**From:** Lewis Knight (Bioregional)   
**Sent:** 29 April 2016 09:05  
**To:** Leanne Turner  
**Cc:** Caroline Ford; Nicole Lazarus; Douglas Drewniak  
**Subject:** NW Bicester Exemplar, Phase 2: Condition 10: Overheating

Hi Leanne,

Please find our comments on condition 10: Overheating (phase 2: Exemplar).

1.    Under section 2.5 Ventilation, what is meant by ‘95% of the window open while night time’? Is it realistic to expect residents to have to open their windows *almost* as wide as they can go to achieve night-time cooling? Will residents perceive this as a security risk?

2.    Under section 2.4 Internal Gains, there are differences between the figures and units used in Phase 1 overheating analysis and for phase 2. These are outlined below. What is the reasoning for this and what implications does this have on the modelling.

o    Dining/Kitchen: Occupancy gains (W/person) Sensible

o    Dining/Kitchen: Occupancy gains (W/person) Latent

o    Bathroom: Occupancy gains (W/person) Sensible

o    Bathroom: Occupancy gains (W/person) Latent

o    Bathroom: Equipment gains (W/m3) Sensible

o     Bathroom: Equipment gains (W/m3) Latent

o    Bedroom: Occupancy gains (W/person) Sensible

o    Bedroom: Occupancy gains (W/person) Latent

o    Bedroom: Equipment gains (W/m3) Sensible

o     Bedroom: Equipment gains (W/m3) Latent

3.    Has the introduction of the spandrel panel and the overhang been modelled within the phase 2 daylighting analysis (condition 8)

4.    The analysis provides, and models two design alterations for Unit 281. The introduction of a spandrel and an Overhang. Which one is being proposed?

5.    In some situations the risk levels are lower in the 2030 projection than compared to the 2005 projection. Why is this? This seems to be the opposite of what we would expect.

6.    Although the 2040 projection has been removed from this updated analysis we would still seek clarification as to why an overheating risk was present on unit 281 even with the design alterations. Similarly to point 5, we would like to understand why this risk (in 2040 projection) is now not present in the 2050 projection. We would expect the risk levels to increase over time.

Many Thanks

Lewis

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