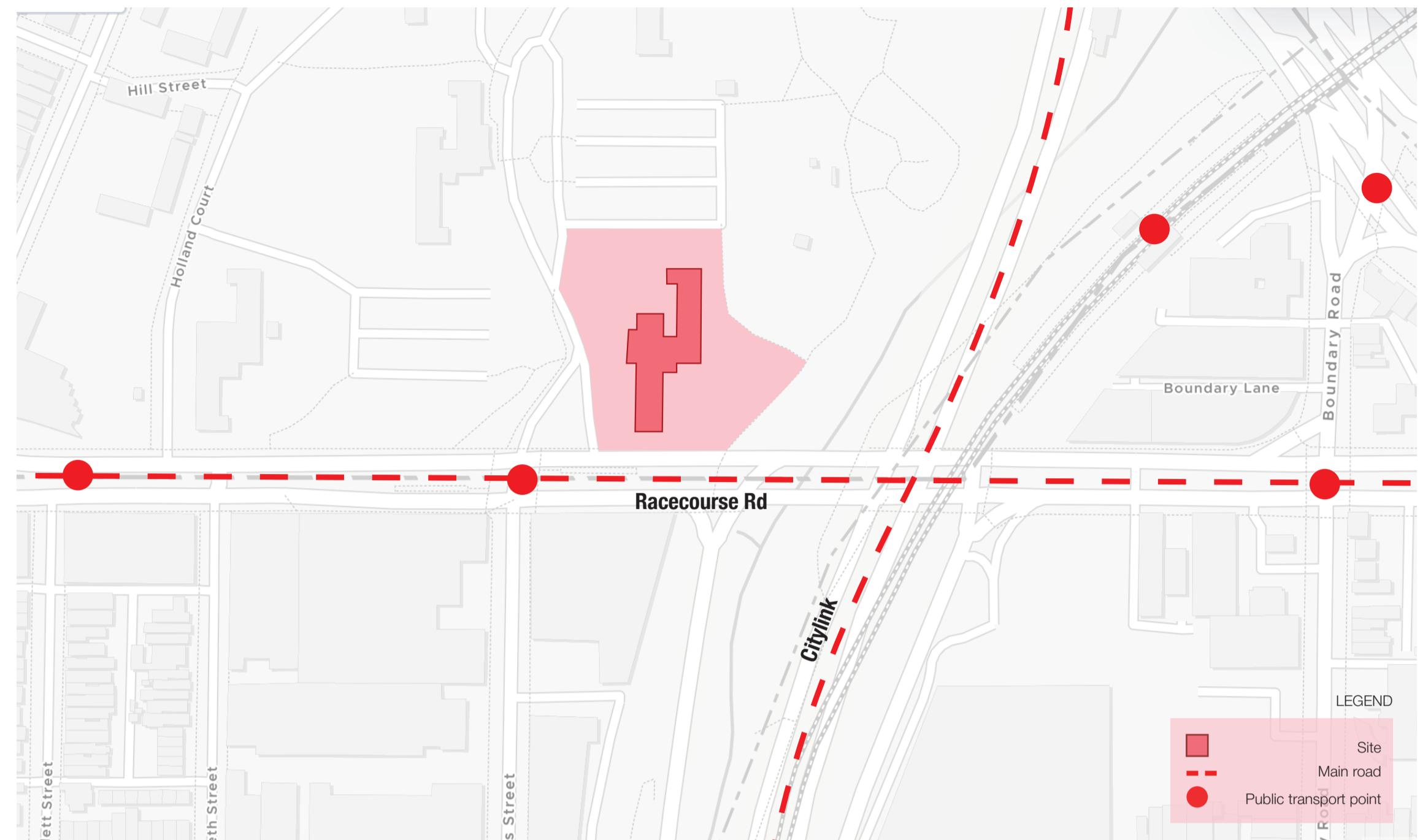
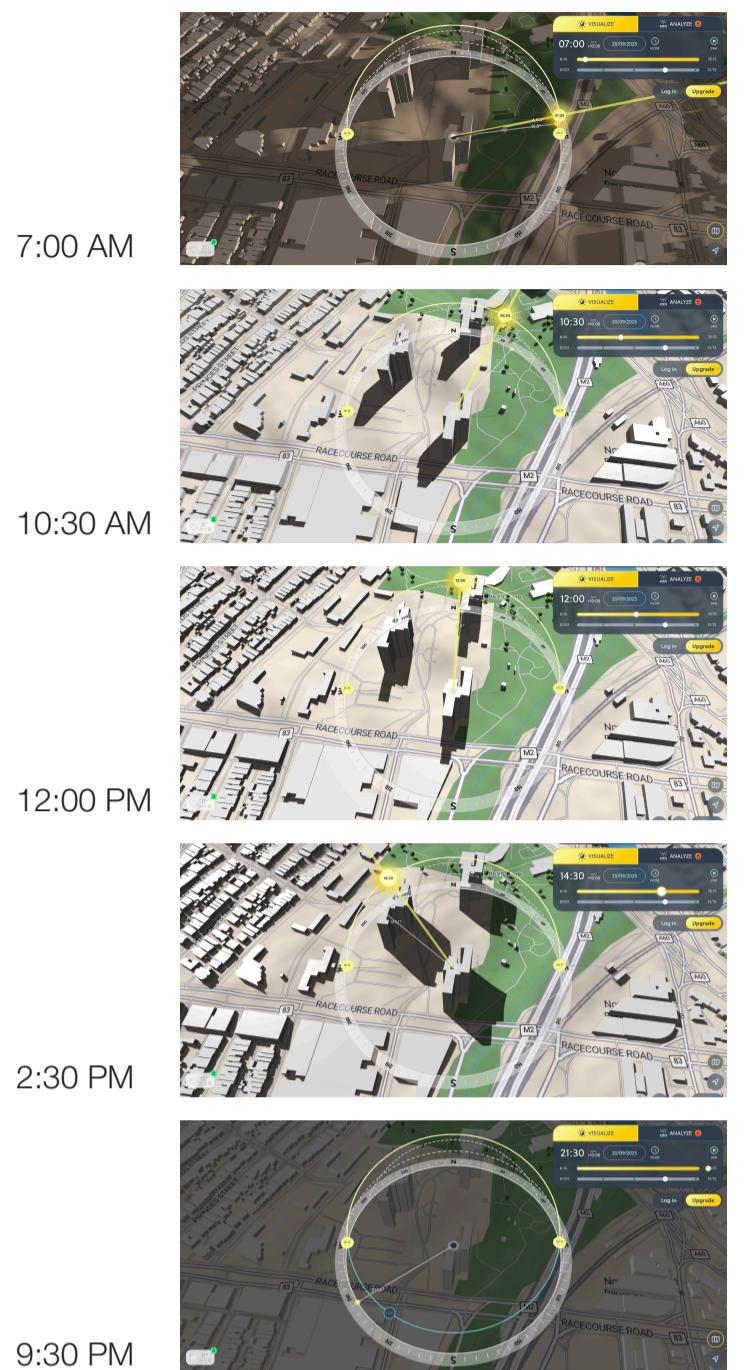


