

By email
8 December 2022

Luis Salgado
Architectus

Our ref CD

Dear Luis

601 Pacific Highway

Floor Heights

The purpose of this letter is to provide information in relation to the floor-by-floor heights of the proposed commercial tower at 601 Pacific Highway.

Roof top plantroom

This is effectively two plantroom levels as we have tanks and ventilation plant at low level with cooling towers and heat pumps above. The 8m height is already at the minimum level required to fit the two levels of services equipment. There is a 3m minimum requirement for the ventilation plant to enable ductwork across the floorplate at high level to risers which leaves a 2.1m clear vertical height for access and the air handling unit space beneath. There is also a minimum 5m clear height required for cooling towers above (incl deck/structure) which is already restricting us to slimline units (we usually ask for 6m+ clear).

Mid-level plantroom

The key equipment item driving the 5.4m clear minimum height requirement is the upper chamber substation. Ausgrid's standard (NS113) mandates 4.2m clear height (3.2m for the substation and 1m for the cabling/trench) and there is a requirement to hoist the transformers to ground level for replacement which at this height requires a lifting beam / drum depth of circa 1.2m. Additionally at this plantroom level we are double stacking equipment for the other half of the floor plate with ventilation plant on top of chilled water plant and switch rooms. Allowing for structure above, 6m is as low as you could go and ideally, we need a 6m clear height.

Low level plantroom

This level is for ventilation plant and there needs to be some flexibility to accommodate kitchen exhaust treatment systems which could require 5m clear to include maintenance and duct crossovers, hence a 6m floor to floor is required.

Typical Office Floor - tower

In our experience floor to floor heights for typical A and Premium grade office floors is 3.75m to 3.85m to minimum a 2.7m ceiling and accommodate 150mm raised floor depending on the core location, floor plate size and mechanical system selection. We would not recommend a floor to floor lower than 3.75m at this stage otherwise we would be limiting the mechanical system selection and restricting the flexibility for a commercial office floor.

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Typical Office Floor - podium

The podium floors have less access to daylight and are larger in size than the tower and in our experience to gain adequate daylight into the floor plate the floor plate requires some more floor-to-floor height than the upper floors. It is common for floor-to-floor height of 4m at podium levels.

Yours sincerely



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cc Ryan Crabbe