky. The 'planar blades' are broken into vertically emphasised proportions through a series of recessive vertical slot infills. These elements create contrasting shadow gaps and accommodate shaded external residential balconies on the north and south facade within the upper portions of the tower.

The building transitions tonally from darker colours at the base to lighter colours at the top of the building. The tower element of the hotel offers a distinction from the earthy podium materials, with a curtain wall system creating lighter and more transparent articulation. The design of the facade is also driven by the overheating and energy strategy.

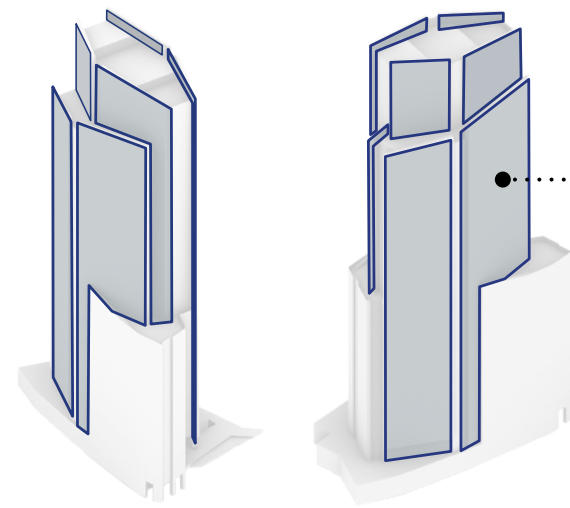


FIGURE 169. Planar Blades

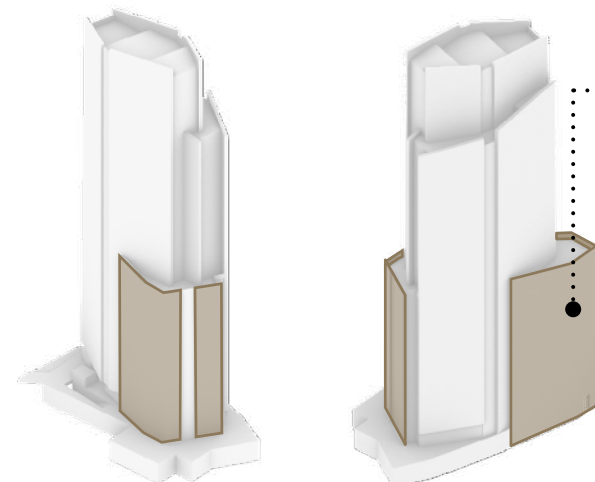


FIGURE 171. Folding Blades

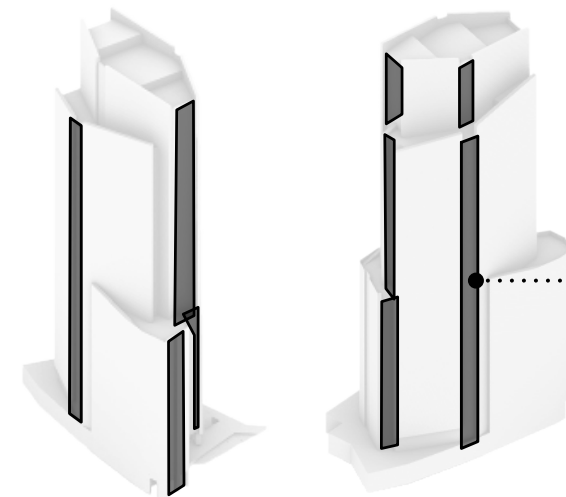


FIGURE 170. Recessed Infills

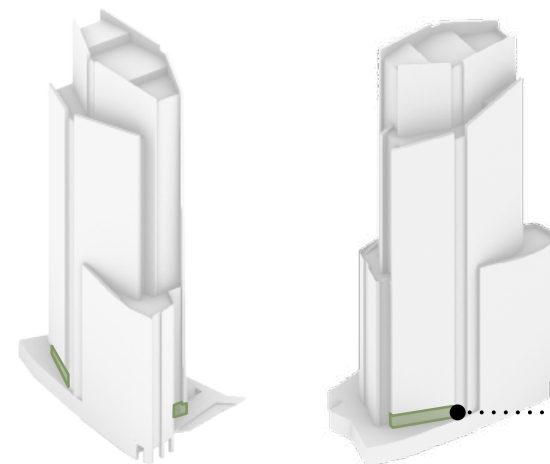
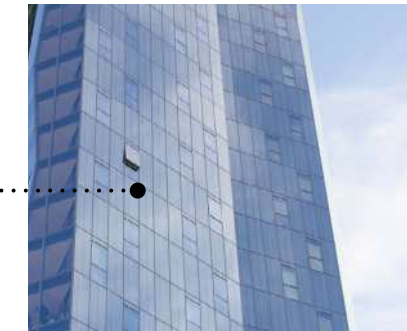


FIGURE 172. Recessed Plinth



Back-painted and insulated opaque glass



Light Bronze coloured Projected Aluminium Mullions



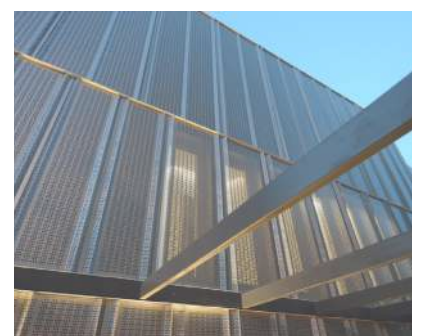
Back-painted and insulated opaque glass colour dark grey



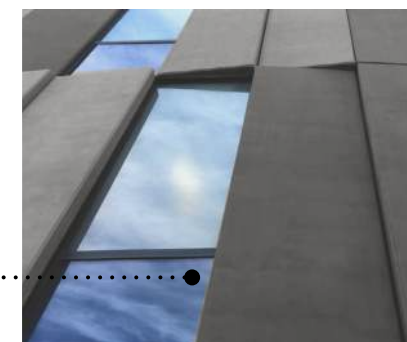
Dark grey coloured Aluminium projected louvres on brise-soleil



Bronze coloured profiled Aluminium solid panel



Bronze coloured Aluminium Perforated Panel over opaque openable panel



Dark Grey Coloured Profiled Pre-cast Concrete Panels



+ Triple glazed vision panel

5.7 APPEARANCE - FACADE DESIGN

5.7.2 COLOUR, CONCEPT AND MATERIAL (CONTINUED)

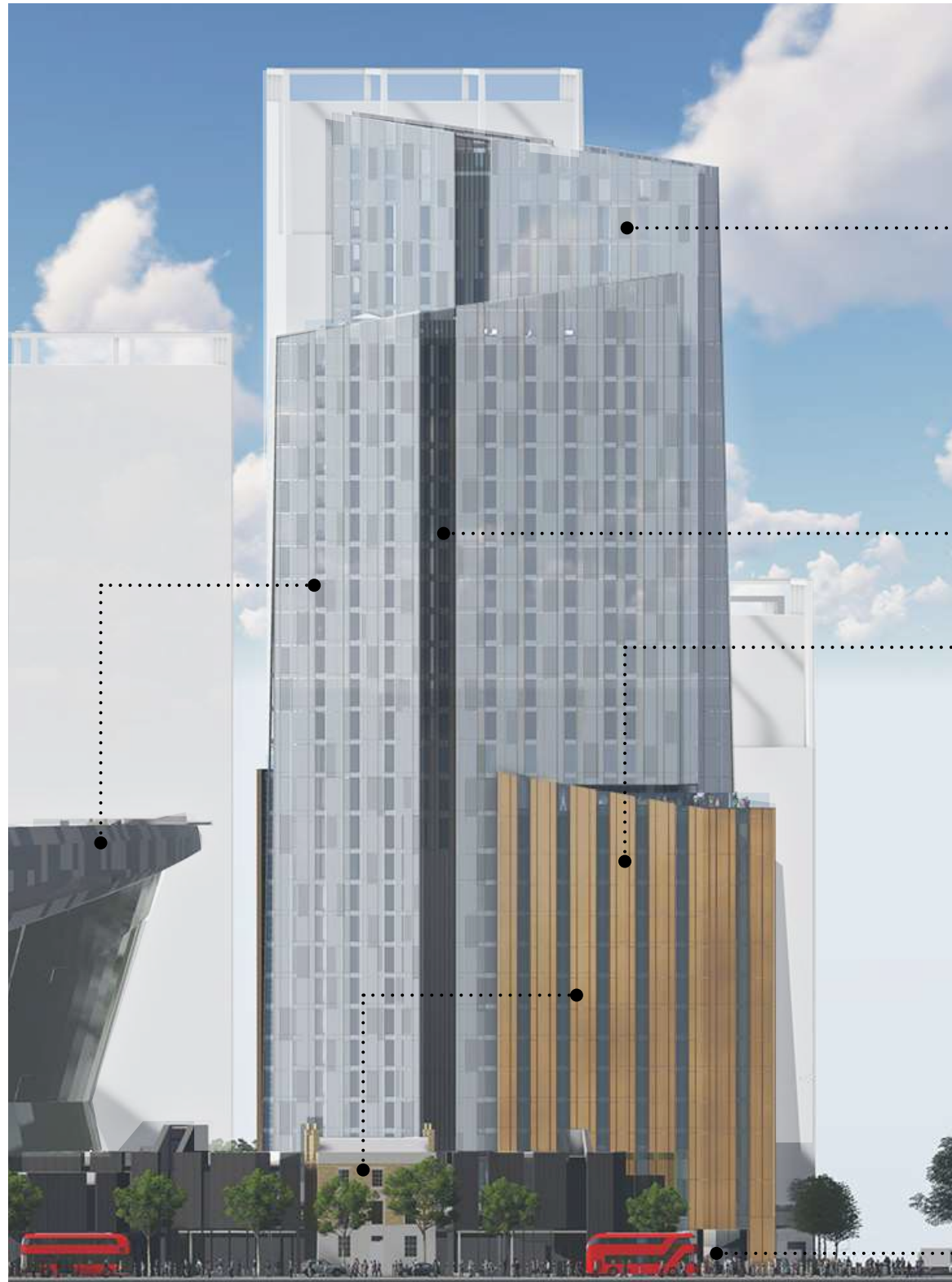


FIGURE 173. Echoing the colour and textural quality of Warmington House and the Stadium

