

Appendix D – Overheating Results

1.1 1 Museum Street

1MS - TM52 - Overheating analysis results using weather file DSY1

Room Name	Criterion 1 (%Hrs $T_{op}-T_{max}$ $\geq 1K$)	Criterion 2 (Max. Daily Deg.Hrs)	Criterion 3 (Max ΔT)	Pass/Fail
Pass/Fail Threshold	3	6	4	
G3 Office	20	29	4	Fail
G6 Office	23.4	35	5	Fail
G9 Office	24.1	42	6	Fail
G19 Office	43.5	54	7	Fail

1MS - TM52 - Overheating analysis results using weather file DSY2

Room Name	Criterion 1 (%Hrs $T_{op}-T_{max}$ $\geq 1K$)	Criterion 2 (Max. Daily Deg.Hrs)	Criterion 3 (Max ΔT)	Pass/Fail
Pass/Fail Threshold	3	6	4	
G3 Office	27.9	42	5	Fail
G6 Office	31.4	49	6	Fail
G9 Office	32.5	54	7	Fail
G19 Office	42.8	68	8	Fail

1MS - TM52 - Overheating analysis results using weather file DSY3

Room Name	Criterion 1 (%Hrs $T_{op}-T_{max}$ $\geq 1K$)	Criterion 2 (Max. Daily Deg.Hrs)	Criterion 3 (Max ΔT)	Pass/Fail
Pass/Fail Threshold	3	6	4	
G3 Office	25.5	34	5	Fail
G6 Office	27.6	41	5	Fail
G9 Office	27.8	49	6	Fail
G19 Office	42.5	63	7	Fail

Appendix E – Overheating results_Part 2

High Holborn Part O results, windows open 24/7, DSY1 2020s

Room Name	Weather File DSY 1 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F 1B2P DOUBLE BEDROOM	1	20	Pass
1F 1B2P LIVING/DINING/KITCHEN	2	-	Pass
2F 1B2P DOUBLE BEDROOM	1	20	Pass
2F 1B2P LIVING/DINING/KITCHEN	1.8	-	Pass
3F 1B2P DOUBLE BEDROOM	1	20	Pass
3F 1B2P LIVING/DINING/KITCHEN	1.8	-	Pass
4F 3B5P SINGLE BEDROOM	0.3	18	Pass
4F 3B5P DOUBLE BEDROOM 1	0.7	13	Pass
4F 3B5P DOUBLE BEDROOM 2	0.4	20	Pass
5F 3B5P STUDY	0.5	-	Pass
5F 3B5P LIVING/KITCHEN/DINING	2.8		Pass

High Holborn Part O results, windows closed at night, DSY1 2020s

Room Name	Weather File DSY 1 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F 1B2P DOUBLE BEDROOM	6	316	Fail
1F 1B2P LIVING/DINING/KITCHEN	6.9	-	Fail
2F 1B2P DOUBLE BEDROOM	5.3	308	Fail
2F 1B2P LIVING/DINING/KITCHEN	4.7	-	Fail
3F 1B2P DOUBLE BEDROOM	5.7	317	Fail
3F 1B2P LIVING/DINING/KITCHEN	5.1	-	Fail
4F 3B5P SINGLE BEDROOM	6.5	386	Fail
4F 3B5P DOUBLE BEDROOM 1	10	379	Fail
4F 3B5P DOUBLE BEDROOM 2	7.5	457	Fail
5F 3B5P STUDY	1	-	Fail
5F 3B5P LIVING/KITCHEN/DINING	14.7		Fail

High Holborn Part O results, windows open 24/7, DSY2 2020s

Room Name	Weather File DSY 2 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F 1B2P DOUBLE BEDROOM	2.4	47	Fail
1F 1B2P LIVING/DINING/KITCHEN	4.6	-	Fail
2F 1B2P DOUBLE BEDROOM	2.5	49	Fail
2F 1B2P LIVING/DINING/KITCHEN	4.2	-	Fail
3F 1B2P DOUBLE BEDROOM	2.6	49	Fail
3F 1B2P LIVING/DINING/KITCHEN	4.2	-	Fail
4F 3B5P SINGLE BEDROOM	1.1	43	Fail
4F 3B5P DOUBLE BEDROOM 1	1.9	33	Fail
4F 3B5P DOUBLE BEDROOM 2	1.2	48	Fail
5F 3B5P STUDY	1.4	-	Pass
5F 3B5P LIVING/KITCHEN/DINING	5.4		Fail