# PROJECT OVERVIEW

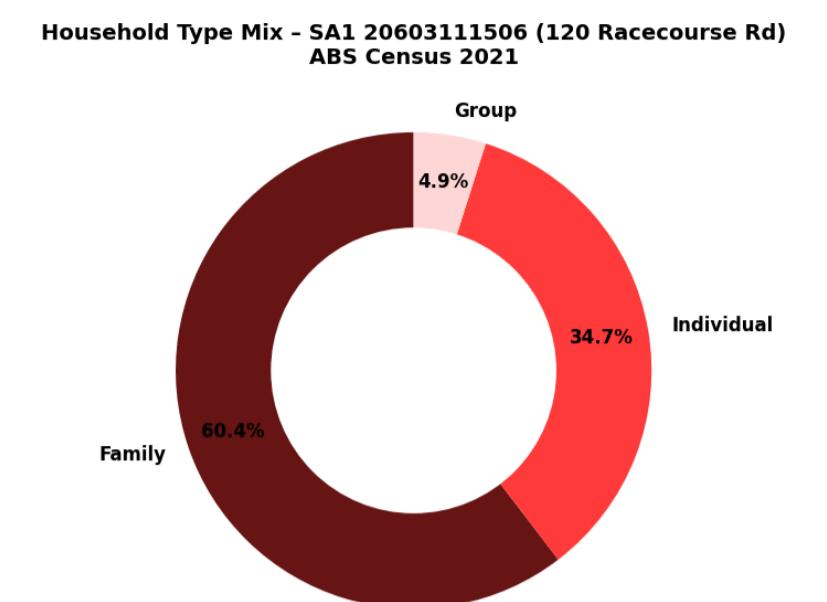
## SITE



## SUN ANALYSIS



## DEMOGRAPHIC



Household structures in the area are dominated by families. Incomes at both the personal and family level are notably lower than the Victorian average. Together, this points to a community with mixed household types but clear signs of economic disadvantage.

## PRECEDENTS



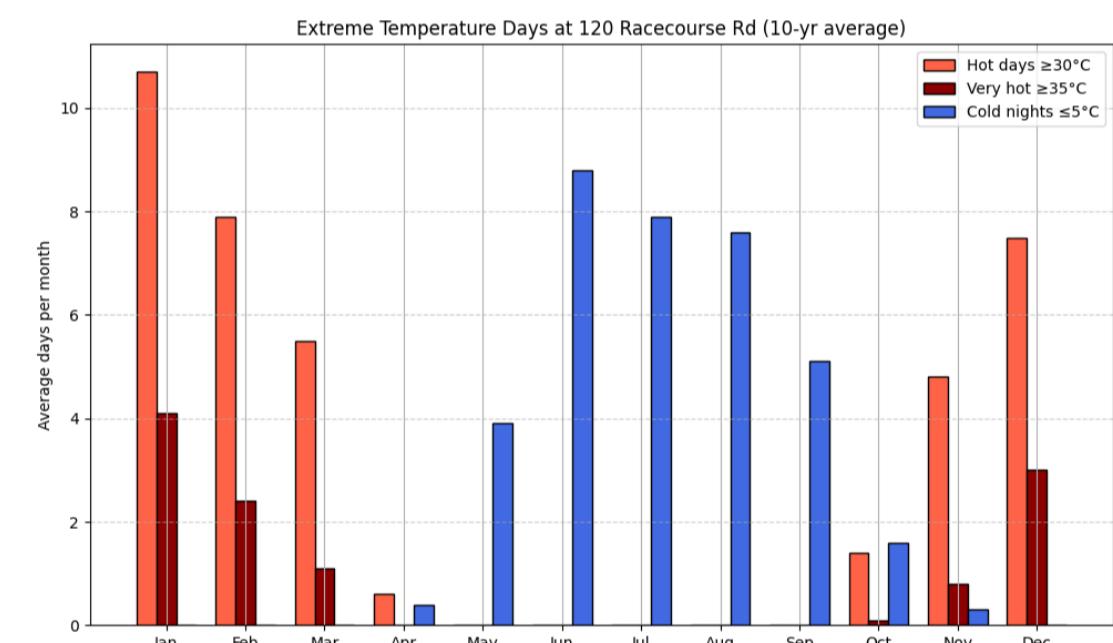
ParkLife, by Austin Maynard Architects, completed in 2022, located in Brunswick, Melbourne, Australia.

Singapore Green Plan 2030, Government of Singapore, announced in 2021, applicable to Singapore.



Library at the Dock, by Clare Design with Hayball, completed in 2014, located at Victoria Harbour in Melbourne Docklands, Australia.