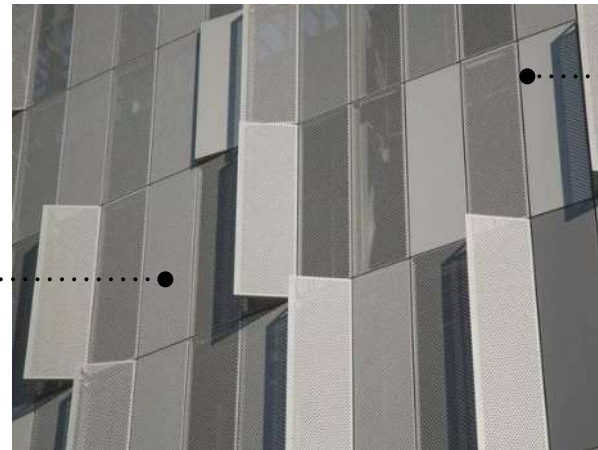


FIGURE 174. PLANAR BLADES - Relate to THFC Stadium



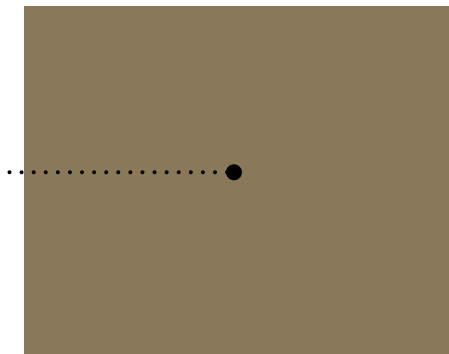
FIGURE 175. FOLDING BLADES - Relate to Warmington House



FIGURE 176. BASE - Relates to Tottenham Stadium



PLANAR BLADES - Light bronze + Projected mullions



FOLDING BLADES - Bronze



+ Profiled panels



INFILLS - Warm Grey



+ Louvres & Fins



BASE - Light Grey



BASE - Dark Grey

+ Art walls



FIGURE 177. View from Southern Approach

5.7 APPEARANCE - FACADE DESIGN

5.7.2 APPEARANCE - ELEVATION

The composition of the facade is made up of a series of six different wall types:-

1. Main Wall Type 1 - Residential **'Planar Blades'**
2. Main Wall Type 2 - **'Recessed Infill N/S'**
3. Main Wall Type 3 - **'Recessed Infill E/W'**
4. Main Wall Type 4 - **'Recessed Infill Balconies'**
5. Main Wall Type 5 - **'Folding Blades'**
6. Main Wall Type 6 - **'Pre-cast Concrete Panels'**