High Holborn Part O results, windows open 24/7, DSY3 2020s

Room Name	Weather File DSY 3 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F 1B2P DOUBLE BEDROOM	2.8	47	Fail
1F 1B2P LIVING/DINING/KITCHEN	5.5	-	Fail
2F 1B2P DOUBLE BEDROOM	2.6	49	Fail
2F 1B2P LIVING/DINING/KITCHEN	5.2	-	Fail
3F 1B2P DOUBLE BEDROOM	2.6	49	Fail
3F 1B2P LIVING/DINING/KITCHEN	5.2	-	Fail
4F 3B5P SINGLE BEDROOM	1.1	40	Fail
4F 3B5P DOUBLE BEDROOM 1	2	29	Pass
4F 3B5P DOUBLE BEDROOM 2	1.3	48	Fail
5F 3B5P STUDY	1.1	-	Pass
5F 3B5P LIVING/KITCHEN/DINING	6.3		Fail

Vine Lane overheating analysis against Part O, windows open 24/7, DSY1 2020s

Room Name	Weather File DSY 1 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
4F 1B2P DOUBLE BEDROOM	0.6	14	Pass
4F 1B2P LIVING/DINING/KITCHEN	1.1	-	Pass
3F 1B2P DOUBLE BEDROOM	0.7	15	Pass
3F 1B2P LIVING/DINING/KITCHEN	1.5	-	Pass
3F 1B2P LIVING/DINING/KITCHEN	0.8	-	Pass
3F 1B2P DOUBLE BEDROOM	0.6	14	Pass
3F 1B2P DOUBLE BEDROOM	0.2	14	Pass
3F 1B2P LIVING/DINING/KITCHEN	0	-	Pass
5F 1B2P DOUBLE BEDROOM	0.7	14	Pass
5F 1B2P LIVING/DINING/KITCHEN	1.2	-	Pass
4F 1B2P DOUBLE BEDROOM	0.6	14	Pass
4F 1B2P LIVING/DINING/KITCHEN	0.9	-	Pass
4F 1B2P LIVING/DINING/KITCHEN	1.6	-	Pass
4F 1B2P DOUBLE BEDROOM	1	13	Pass

Vine Lane overheating analysis against Part O, windows open 24/7, DSY2 2020s

Room Name	Weather File DSY 2 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
4F 1B2P DOUBLE BEDROOM	1.7	35	Fail
4F 1B2P LIVING/DINING/KITCHEN	2.7	-	Pass
3F 1B2P DOUBLE BEDROOM	1.7	36	Fail
3F 1B2P LIVING/DINING/KITCHEN	2.1	-	Pass
3F 1B2P LIVING/DINING/KITCHEN	0.6	-	Pass
3F 1B2P DOUBLE BEDROOM	1.7	37	Fail
3F 1B2P DOUBLE BEDROOM	0.8	36	Fail
3F 1B2P LIVING/DINING/KITCHEN	4.1	-	Fail
5F 1B2P DOUBLE BEDROOM	2	34	Fail
5F 1B2P LIVING/DINING/KITCHEN	3.3	-	Fail
4F 1B2P DOUBLE BEDROOM	1.9	36	Fail

Room Name	Weather File DSY 2 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
4F 1B2P LIVING/DINING/KITCHEN	2.3	-	Pass
4F 1B2P LIVING/DINING/KITCHEN	4.3	-	Fail
4F 1B2P DOUBLE BEDROOM	2.7	35	Fail

Vine Lane overheating analysis against Part O, windows open 24/7, DSY3 2020s

Room Name	Weather File DSY 3 2020		
	Criteria 1:	Criteria 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
4F 1B2P DOUBLE BEDROOM	1.9	32	Pass
4F 1B2P LIVING/DINING/KITCHEN	3.2	-	Fail
3F 1B2P DOUBLE BEDROOM	2.3	35	Fail
3F 1B2P LIVING/DINING/KITCHEN	2.5	-	Pass
3F 1B2P LIVING/DINING/KITCHEN	5	-	Fail
3F 1B2P DOUBLE BEDROOM	2	34	Fail
3F 1B2P DOUBLE BEDROOM	1	33	Fail
3F 1B2P LIVING/DINING/KITCHEN	0.8	-	Pass
5F 1B2P DOUBLE BEDROOM	2.2	32	Pass
5F 1B2P LIVING/DINING/KITCHEN	3.8	-	Fail
4F 1B2P DOUBLE BEDROOM	2.1	34	Fail
4F 1B2P LIVING/DINING/KITCHEN	2.6	-	Pass
4F 1B2P LIVING/DINING/KITCHEN	5.3	-	Fail
4F 1B2P DOUBLE BEDROOM	3.1	33	Fail