## SITE CONTEXT / CURRENT ISSUES



## Extreme Temperature Days (Climate Analysis)

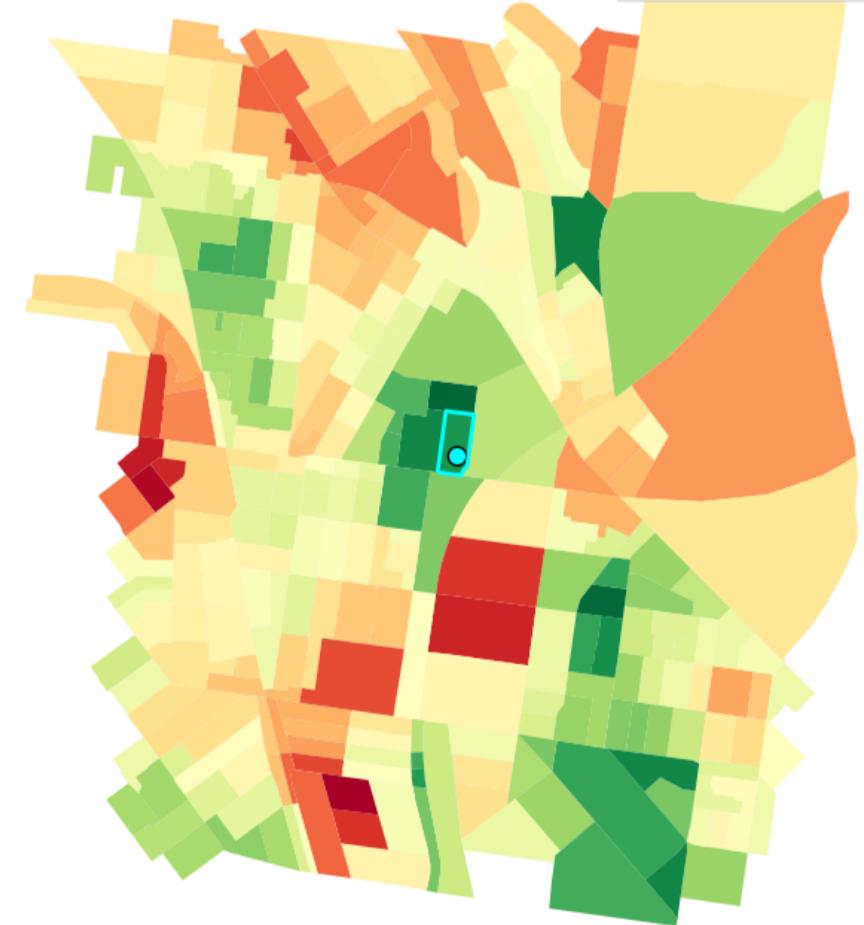
Using daily weather data (last 10 years), we assessed local temperature extremes:

- Hot days ≥30 °C: >10 days/month in January and December.
- Very hot days ≥35 °C: 3–4 days in peak summer months.
- Cold nights ≤5 °C: 7–9 days/month through winter (June–August).

This dual pattern shows residents face both summer overheating and winter underheating, leading to high energy costs, health stress, and reliance on inefficient appliances.

## Urban Heat Island (2018) — 120 Racecourse Rd, Flemington

Site mesh block (cyan) vs 120 Racecourse Rd (blue dot).

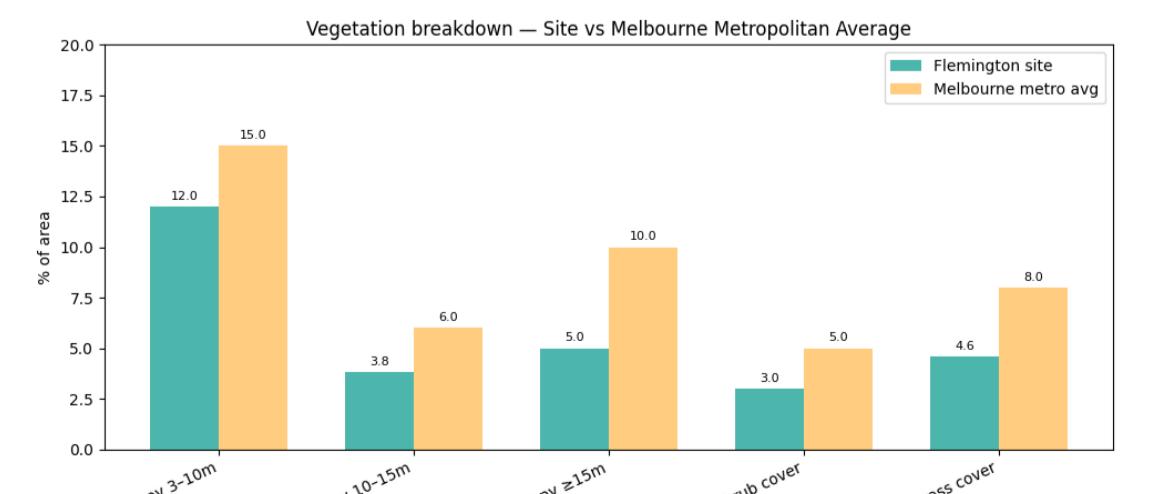


## Urban Heat Island (UHI) Map

Overlaying the site on Melbourne's UHI dataset (2018) shows the tower sits in a clear heat hotspot — around 9–10 °C hotter than rural baseline.

- Surrounding parks appear cooler (greens), while the tower's block and neighbouring hard-surface areas are shown in yellow to red tones (9–11 °C hotter).
- This confirms that the site's lack of canopy cover contributes to overheating at the precinct scale.

The UHI map visually captures how the urban environment intensifies outdoor heat stress, which is then compounded indoors by the tower's uninsulated concrete envelope.