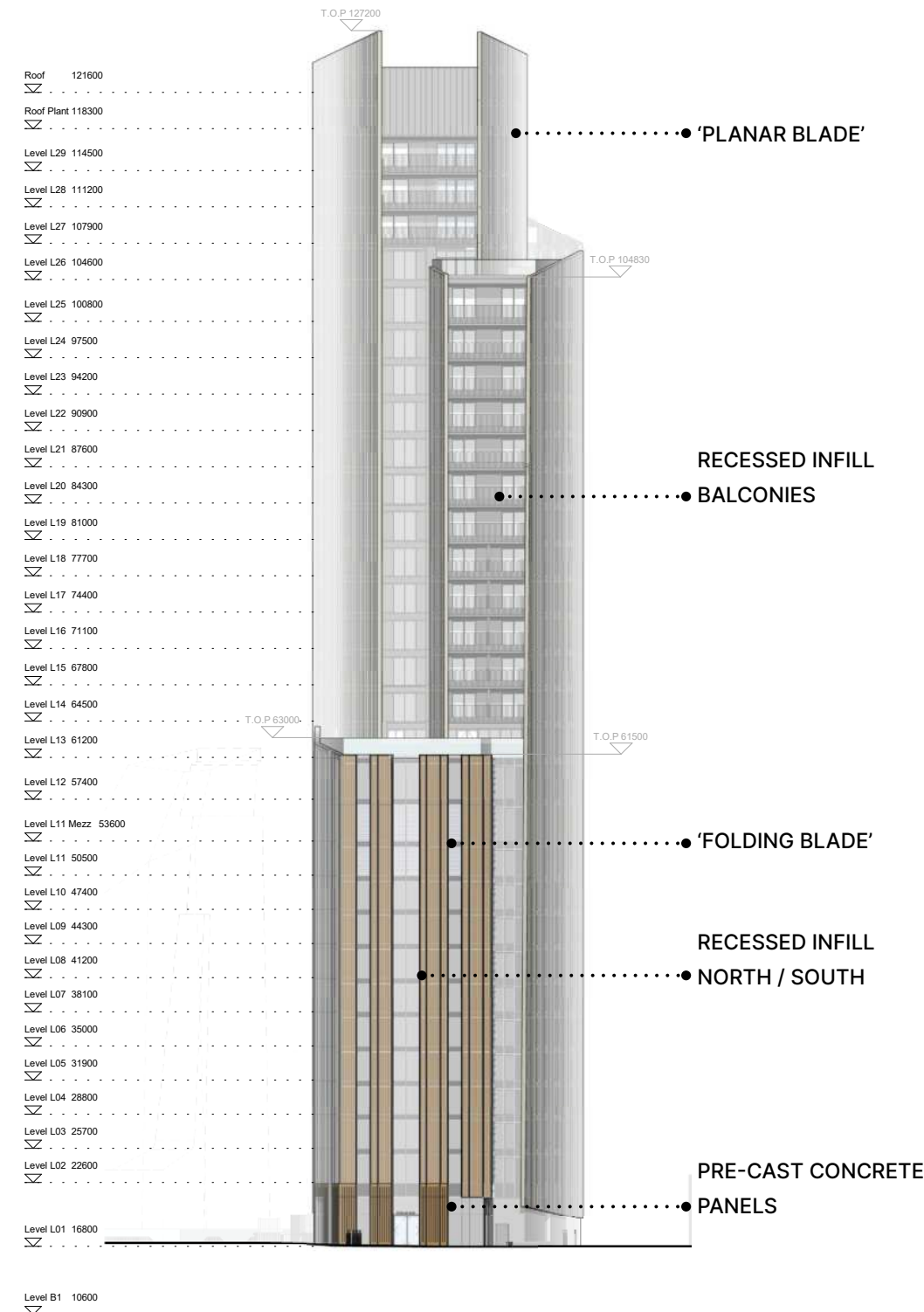


FIGURE 178. North Elevation

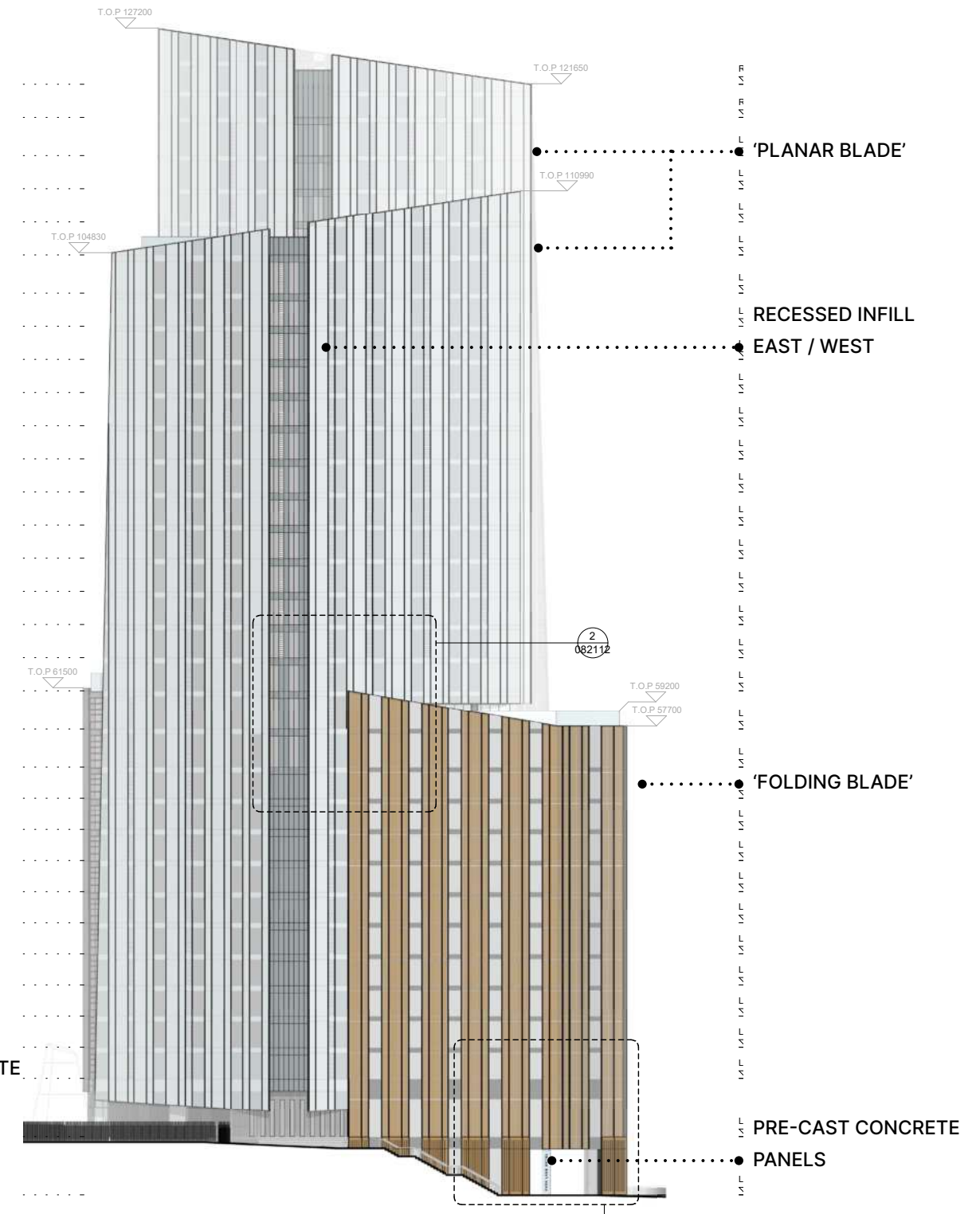


FIGURE 179. West Elevation

5.7 APPEARANCE - FACADE DESIGN

5.7.4 APPEARANCE - ELEVATION (CONTINUED)

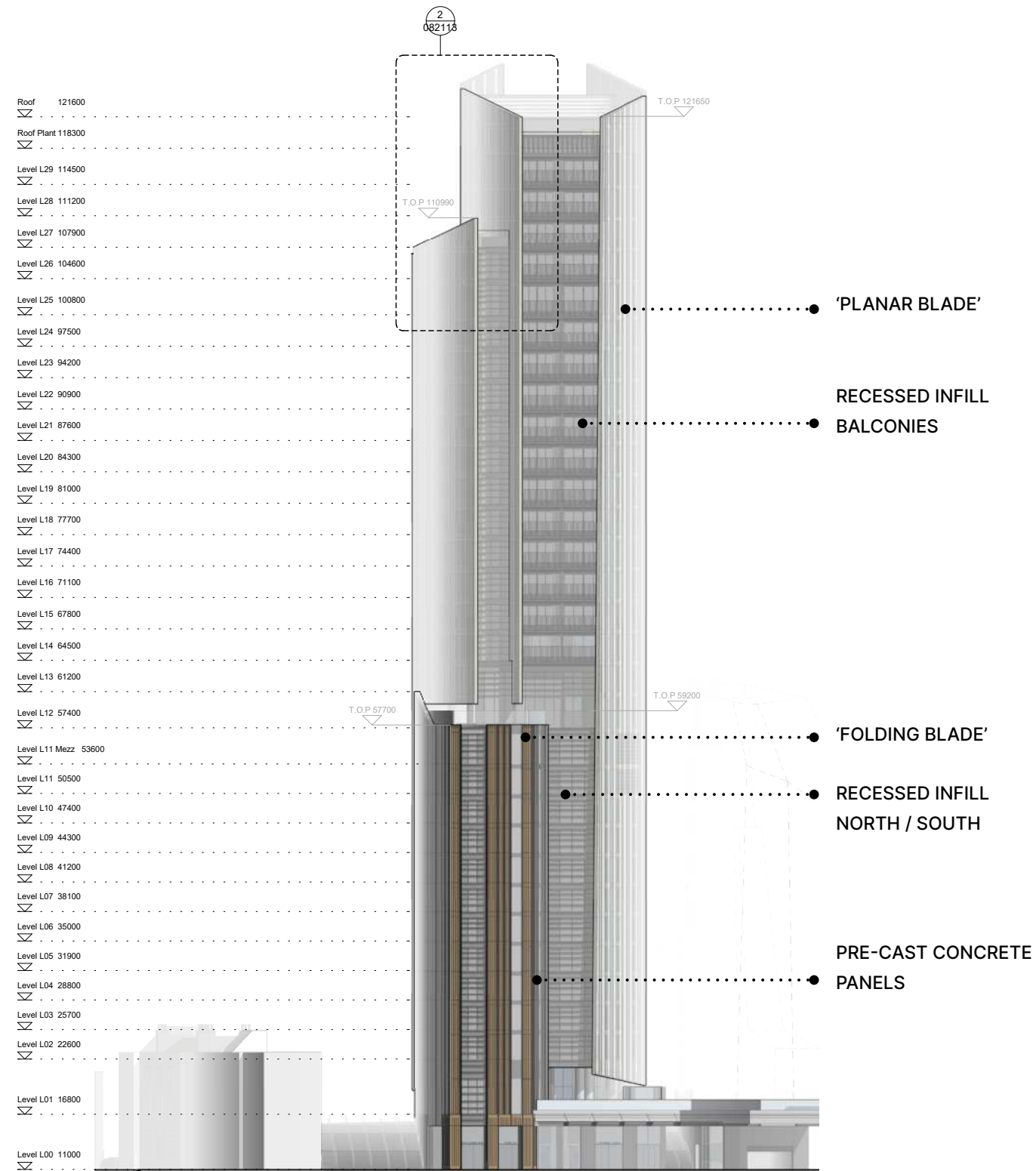


FIGURE 180. South Elevation

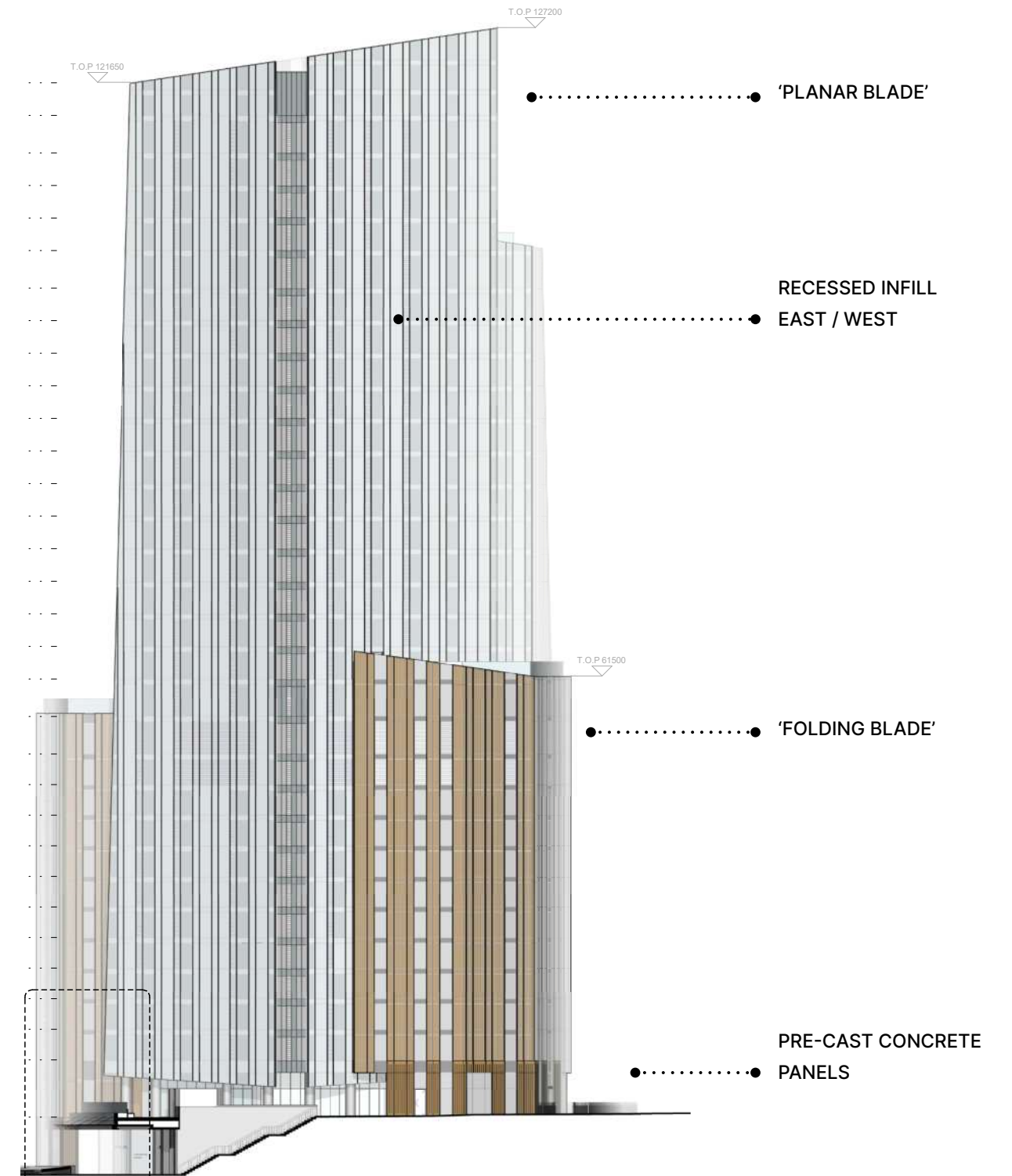


FIGURE 181. East Elevation

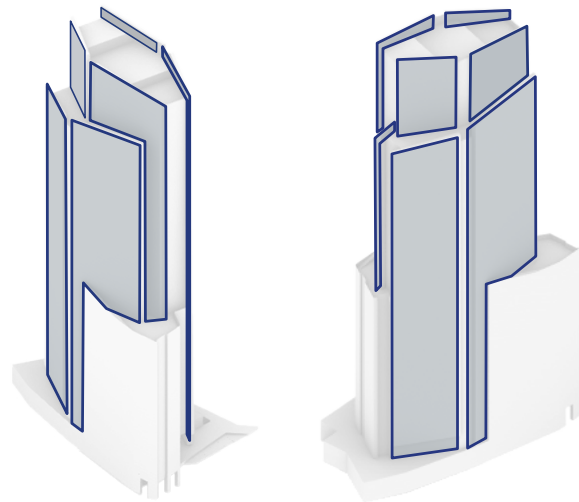
5.7 APPEARANCE - FACADE DESIGN

5.7.3 MAIN WALL TYPE 01 - RESIDENTIAL 'PLANAR BLADES'

The planar blades are a crisp and striking element consisting of a vertically emphasised grid framework, with a combination of solid, perforated, and glazed panels to provide views out of the building and add variation within the grid. The blades emerge from the stadium podium and roof terraces, angled towards an apex reaching for the sky.

