

Vistry South East Burgess Hill

Part O Overheating assessment summary

AES Sustainability Consultants Ltd

Rev 00

23/05/2025



Part 1 – Building Details and Declarations

1.1 Building and site details	
Residential building name/number	Burgess Hill Phase 3
Street	Eastbridge Avenue
Town	Burgess Hill
County	Sussex
Postcode	RH15 8DQ
Proposed building use/type of building	Residential
Are there any security, noise or pollution Issues?	Yes - noise Issues
1.2 Designers details	
Designer's name	Ahamed Hassan
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	Ahamed Hassan	23/05/2025	First Issue
Rev 01			
Rev 02			
Rev 03			

Overheating results summary
Plot-by-plot schedule
Revision: 00
Date: 05/2025

Legend - overheating testing method	
	Dynamic assessment by AES
	Simplified assessment by AES
	Group house type approval applies by Briary

							Enhanced ventilation is in addition to Approved Document F minimum rates.								All g-glazing figures noted are to BS EN-410 (glass only)										
															Window specification 1		Window specification 2		Rooflight specification		French door specification				
Plot Number	House Type Name	Phase	Acoustic issue	Background ventilation system	Enhanced Mechanical ventilation for overheating (Yes/No)	Testing method	Combined Kitchen/Living ventilation rate (L/s)	Kitchen ventilation rate (L/s)	Living room ventilation rate (L/s)	Bed 1 ventilation rate (L/s)	Bed 2 ventilation rate (L/s)	Bed 3 ventilation rate (L/s)	Bed 4 ventilation rate (L/s)	Bed 5 ventilation rate (L/s)	Window 1 U-value (whole window)	Window 1 g-glazing	Window 2 U-value (whole window)	Window 2 g-glazing	Rooflight U-value (whole rooflight)	Rooflight g-glazing	French door U-value (whole window)	French door g-glazing	g-glazing applicability (Whole unit/room)	Increase Free Area (Yes/No)	SAP checks complete
159	Flat Type 29	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	39	33	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
160	Flat Type 30	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	42	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
161	Flat Type 31	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	36	41	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
162	Flat Type 29	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	37	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
163	Flat Type 29	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	36	31	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
164	Flat Type 30	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	37	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
165	Flat Type 31	3	Yes	MVHR	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
166	Flat Type 1	3	No	MVHR	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
167	Flat Type 29	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
168	Flat Type 29	3	Yes	MVHR	Yes	Dynamic assessment by AES	15	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
169	Flat Type 30	3	Yes	MVHR	Yes	Dynamic assessment by AES	15	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
170	Flat Type 31	3	Yes	MVHR	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
171	Flat Type 1	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	34	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
172	Flat Type 29	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	34	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
173	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
174	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
175	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
176	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
236	HT S	3	Yes	dMEV	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
237	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
238	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
239	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
240	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
241	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
242	HT K	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	30	30	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
243	HT M	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	23	0	24	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
244	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
245	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
246	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
247	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
248	HT B	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	28	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
249	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
250	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
251	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
252	HT D	3	No	dMEV	No	Group house type approval applies by Briary	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
253	HT M	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	23	0	24	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
254	HT B	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	28	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
255	HT B	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	28	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
256	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
257	HT D	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	0	29	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
258	HT R	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	27	29	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
259	HT R	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	27	29	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
260	HT R	3	Yes	dMEV	Yes	Dynamic assessment by AES	0	0	0	27	29	0	0												

Plot Number	House Type Name	Phase	Acoustic issue	Background ventilation system	Enhanced Mechanical ventilation for overheating (Yes/No)	Testing method	Combined Kitchen/Living ventilation rate (L/s)	Kitchen ventilation rate (L/s)	Living room ventilation rate (L/s)	Bed 1 ventilation rate (L/s)	Bed 2 ventilation rate (L/s)	Bed 3 ventilation rate (L/s)	Bed 4 ventilation rate (L/s)	Bed 5 ventilation rate (L/s)	Window 1 U-value (whole window)	Window 1 g-glazing	Window 2 U-value (whole window)	Window 2 g-glazing	Rooflight U-value (whole rooflight)	Rooflight g-glazing	French door U-value (whole window)	French door g-glazing	g-glazing applicability (Whole unit/room)	Increase Free Area (Yes/No)	SAP checks complete
349	HT 5	3	Yes	dMEV	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
350	HT 5	3	Yes	dMEV	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
351	HT 5	3	Yes	dMEV	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	1.3	0.55	1.4	0.4	Whole unit	No	✓
352	Flat Type 39	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	35	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
353	Flat Type 32	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	36	30	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
354	Flat Type 32	3	Yes	MVHR	Yes	Dynamic assessment by AES	0	0	0	45	33	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
355	Flat Type 40	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	34	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
356	Flat Type 40	3	No	MVHR	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
357	Flat Type 37	3	No	MVHR	No	Dynamic assessment by AES	0	0	0	0	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
358	Flat Type 40	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	34	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓
359	Flat Type 37	3	No	MVHR	Yes	Dynamic assessment by AES	0	0	0	40	0	0	0	0	1.00	0.4	N/A	N/A	N/A	N/A	1.4	0.4	Whole unit	No	✓

Overheating assessment notes



Mechanical ventilation
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.
This does not refer to a specific fan type or system but is a performance requirement to be met by the system designer/ engineer.
"Enhanced mechanical ventilation" refers to ventilation specifically to mitigate overheating risk and is in addition to part F minimum (trickle) ventilation rates.
g-glazing values
All g-glazing figures noted are for the glass only, using the BS EN-410 methodology.
Frame factor
Where g-glazing figures are quoted, this is based on a window frame factor of 30%.
Natural ventilation openings
CIBSE TM59 sample size
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.
Cooling systems
No cooling systems modelled.
Tempered air systems
No tempered air systems modelled.
M&E system design
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.
Protection from falling strategy
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.
Guarding is to be introduced to all windows not meeting the minimum requirements for protection from falling.
Accessible windows (Canopies and oriel bay roofs)
Windows above canopies and oriel bay roofs are easily accessible.
Weather file
The assessment uses weather file: London_GTW_DSY1_2020High50
Acoustic assessment
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).

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.