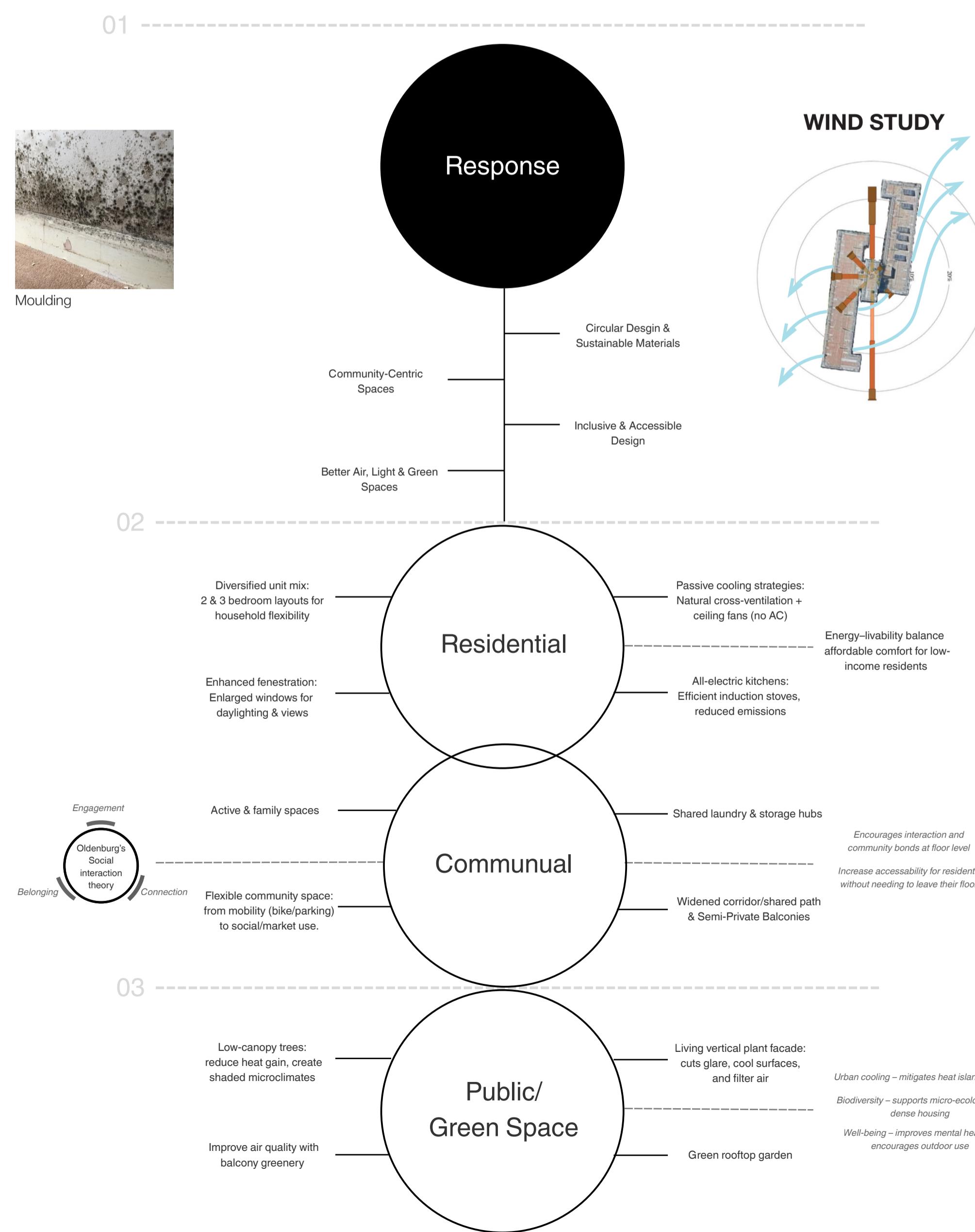
## Vegetation Comparison (Site vs Melbourne Metro)

Our analysis shows the Flemington tower's mesh block has 28.5% vegetation cover, well below the ~44% Melbourne metropolitan average.

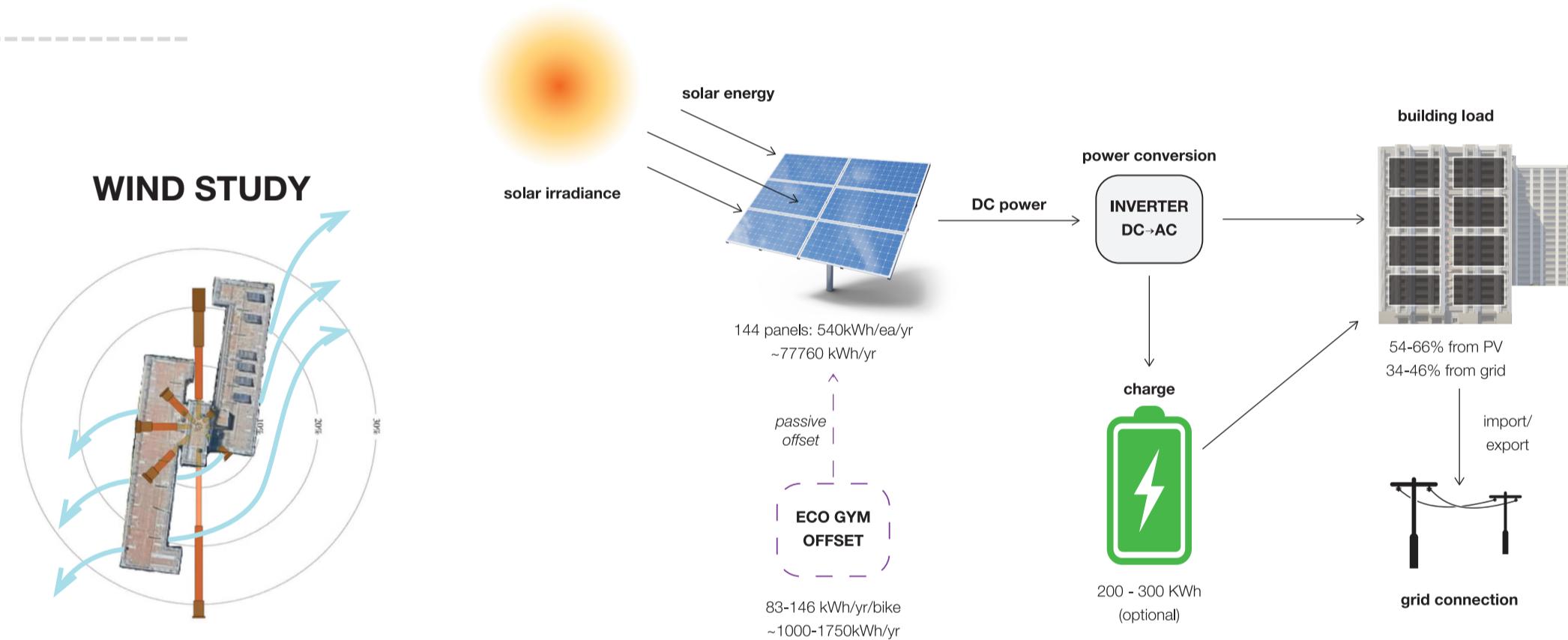
- Critically, tall canopy cover (~15m) is only ~5%, half the city benchmark (~10%).
- Shrubs and grass cover are also under-represented.

This highlights a shade deficit: residents are surrounded by low greenery but lack the tall trees that provide meaningful cooling and protection. The shortfall in vegetation directly amplifies Urban Heat Island intensity.