The proportion of glazing has been carefully considered to manage overheating risk whilst achieving good natural light levels.

The design of the curtain wall system has been developed with input from specialist supplier in order to achieve the maximum thermal performance for a curtain wall solution, including minimising thermal bridging at connections, triple glazing and maximise insulation build-ups.



- ① Fritted back painted and insulated opaque glass
- ② Triple glazed fixed unit, vision panel
- ③ Fritted glass louvred panel over opaque openable panel
- ④ Light bronze coloured projected aluminium mullions
- ⑤ Fritted back-painted and insulated opaque glass spandrel panel

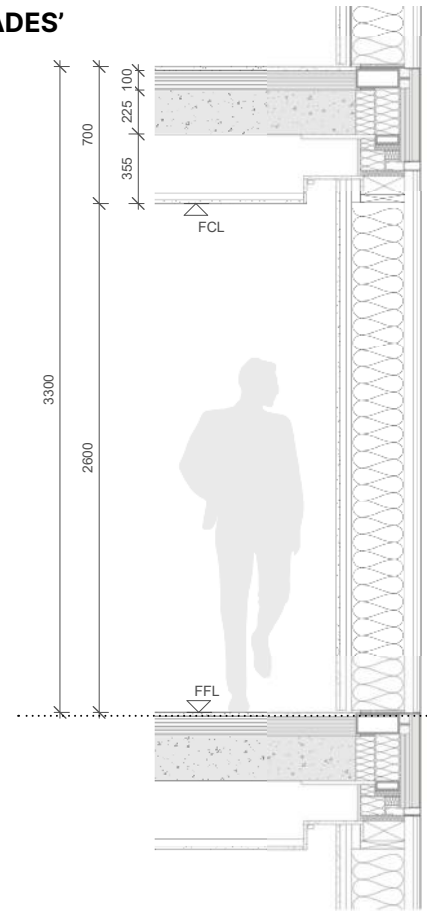


FIGURE 182. Section - Solid Panel

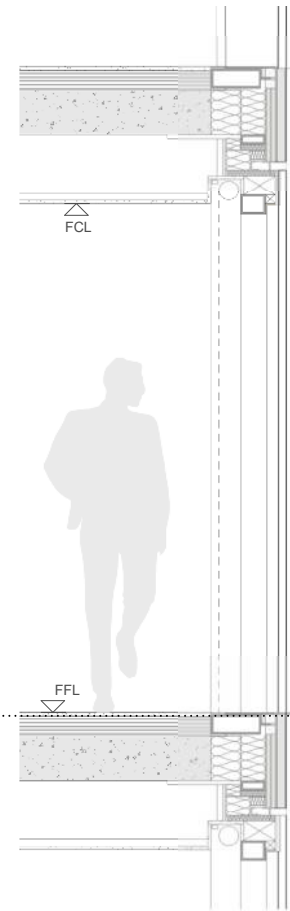


FIGURE 183. Section - Vision Panel

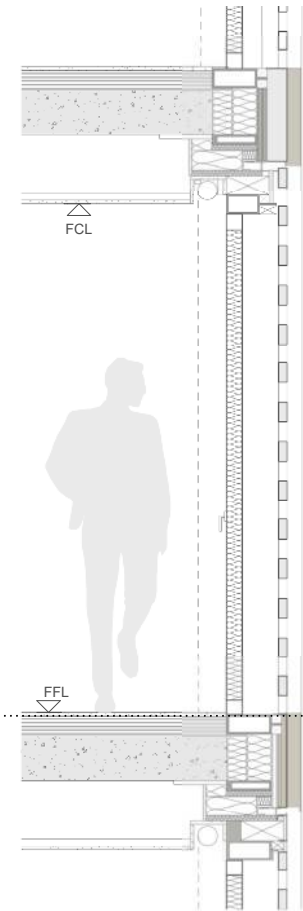


FIGURE 184. Section - Openable and Louvred Panel



FIGURE 186. Elevation



FIGURE 185. Axonometric View

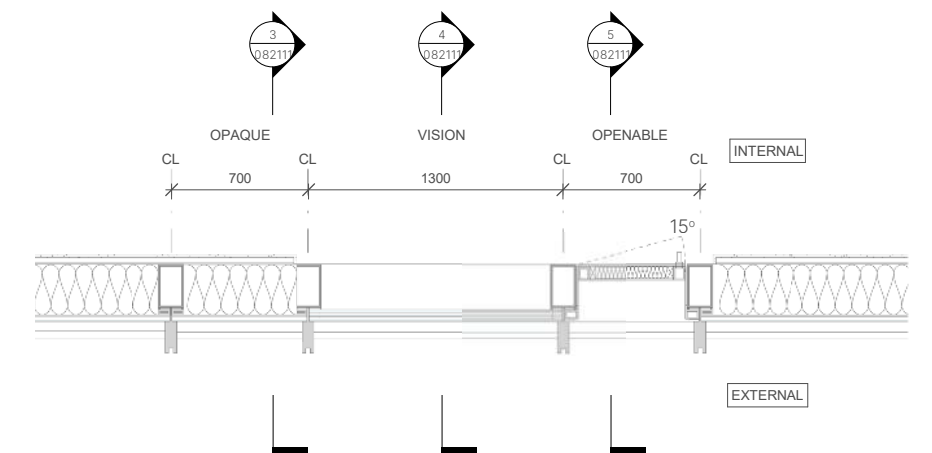


FIGURE 187. Plan

5.7 APPEARANCE - FACADE DESIGN

5.7.4 MAIN WALL TYPE 02 - RECESSED INFILL NORTH/SOUTH

The recessed infill north/south acts as a recessive vertical slot, creating a contrasting shadow gap effect to the 'planar blades', breaking down the vertical proportions. This wall type is a combination of back-painted and insulated opaque glass and fixed triple glazed vision panel.'

In addition, this wall type features brise soleil providing shade from the direct sun during summer, whilst allowing low-level sun to enter the buildings.

