# PRP

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#### Elmsbrook Bicester - Phases 3 & 4 | Non-Technical Summary

This non-technical summary aims to respond to the queries raised by the planning officer on 13<sup>th</sup> March 2018 with regards to Planning Condition 10 (risk of summer overheating), following the submission of the overheating report produced in December 2017.

The questions raised are itemised as follows:

- 1. I would question whether residents would be content to leave ground floor windows open during night time hours and I think it is not appropriate to rely on this?
- 2. My understanding is that on previous phases it was specified that windows would not be open on the ground floor during the night?
- 3. Would the opening of windows on upper floors be sufficient to achieve the cooling required?
- 4. Are the dwellings provided with blinds from the start?
- 5. My understanding is that residents shouldn't have to adapt their homes for 20 years from first occupation, so I am interested to know whether this is the case?

## 1. I would question whether residents would be content to leave ground floor windows open during night time hours and I think it is not appropriate to rely on this?

As outlined in the overheating report produced in December 2017 the only house type requiring ground floor windows to be opened at night was the 5B10P type (plots 30, 195, 226 and 227). This would have been on a controlled aperture restrictor and for certain time periods only, however, we understand the concerns residents may have with leaving ground floor windows open so have further looked into ways to avoid this requirement.

All four of these plots have been designed with a Ventive passive ventilation system which wasn't taken into account when the overheating report was initially produced in December 2017. Data for this system has now been included in a recent review of the overheating analysis with the aim of removing the requirement to open ground floor windows at night.

To summarise this review it was found that the Ventive passive ventilation system combined with the strategy of opening bedroom windows during night time hours and installing blinds to the high risk bedrooms (beds 2, 4 and 5) removed any overheating risk in the current and 2030 scenarios. For the 2050 scenario an additional measure of installing blinds to all habitable rooms, including the downstairs rooms, would need to be implemented. These four plots, as with all other plots on this site, have been designed so that blinds can be fitted if or when needed.

## 2. My understanding is that on previous phases it was specified that windows would not be open on the ground floor during the night?

It is correct that on the previous phases the overheating strategy did not require ground floor windows to be open during night time hours. On phases 3 & 4 there was only one house type (5B10P - plots 30, 195, 226 and 227), where the December 2017 overheating report suggested opening ground floor windows during night time hours but, as confirmed in the response to question 1 above, this has now been overcome with a combination of the Ventive passive ventilation system, opening bedroom windows during night time hours or installing blinds to beds 2, 4 and 5 (current and 2030 scenarios) or installing blinds to all habitable rooms (2050 scenario).

## 3. Would the opening of windows on upper floors be sufficient to achieve the cooling required?

With the inclusion of data from the Ventive passive ventilation system the risk of overheating in all three scenarios for the 5B10P type has now been reduced. In addition to the Ventive system the current and 2030 scenarios will require upstairs windows to be open at night and blinds installed to the high risk bedrooms (beds 2, 4 and 5). The 2050 scenario will, in addition to the above, also require blinds adding to all other habitable rooms.

#### 4. Are the dwellings provided with blinds from the start?

The only plots that require blinds are plots 30, 195, 226 and 227 (5B10P type). To meet the requirements of the current and 2030 scenarios blinds will need to be installed to bedrooms 2, 4 and 5. These will be installed prior to the properties being sold. To meet the requirements of the 2050 scenario additional blinds would need to be installed to all other habitable rooms in this plot type but this would be done by the occupier at that time.

## 5. Residents shouldn't have to adapt their homes for 20 years from first occupation, so I am interested to know whether this is the case?

Residents will not be expected to adapt their homes to reduce any overheating risk within 20 years of first occupation. The only time that residents would have to adapt their properties is in the 2050 scenario where additional blinds will be required to all habitable rooms in the 5B10P plot type, however, out of the 228 plots on phases 3 and 4 only four plots fall into this category.

I hope this non-technical summary provides adequate clarification to the questions raised in relation to planning condition 10. If you have any further questions please do not hesitate to contact us.

Kind regards,

Carolina Caneva Associate - Development Consultancy