## PROJECT APPROACH



## PV SYSTEM



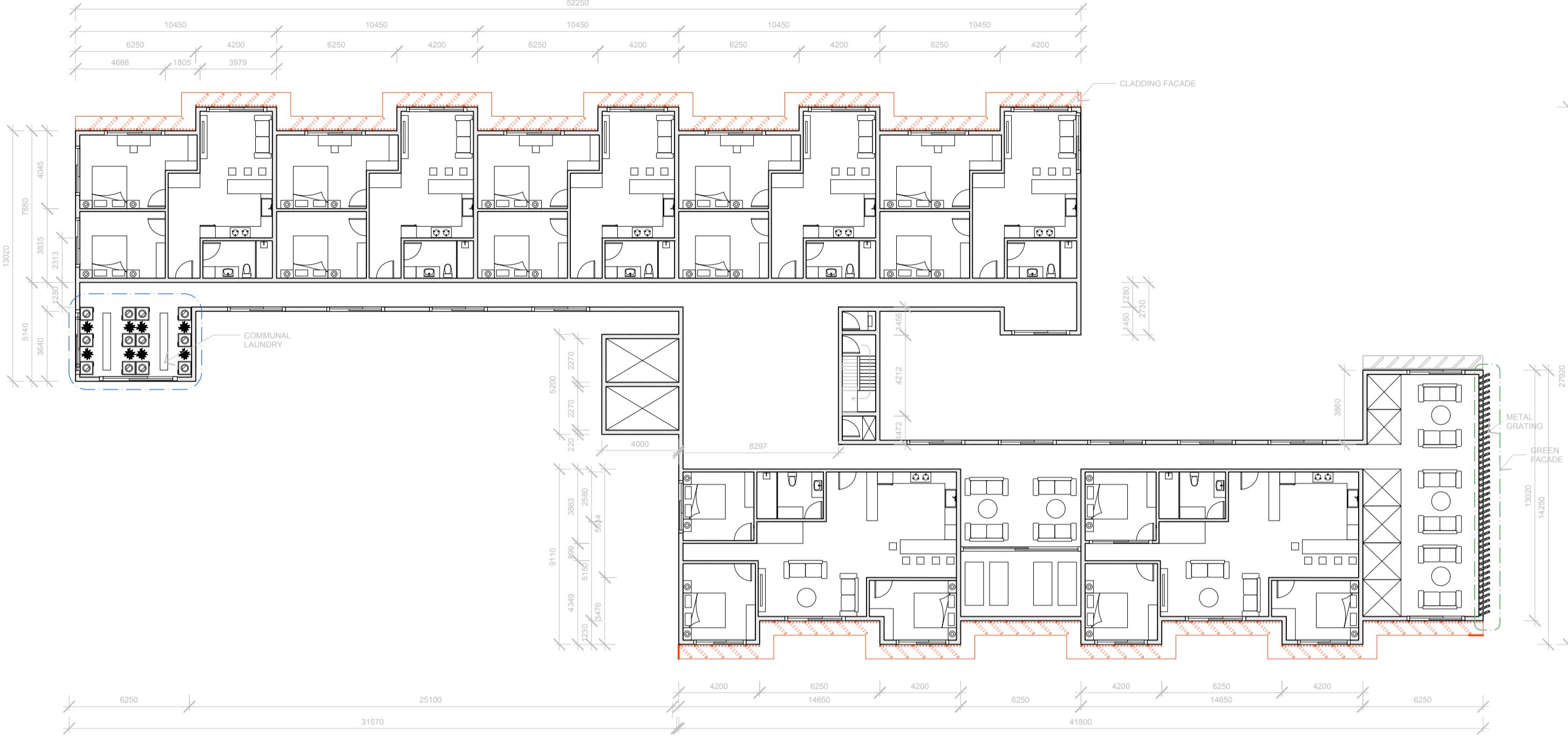
For more PV system and energy information specific to our project, please scan the QR code



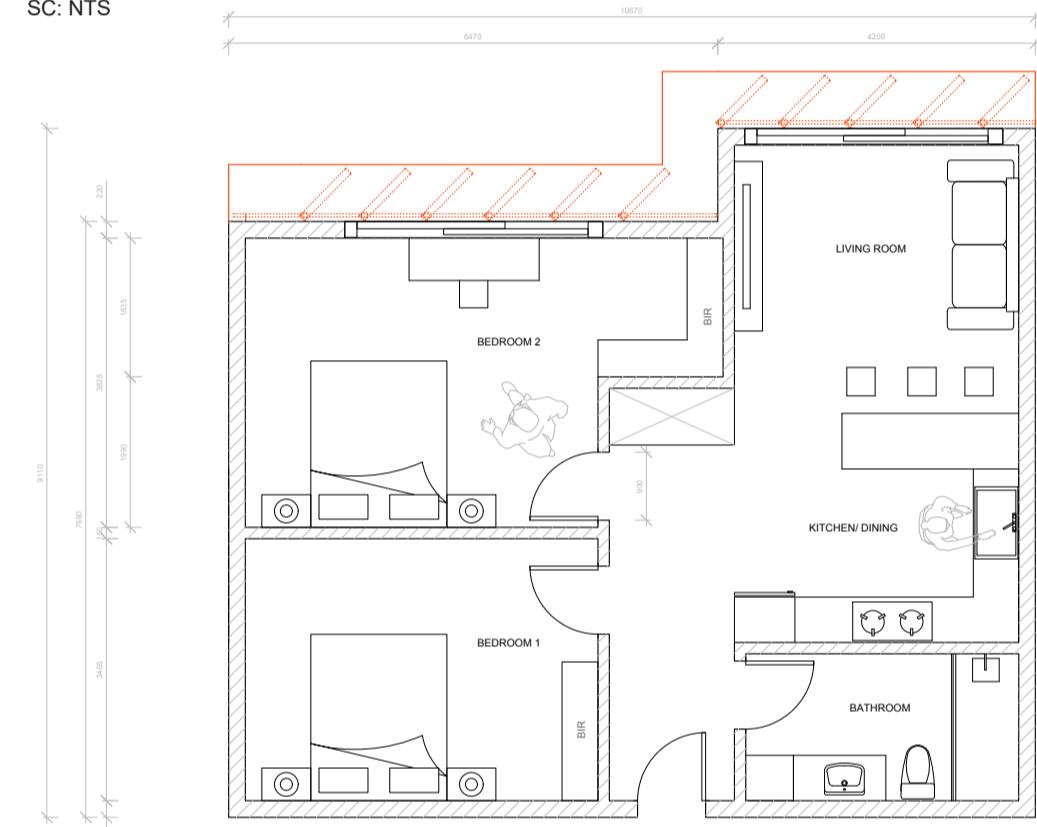
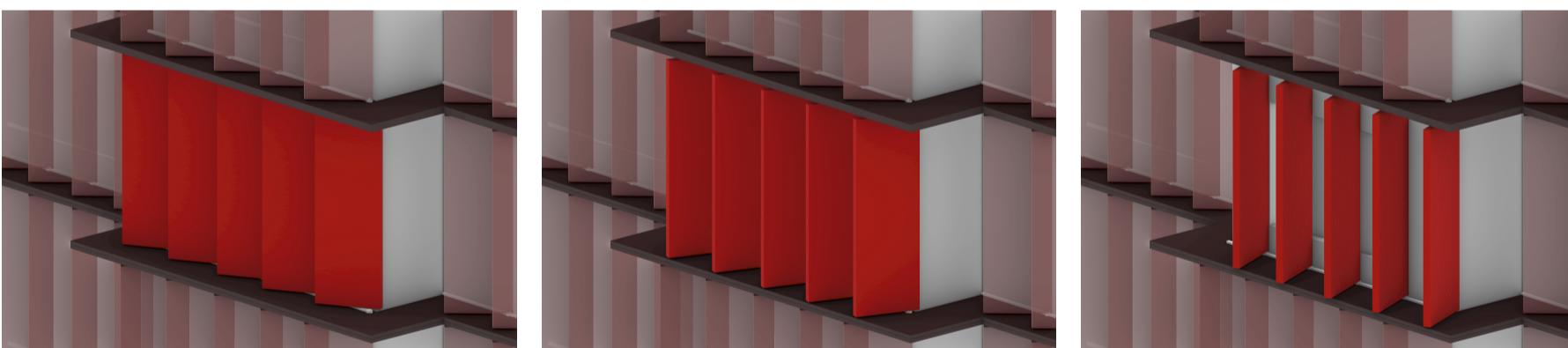
## AI VISUALISATION RENDER - MIDJOURNEY