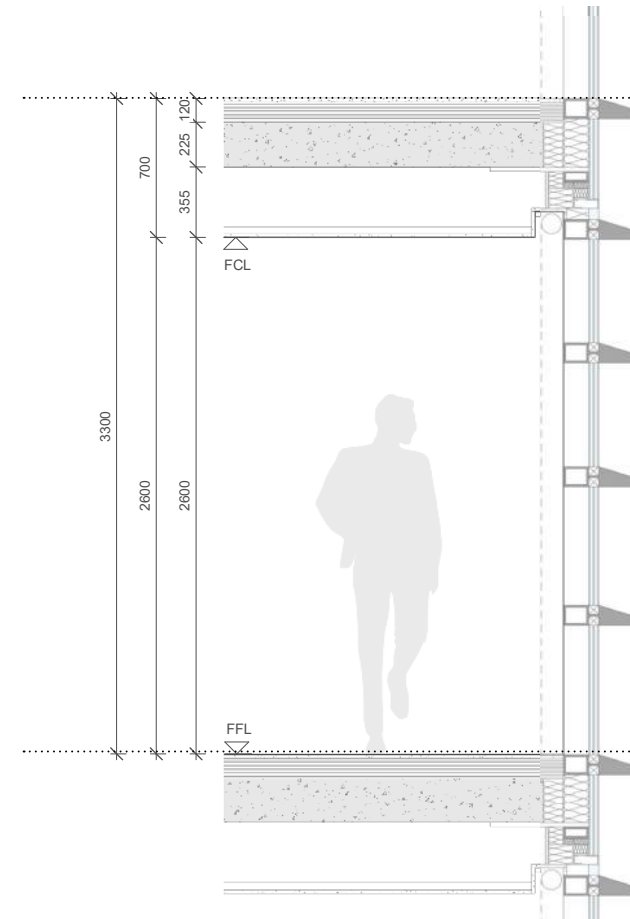


FIGURE 188. Section

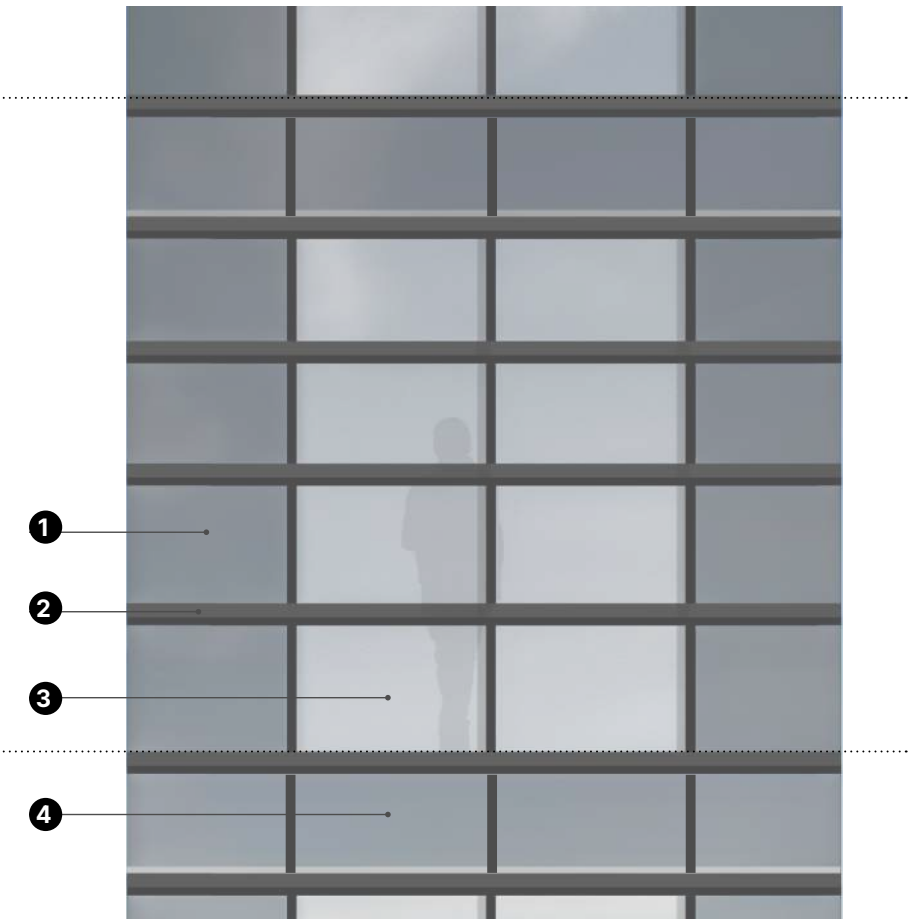


FIGURE 190. Elevation



FIGURE 189. Axonometric View

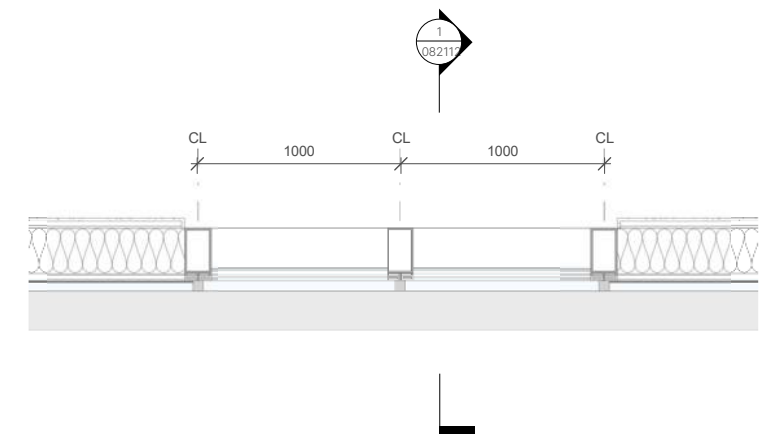


FIGURE 191. Plan

- ① Back-painted & insulated opaque glass, colour dark grey
- ② Dark grey coloured aluminium projected louvres or brise-soleil
- ③ Triple glazed fixed unit, vision panel
- ④ Back-painted opaque glass spandrel panel, colour dark grey

5.7 APPEARANCE - FACADE DESIGN

5.7.5 MAIN WALL TYPE 03 - RECESSED INFILL EAST/WEST

The recessed infill (east-west) wall type features opaque glass panels with aluminium fins on the external side to provide shading from the sun and reducing heat gain. When compared to horizontal louvres, vertical louvres are ideal on the east and west elevations as the angle of the sun is typically lower.

The triple glazing is vertically shaded by a continuous vertical fin to accentuate the slender proportion. Other forms of passive design approaches such as additional backing insulation and thermally-broken framing system (bespoke with input from specialist supplier) have been carefully considered in the facade design.

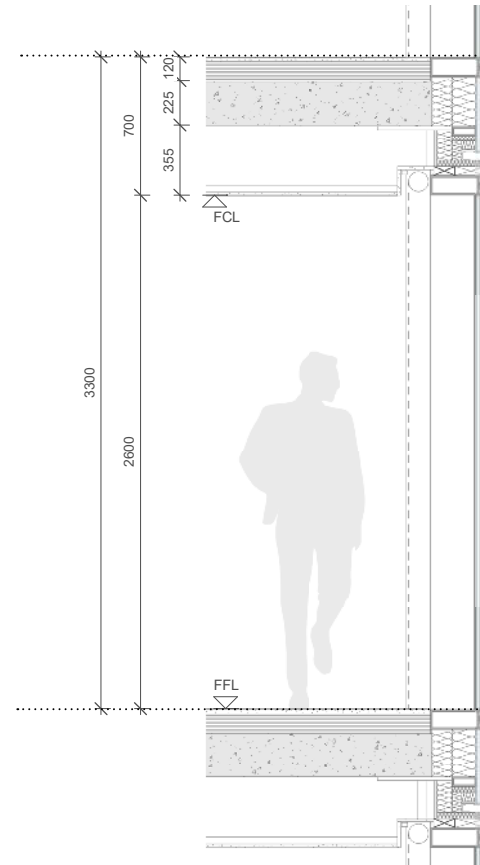


FIGURE 192. Section - Vision Panel

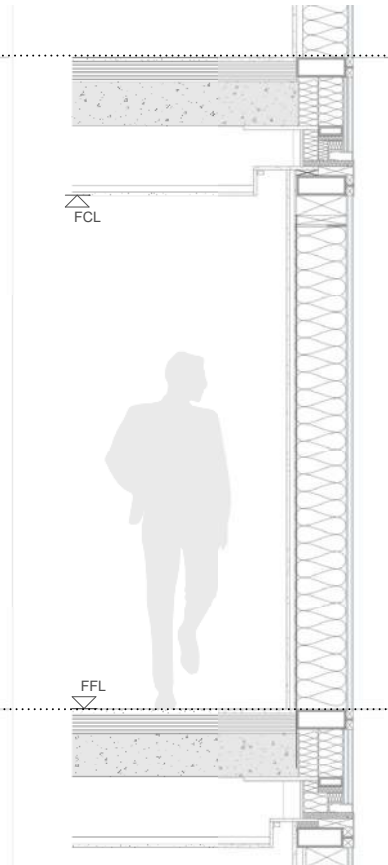


FIGURE 193. Section - Solid Panel

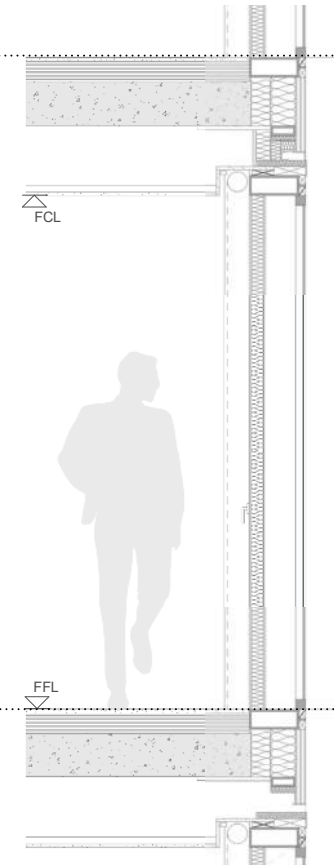


FIGURE 194. Section - Openable and Louvred Panel

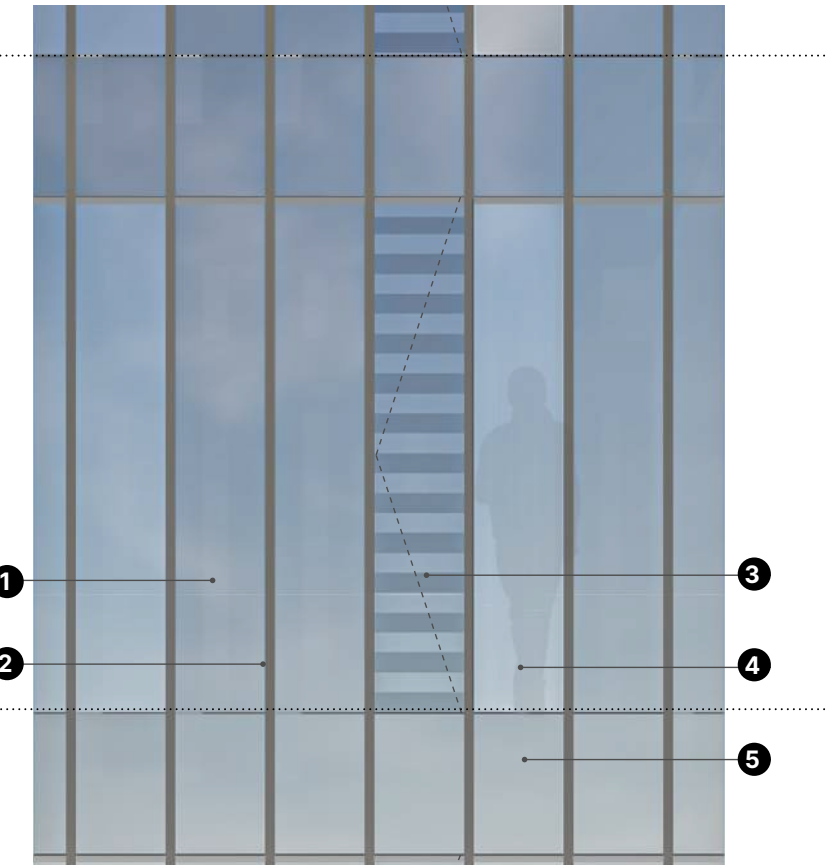


FIGURE 195. Elevation

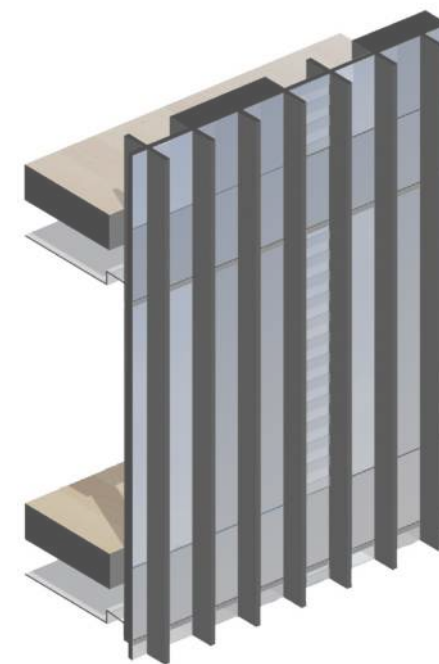


FIGURE 196. Axonometric View

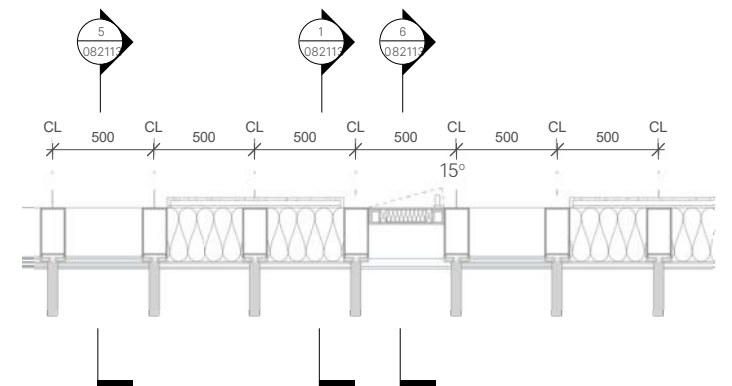
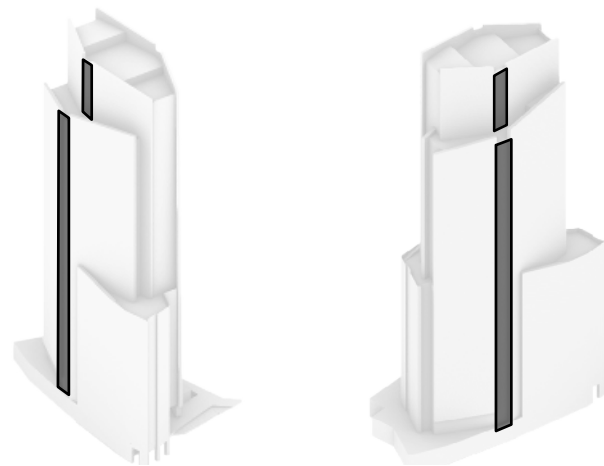


