

**8078 Watmore Lane**

**Taylor Wimpey**

Part O Overheating assessment summary

AES Sustainability Consultants Ltd

Rev 00

Date 30/09/2025



## Part 1 – Building Details and Declarations

| 1.1 Building and site details                      |                                                 |
|----------------------------------------------------|-------------------------------------------------|
| Residential building name/number                   | All applicable units covered by site assessment |
| Street                                             | n/a                                             |
| Town                                               | Winnersh                                        |
| County                                             | Wokingham                                       |
| Postcode                                           | RG41                                            |
| Proposed building use/type of building             | Residential                                     |
| Are there any security, noise or pollution Issues? | Yes - security & noise issues                   |
| 1.2 Designers details                              |                                                 |
| Designer's name                                    | Lynsey Thomspson                                |
| Company                                            | AES Sustainability Consultants                  |
| Address line 1                                     | 4b Tiverton Way                                 |
| Address line 2                                     | Tiverton                                        |
| Postcode                                           | EX16 6TG                                        |
| Telephone number                                   | 01884 242050                                    |
| Email address                                      | info@aessc.co.uk                                |

| Revision | Author           | Date       | Comment     |
|----------|------------------|------------|-------------|
| Rev 00   | Lynsey Thomspson | 30/09/2025 | First issue |
| Rev 01   |                  |            |             |
| Rev 02   |                  |            |             |
| Rev 03   |                  |            |             |

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## Overheating assessment notes



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| <b>Mechanical ventilation</b>                                                                                                                                                                                                                                                                                                                                               |
| "Enhanced mechanical ventilation" refers to ventilation specifically to mitigate overheating risk and is in addition to part F minimum (trickle) ventilation rates.                                                                                                                                                                                                         |
| AES have modelled mechanical ventilation as a system which draws air from an external source and provides the ventilation rates noted in the schedule of results.                                                                                                                                                                                                           |
| Mechanical boost mode (included for occasional use with louder fan noise) is not be assumed in the overheating risk analysis, as per the CIBSE TM59 guidance.                                                                                                                                                                                                               |
| This does not refer to a specific fan type or system but is a performance requirement to be met by the system designer/ engineer.                                                                                                                                                                                                                                           |
| <b>g-glazing values</b>                                                                                                                                                                                                                                                                                                                                                     |
| All g-glazing figures noted are for the glass only, using the BS EN-410 methodology.                                                                                                                                                                                                                                                                                        |
| <b>Frame factor</b>                                                                                                                                                                                                                                                                                                                                                         |
| Where g-glazing figures are quoted, this is based on a window frame factor of 30%.                                                                                                                                                                                                                                                                                          |
| <b>Natural ventilation openings</b>                                                                                                                                                                                                                                                                                                                                         |
| "Increase free area" in the context of these results refers to making fixed panes openable to increase natural ventilation. This was not utilised in this assessment.                                                                                                                                                                                                       |
| <b>CIBSE TM59 sample size</b>                                                                                                                                                                                                                                                                                                                                               |
| The Part O dynamic thermal modelling method allows that a sample of homes be assessed instead of testing every single home in a scheme. The final sample of homes is to be approved with the Building Control Body (BCB). It is recommended that this should be agreed early on with the BCB, to avoid late requests for additional modelling and potential design changes. |
| The overheating sample tests a worst case occurrence of a given house type, considering orientation and acoustic, security and air quality constraints. Where results are applicable to multiple plots on the site, this has been noted in the plot schedule.                                                                                                               |
| <b>Cooling systems</b>                                                                                                                                                                                                                                                                                                                                                      |
| No cooling systems modelled.                                                                                                                                                                                                                                                                                                                                                |
| <b>Tempered air systems</b>                                                                                                                                                                                                                                                                                                                                                 |
| No tempered air systems modelled.                                                                                                                                                                                                                                                                                                                                           |
| <b>National house type orientation</b>                                                                                                                                                                                                                                                                                                                                      |
| National house type overheating assessments are carried out for all orientations (North/East/South/West).                                                                                                                                                                                                                                                                   |
| <b>M&amp;E system design</b>                                                                                                                                                                                                                                                                                                                                                |
| AES are not qualified to comment on specific M&E system designs, including plant selection, ductwork & pipework layouts, setting out & controls. The M&E system design should be advised by a suitably qualified engineer or installer.                                                                                                                                     |
| <b>Protection from falling strategy</b>                                                                                                                                                                                                                                                                                                                                     |
| Windows considered in the overheating assessment that may pose a higher risk of falls from height and can be opened wider than 100mm, meet the minimum requirements for protection from falling within table 3.1 of Approved Document O.                                                                                                                                    |
| <b>Accessible windows (Canopies and oriel bay roofs)</b>                                                                                                                                                                                                                                                                                                                    |
| Windows on the ground floor are easily accessible.                                                                                                                                                                                                                                                                                                                          |
| <b>Weather file</b>                                                                                                                                                                                                                                                                                                                                                         |
| The assessment uses weather file: Swindon_Brize_Norton_DSY1_2020High50                                                                                                                                                                                                                                                                                                      |
| <b>Acoustic assessment</b>                                                                                                                                                                                                                                                                                                                                                  |
| Acoustic constraints apply to the site. The overheating mitigation strategy takes account of the likelihood that windows will be closed during sleeping hours (11pm to 7am).                                                                                                                                                                                                |
| <b>Other caveats</b>                                                                                                                                                                                                                                                                                                                                                        |
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| If construction deviates from the specification above in any way whatsoever, please check with AES Sustainability Consultants immediately to ensure compliance is still achieved. AES Sustainability Consultants cannot be held responsible for non compliance if the specification that the calculation is based upon is not followed.                                     |