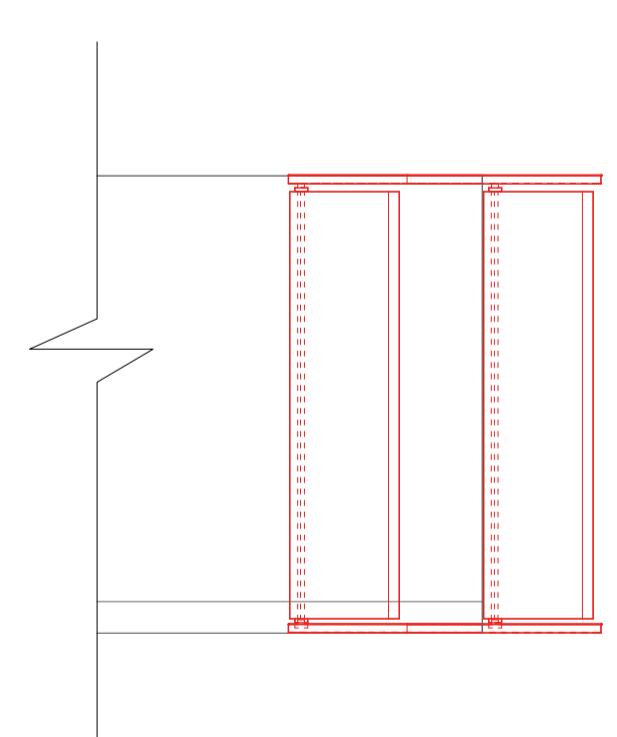
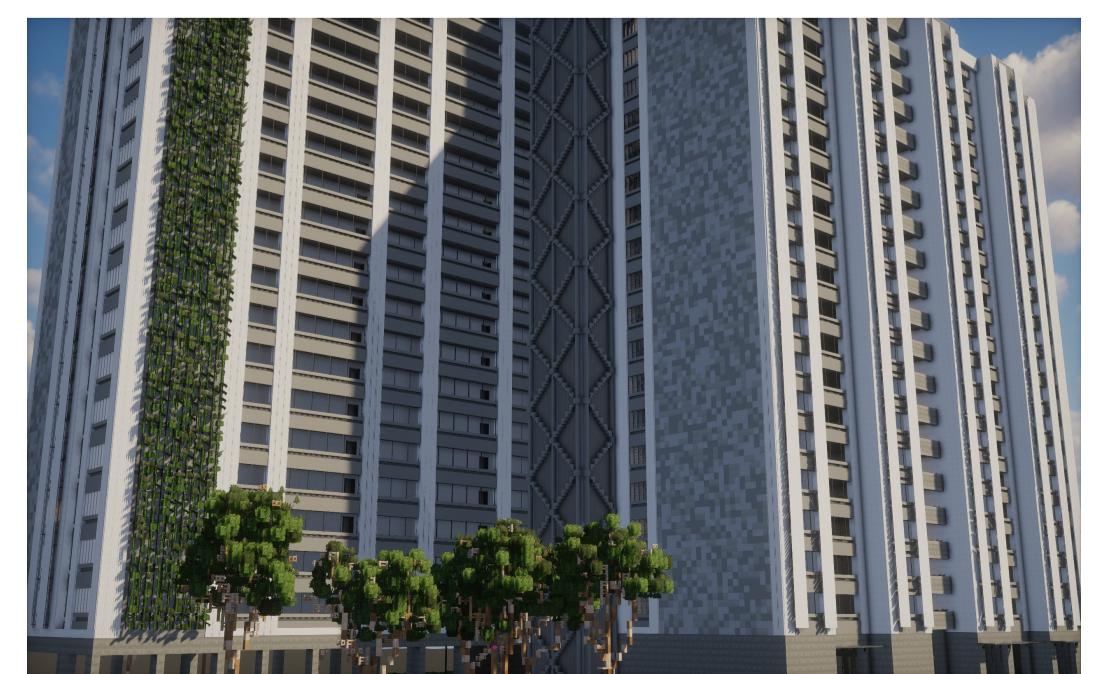
## RESIDENTIAL SECTION (19 LEVELS)