FIGURE 197. Plan



- ① Back-painted & insulated opaque glass, colour dark grey
- ② Dark grey coloured aluminium projected mullions
- ③ Back-painted glass louvred panel over opaque openable panel, colour dark grey
- ④ Triple glazed fixed unit, vision panel
- ⑤ Back-painted opaque glass spandrel panel, colour dark grey

5.7 APPEARANCE - FACADE DESIGN

5.7.6 MAIN WALL TYPE 04 - RECESSED INFILL BALCONIES

The recessed infill balconies are located at the higher levels, on the north and south elevation, to provide residential units with well shaded private balconies and amenity space. The balconies are positioned strategically on the south elevation to provide additional shade from the high-angle southerly sun, minimising overheating risk.

The opennable glazed doors on the balconies along with the dual aspect nature of all residential accommodation allow for natural crossflow ventilation.

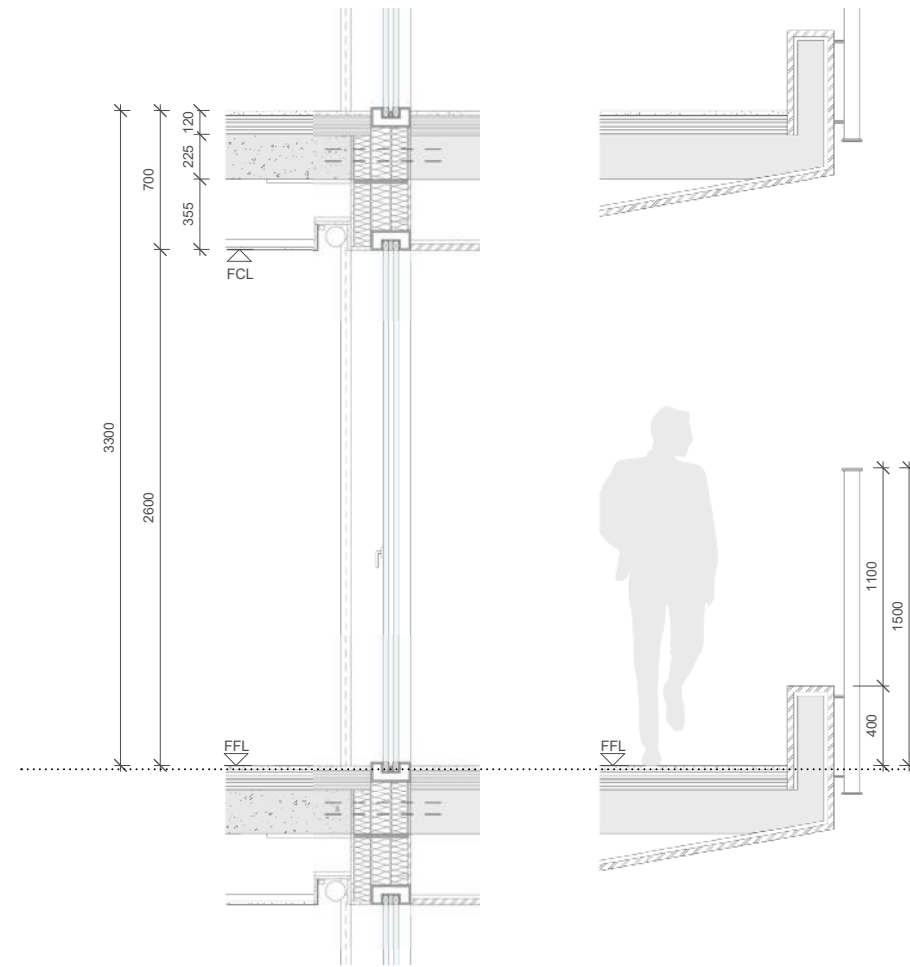


FIGURE 198. Section

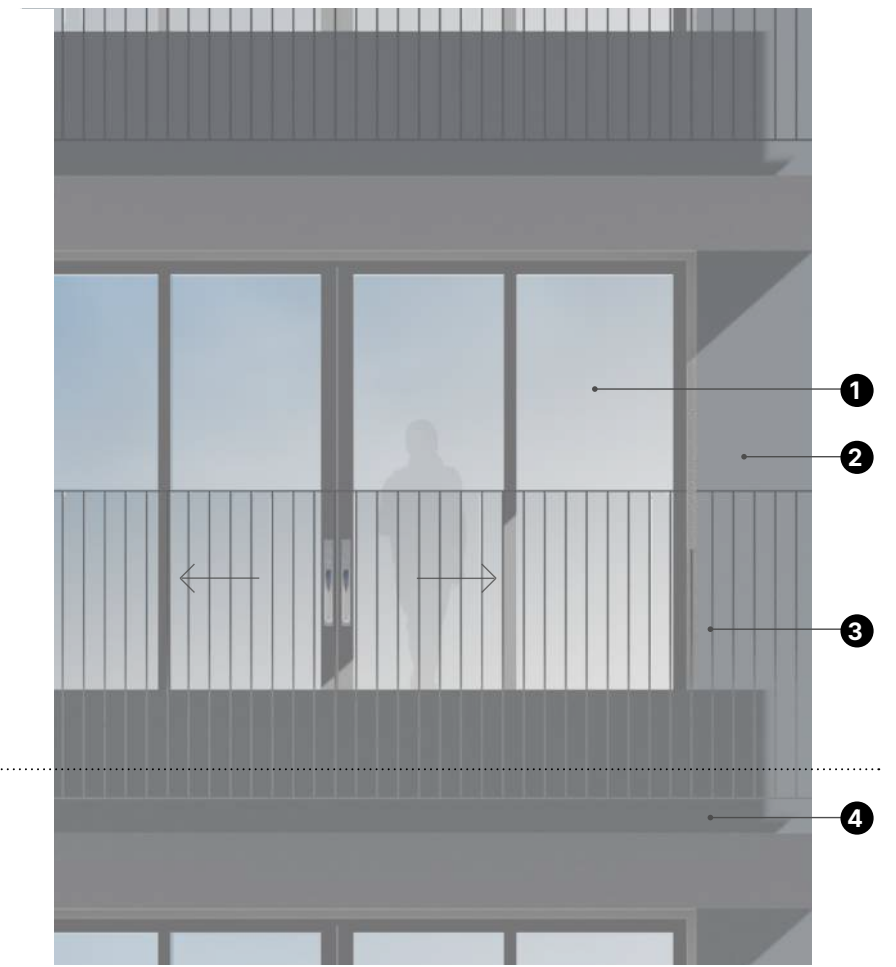


FIGURE 200. Elevation

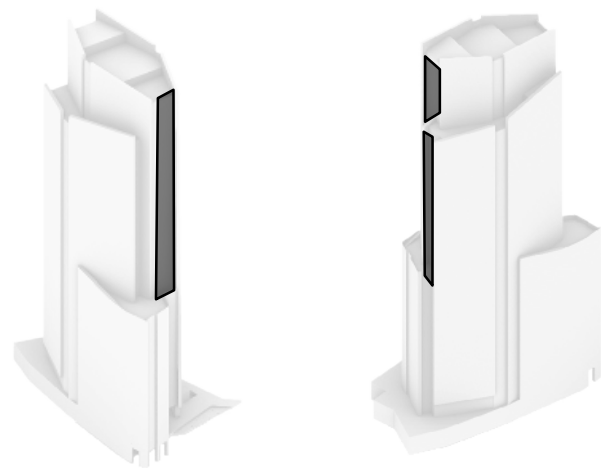


FIGURE 199. Axonometric View

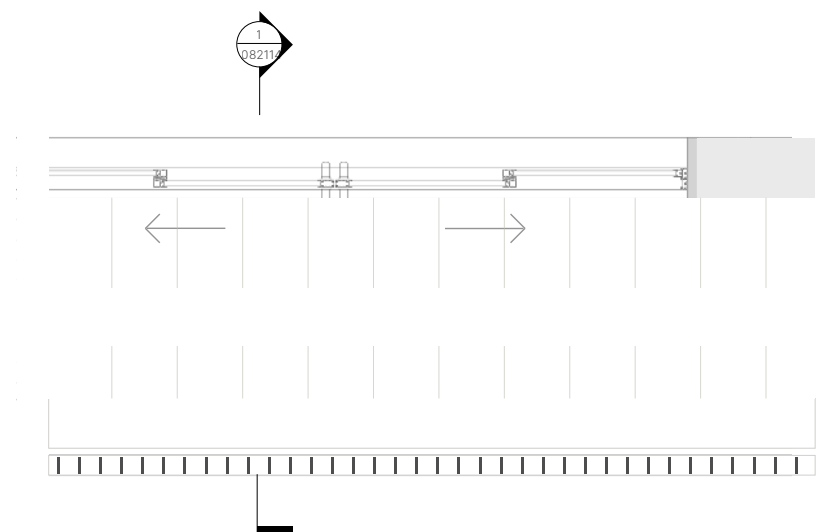


FIGURE 201. Plan

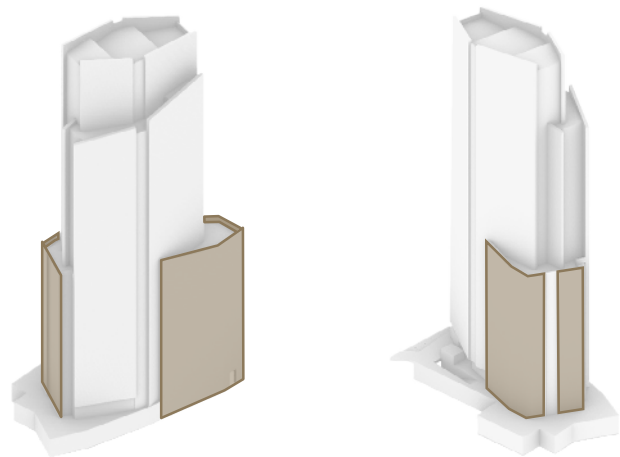
- ① Dark grey coloured aluminium triple glazed sliding door
- ② Dark grey coloured aluminium panel
- ③ Dark grey coloured vertical metal railings & balustrades
- ④ Dark grey coloured aluminium upstand

5.7 APPEARANCE - FACADE DESIGN

5.7.7 MAIN WALL TYPE 05 - 'FOLDING BLADES'

