The Fire Safety & Building Code of Australia (2019) assessment report (dated 7th December 2022) for SP47991 at 41 Rocklands Road, Wollstonecraft, was prepared in response to a Fire Order from North Sydney Council in August 2022. The report is based on on-site audit inspections conducted by Building Code Professionals (BCP), Grant McGrath and is stated as being in compliance with the Building Code of Australia (2019), which includes NSW variations.

On page 4 of the report, reference is made to section C1.2 of BCA (2019), which pertains to RIS (Rise in Storeys) and the building's Effective Height. These parameters are crucial in assessing whether the building meets the BCA performance requirements. The BCP report states that the building has a RIS of eleven (11) and an effective height of greater than 25.0 metres (i.e., 27.7 metres).

However, I believe that there are errors in the calculation of the RIS and Effective Height used in this report.

Calculation of RIS (From BCA (2019))

C1.2 Calculation of rise in storeys

- a) The <u>rise in storeys</u> is the sum of the greatest number of <u>storeys</u> at any part of the <u>external walls</u> of the building and any <u>storeys</u> within the roof space
 - i. above the finished ground next to that part; or
 - ii. if part of the external wall is on the boundary of the allotment, above the natural ground level at the relevant part of the boundary.
- b) A storey is not counted if
 - i. it is situated at the top of the building and contains only heating, ventilating or lift equipment, water tanks, or similar service units or equipment; or
 - ii. it is situated partly below the finished ground and the underside of the ceiling is not more than 1 m above the average finished level of the ground at the external wall, or if the external wall is more than 12 m long, the average for the 12 m part where the ground is lowest.

Guide

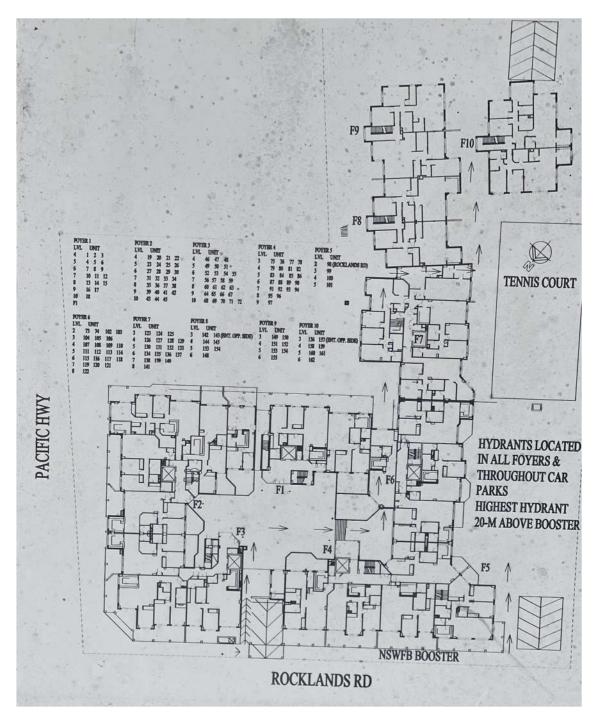
Under C1.2(a), the rise in storeys is the sum of the greatest number of storeys at any part of the external walls of a building above ground level and any storeys within the roof space. The reason for the inclusion of any storey within the roof space is that the storey may not have any external walls such as occur with a hip roof.

C1.2(a)(i) and (ii) distinguish between the situation where the part of the external walls is within the allotment (in which case it is calculated above finished ground level—C1.2(a)(i)), or on the allotment boundary (in which case it is calculated above natural ground level at that point—C1.2(a)(i)).

The rise in storeys is the criteria used to determine the type of construction. This is because the rise in storeys has an impact on:

- the risk of exposure to radiant heat from a fire in another building;
- the risk of emitting radiant heat to another building; and
- the risk to occupants who may need to travel down a stairway to safely evacuate the building.

As can be seen from the NSW Fire & Rescue map in Rocklands Road (below) the highest rise in storeys is in Foyers 1, 2 and 3. Under C1.2 (a). All run from level 4 (ground) to level 11 giving a RIS of eight (8), not eleven (11). The effective height is calculated from the RL of 4A to the RL of 11A and is 19 metre. The RL measurements were taken from Meriton plans lodged at North Sydney Council in 1994, the same data source as used by the BCP consultant.



Recommendation

The BCA (2019) has different compliance requirements for class 2 residential buildings depending on whether the effective height is greater or less than 25 metre. As a consequence, we recommend:

that Law firm chosen by the Strata Committee of SP47991 write to North Sydney Council seeking a stop to the current Fire Order, until a review and revision of the consultant's report can be resubmitted to North Sydney Council and a revised Fire Order issued.