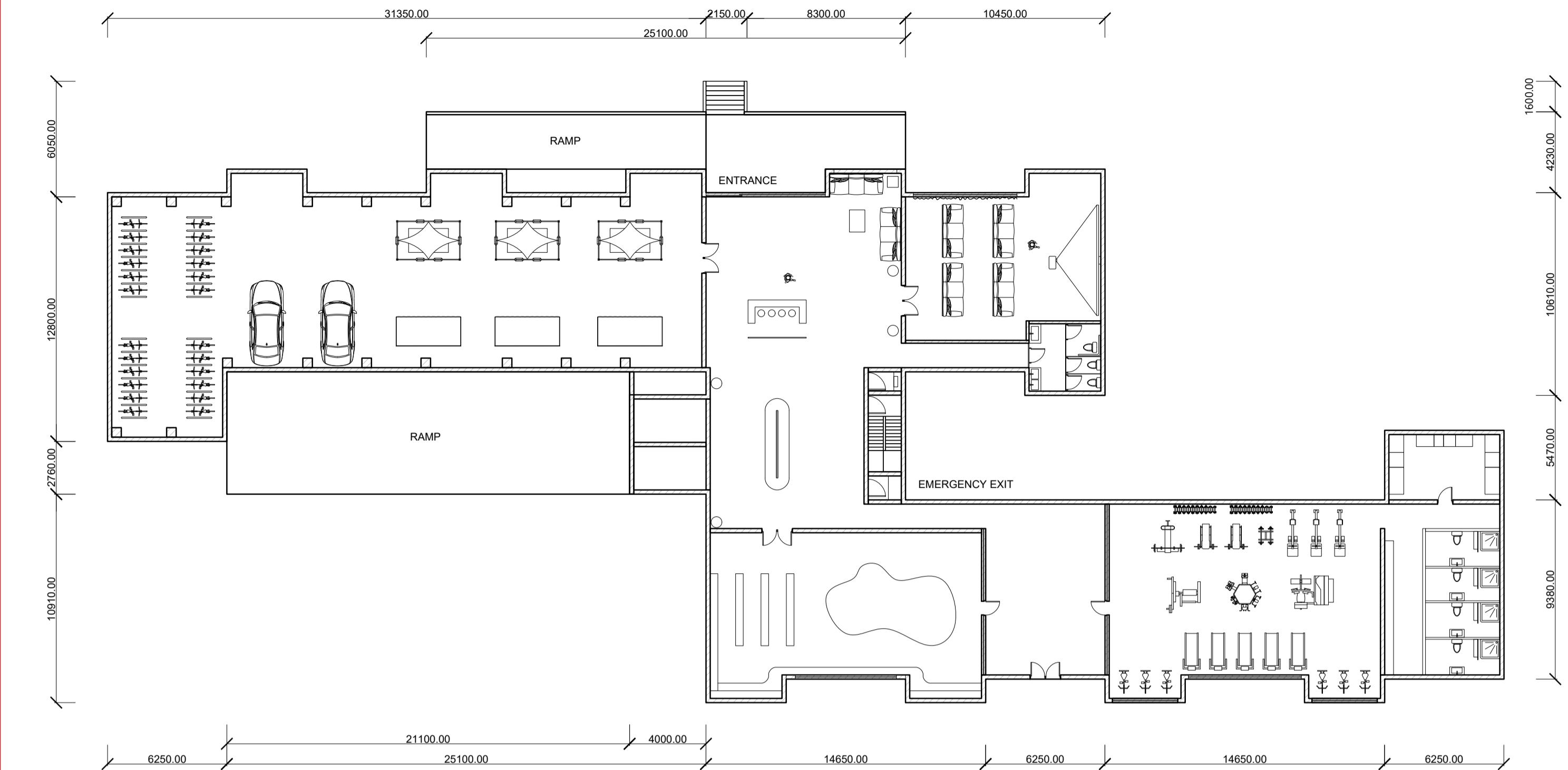
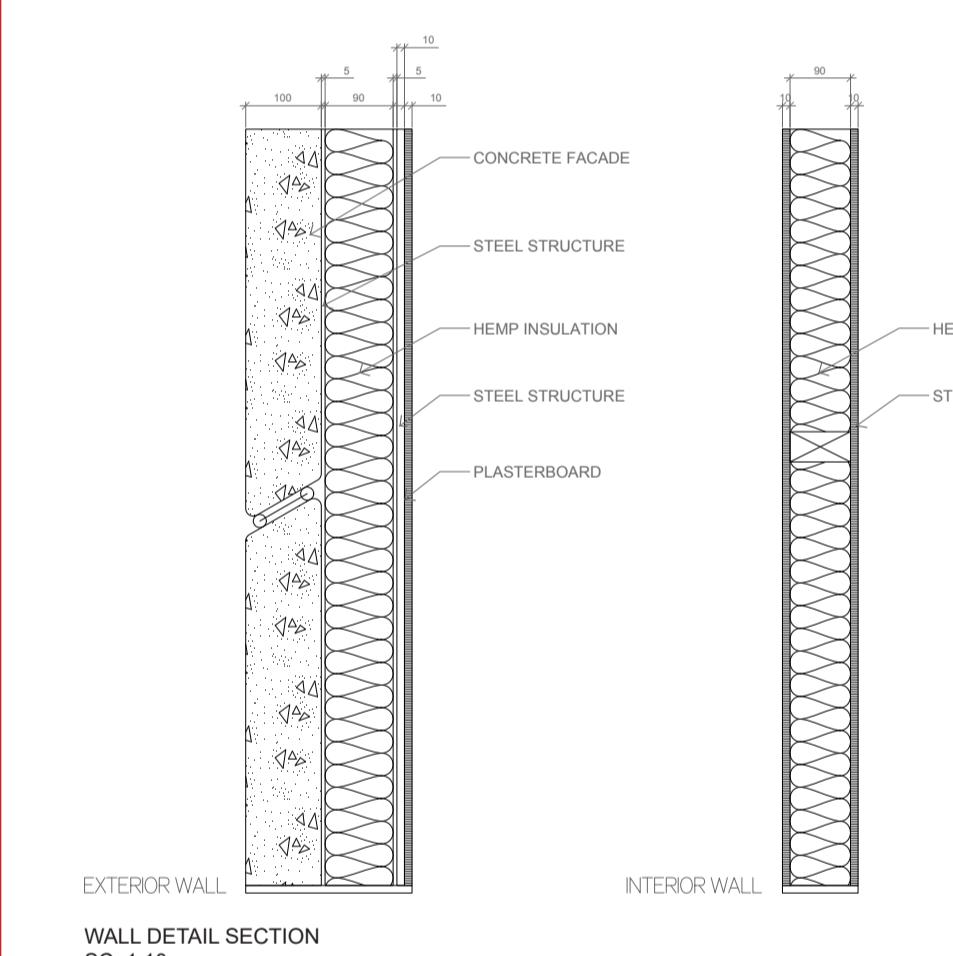
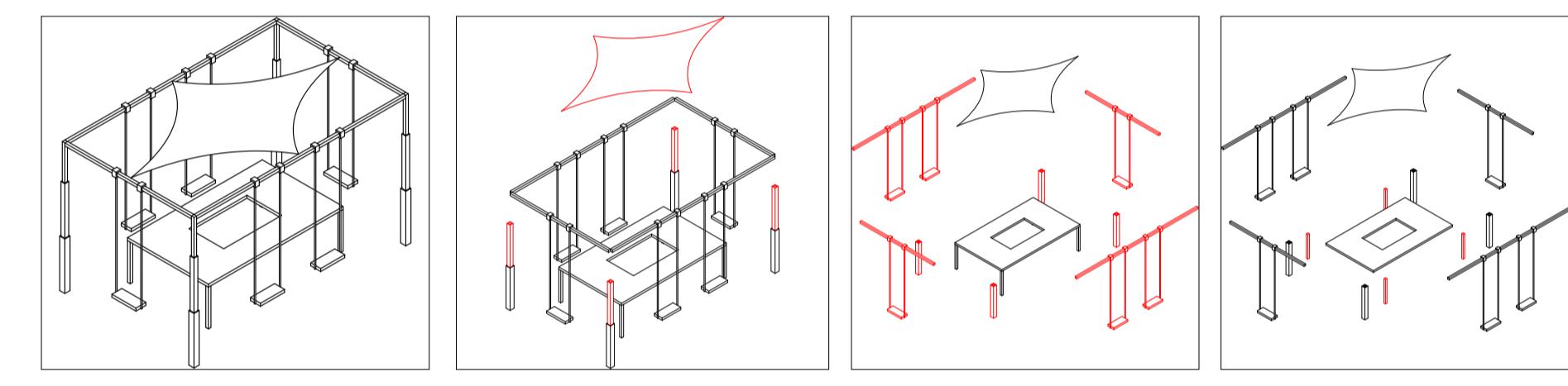
ONE STANDARD FLOOR LEVEL PLAN