The lower rise 'folding blades' adopt the similar articulation as the upper portions of the taller planar elements with subtly different metallic tones and variations to the framework to create a solid base to the building. The 'folded blade' element incorporate both a solid reeded profile aluminium panel within a frame of 200mm projecting vertical mullions to emphasize verticality and add readable texture to these facades when viewed from the ground / podium. The colour and texture within these lower rise elements relates to both the Tottenham Experience cladding and High Road historic masonry buildings.

They are folded in plan, wrapping around the façade and offset from the 'planar blades'. This wall type features both opaque fixed panels and perforated panels over the opaque openable glass. Though the limit of the openable panels are 30 degrees, this design allows for the option to have the rooms naturally ventilated.



- ① Bronze coloured profiled aluminium solid panel
- ② Bronze coloured projected aluminium fins
- ③ Bronze coloured profiled aluminium perforated panel over opaque openable panel
- ④ Triple glazed unit, vision panel
- ⑤ Back-painted opaque glass spandrel panel, colour dark grey

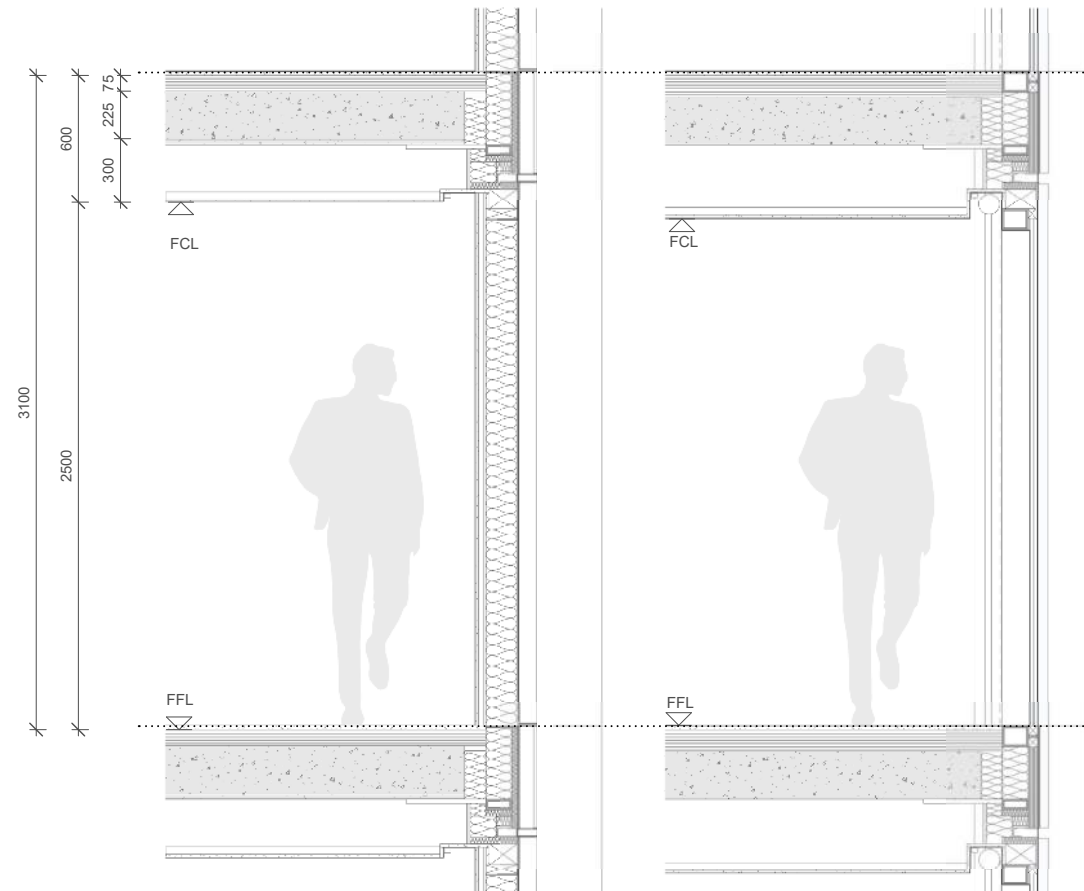


FIGURE 202. Section - Solid Panel

FIGURE 203. Section - Vision Panel

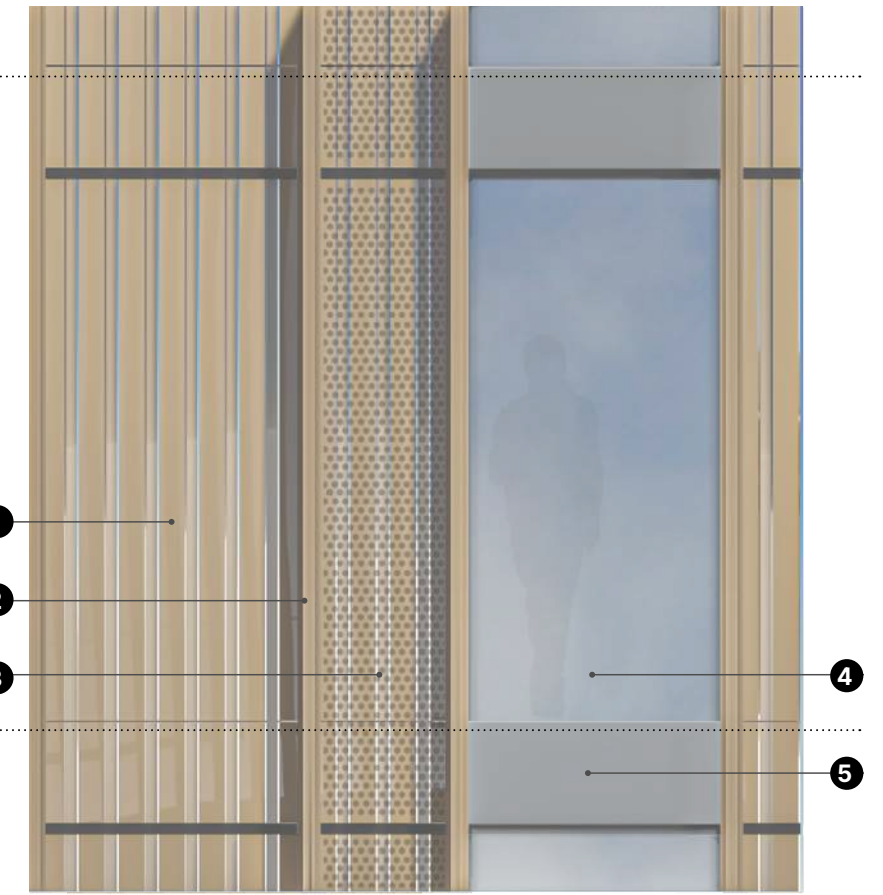


FIGURE 204. Elevation



FIGURE 205. Axonometric View

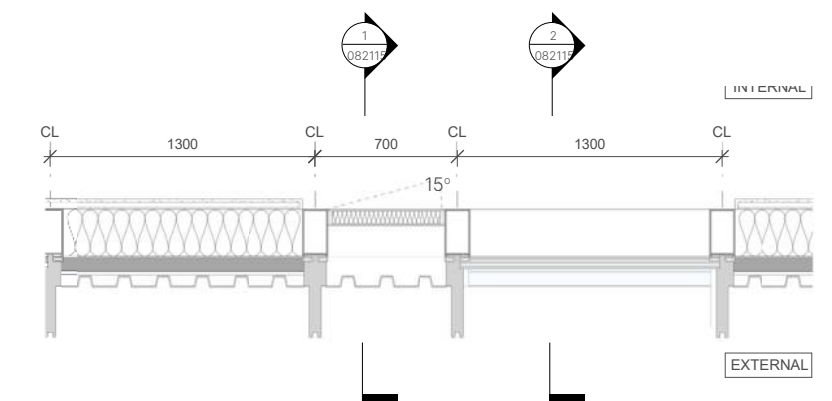


FIGURE 206. Plan

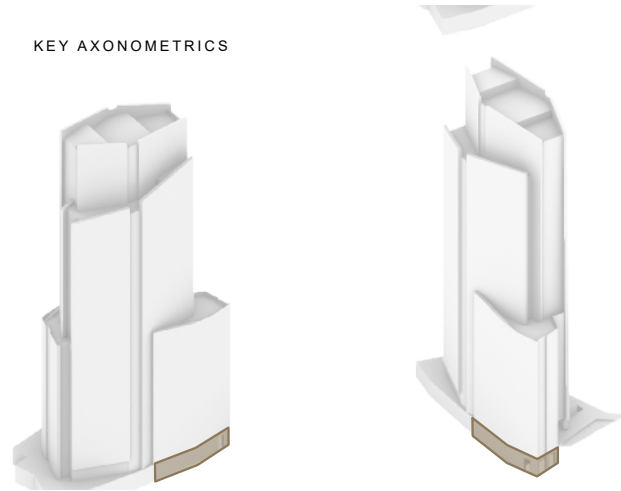
5.7 APPEARANCE - FACADE DESIGN

5.7.8 MAIN WALL TYPE 06 - PRE-CAST CONCRETE PANELS

The pre-cast concrete panels are located at the base of the building. The panels feature a recessed or inverted profile allowing the continuation of the vertical lines of the projecting fins on the building facade above.

The earthy material offers a distinction from the lighter tower elements whilst still matching the colour of the metallic cladding on the 'folding blades.' The pre-cast concrete panels provide a tactile and durable finish at the street / podium level, as a direct response to the crowd and pedestrian movement.

KEY AXONOMETRICS



- ① Bronze coloured profiled pre-cast concrete panels
- ② Bronze coloured projected fin profile
- ③ Triple glazed unit, vision panel

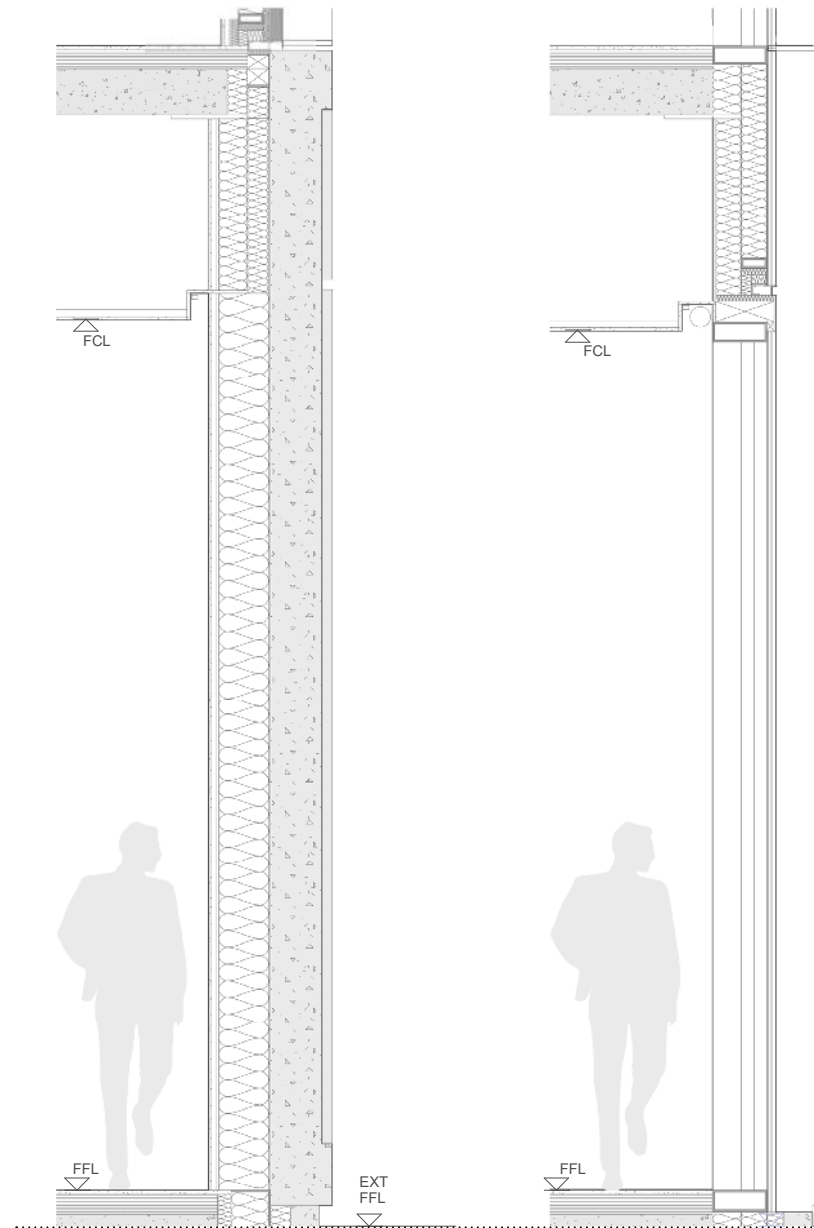


FIGURE 207. Section - Solid Panel

FIGURE 208. Section - Vision Panel

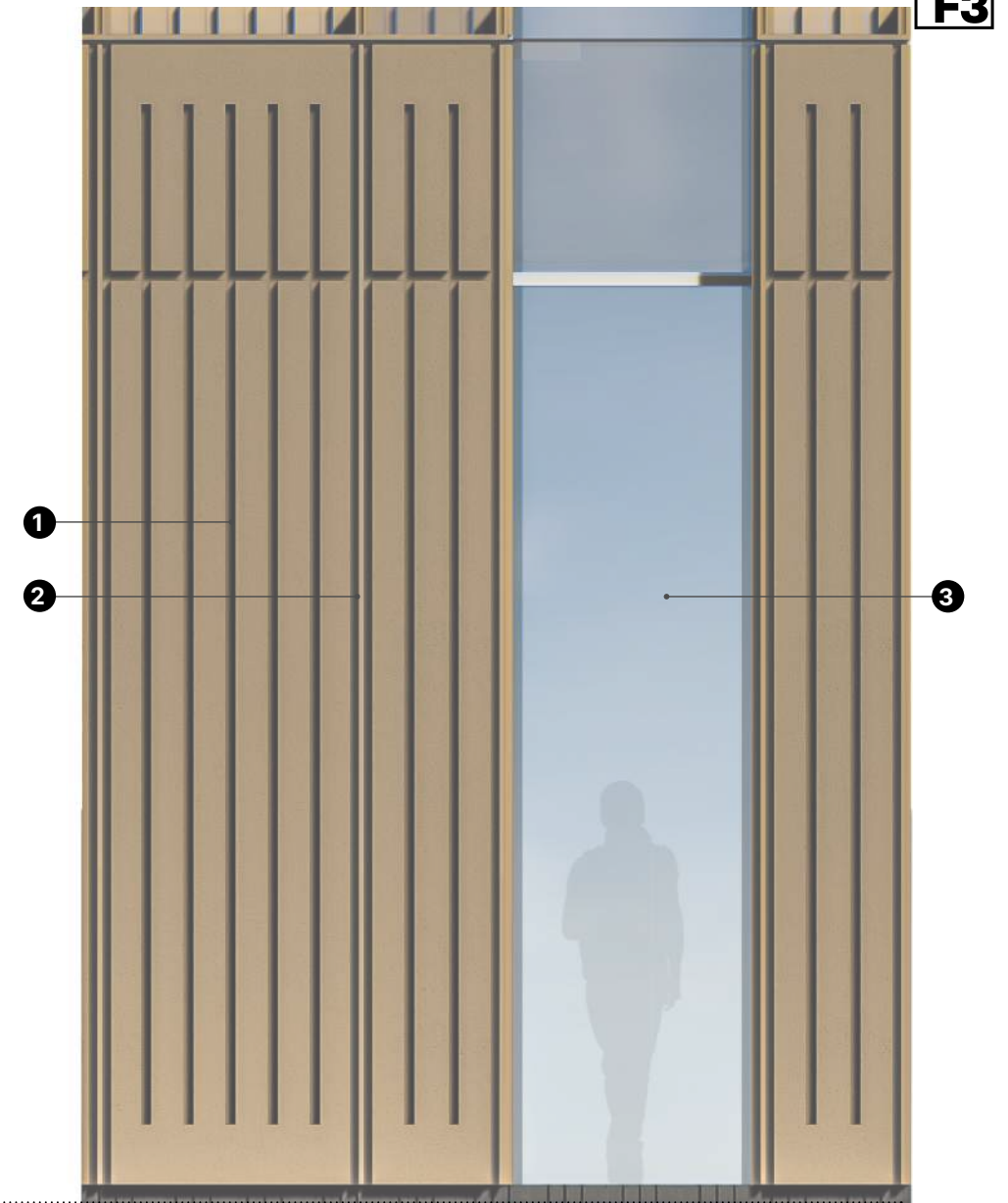


FIGURE 209. Elevation



FIGURE 210. Axonometric View

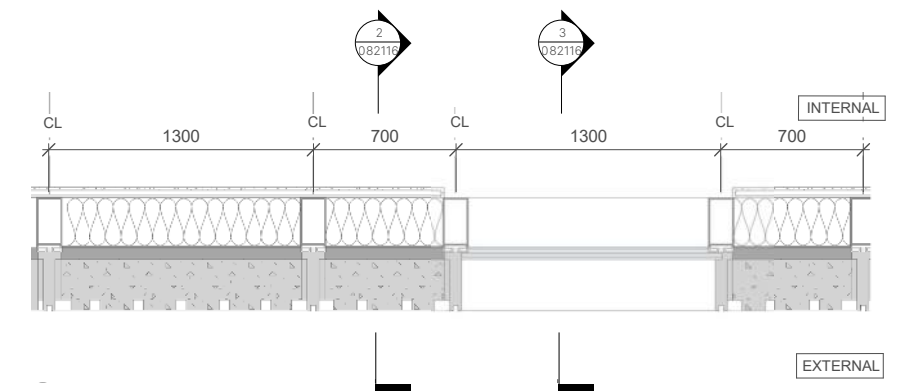


FIGURE 211. Plan