2 BEDROOMS APARTMENT FLOOR PLAN  
SC: 1:100

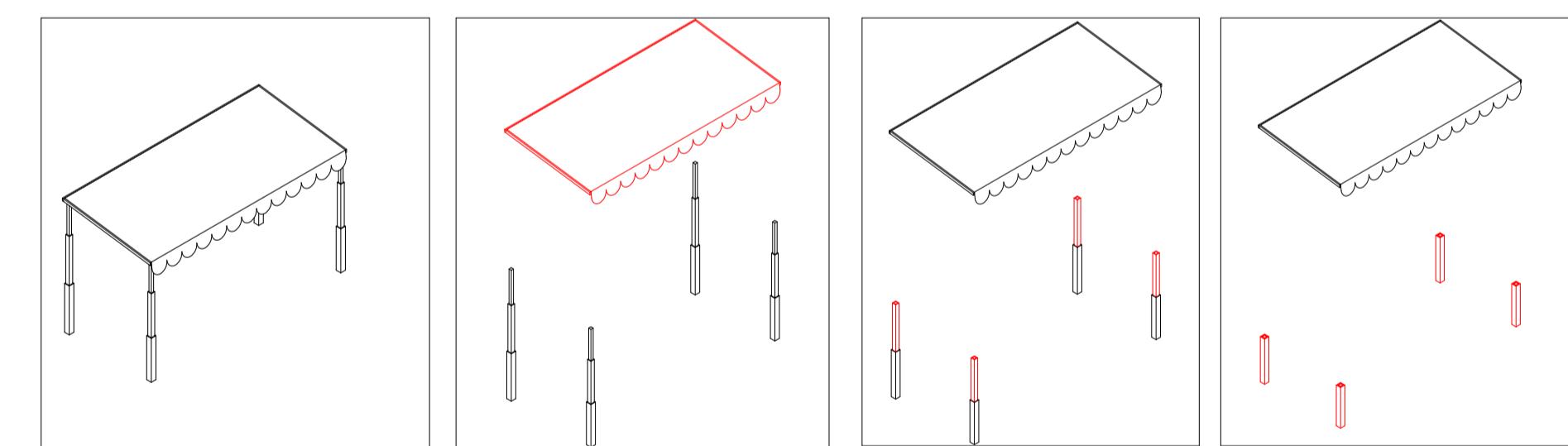
PROCEDURAL DIAGRAM OF ROTATING CLADDING FACADE

CLADDING FACADE SYSTEM  
(WEST AND EAST SIDE)

## GROUND FLOOR &amp; COMMUNAL SECTION

GROUND FLOOR PLAN  
SC: NTSWALL DETAIL SECTION  
SC: 1:10

PROCEDURAL DIAGRAM OF MODULAR GATHERING AREA



PROCEDURAL DIAGRAM OF MODULAR MARKET STAND

For the pitch intro video please scan the QR code



## FFE APPLIANCE &amp; MATERIAL

For more FFE schedule please scan the QR code



Photo	Space	Item (FFE)	Brand / Model	Specification / Size	Dimensions (mm, H×W×D)	Efficiency / Annual Energy (kWh)	Qty (2BR)	Qty (3BR)	Est. Cost (AUD)	Notes
	Kitchen	Fridge/Freezer	Haier	433 L (5-8 star)	1725 × 700 × 676	274–336	1	1 (larger ~500 L e.g. LG 420 L BM)	\$870–1,000	Affordable, highly efficient. LG/Westinghouse as alternates.
	Kitchen	Oven + Induction Cooktop	Westinghouse	600 mm electric set	Oven: 600×600×600, Cooktop: 60×600×520	280–380	1	1	\$1,400–1,600	Safe, efficient induction. Bulk discounts possible via Electrolux/Westinghouse.