West Central Street overheating analysis against Part O, windows open 24/7, DSY1 2020s

Room Name	Weather file DSY 1 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 1	0.1	16	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 2	0	18	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 3	0	15	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 4	0	17	Pass
1F-3F REFURB APT 4B8P KITCHEN	0.2	-	Pass
1F-3F REFURB APT 4B8P LIVING	1	-	Pass
3F LISTED APT 1B2P DOUBLE BEDROOM	0	15	Pass
3F LISTED APT 1B2P LIVING/DINING/KITCHEN	0.1		Pass
3F REFURB APT 1B2P DOUBLE BEDROOM	0	18	Pass
3F REFURB APT 1B2P LIVING/DINING/KITCHEN	0.1	-	Pass
4F NEW 402 1B2P DOUBLE BEDROOM	0	17	Pass
4F NEW 402 1B2P LIVING/DINING/KITCHEN	0.3	-	Pass
4F NEW 403 2B4P DOUBLE BEDROOM 1	0.2	20	Pass
4F NEW 403 2B4P DOUBLE BEDROOM 1	0.1	18	Pass
4F NEW 403 2B4P LIVING/DINING/KITCHEN	0.1	-	Pass

West Central Street overheating analysis against Part O, windows closed at night, DSY1 2020s

Room Name	Weather file DSY 1 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 1	1.2	147	Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 2	0.2	25	Pass

Room Name	Weather file DSY 1 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 3	0.4	105	Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 4	0	26	Pass
1F-3F REFURB APT 4B8P KITCHEN	0.5	-	Pass
3F LISTED APT 1B2P DOUBLE BEDROOM	1.4	247	Fail
3F LISTED APT 1B2P LIVING/DINING/KITCHEN	2.5	-	Pass
3F REFURB APT 1B2P DOUBLE BEDROOM	0.1	45	Pass
3F REFURB APT 1B2P LIVING/DINING/KITCHEN	1.8	-	Pass
4F NEW 402 1B2P DOUBLE BEDROOM	0.1	12	Pass
4F NEW 402 1B2P DOUBLE BEDROOM	0.1	-	Pass
4F NEW 402 1B2P LIVING/DINING/KITCHEN	0.4	-	Pass
4F NEW 403 2B4P DOUBLE BEDROOM 1	1.5	100	Fail
4F NEW 403 2B4P DOUBLE BEDROOM 1	2	233	Fail
4F NEW 403 2B4P DOUBLE BEDROOM 1	1.5	-	Pass

West Central Street overheating analysis against Part O, windows open 24/7, DSY2 2020s

Room Name	Weather file DSY 2 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 1	0.7	33	Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 2	0.5	34	Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 3	0.2	31	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 4	0.2	33	Fail
1F-3F REFURB APT 4B8P KITCHEN	1.3	-	Pass
1F-3F REFURB APT 4B8P LIVING	2.7	-	Pass
3F LISTED APT 1B2P DOUBLE BEDROOM	0.4	32	Pass
3F LISTED APT 1B2P LIVING/DINING/KITCHEN	1.1		Pass
3F REFURB APT 1B2P DOUBLE BEDROOM	0.2	35	Fail
3F REFURB APT 1B2P LIVING/DINING/KITCHEN	0.9	-	Pass
4F NEW 402 1B2P DOUBLE BEDROOM	0.8	34	Fail
4F NEW 402 1B2P LIVING/DINING/KITCHEN	1.2	-	Pass
4F NEW 403 2B4P DOUBLE BEDROOM 1	0.8	35	Fail
4F NEW 403 2B4P DOUBLE BEDROOM 1	0.7	35	Fail
4F NEW 403 2B4P LIVING/DINING/KITCHEN	1.4	-	Pass

West Central Street overheating analysis against Part O, windows open 24/7, DSY3 2020s

Room Name	Weather file DSY 3 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
Pass/Fail Threshold	3%	32 hrs	
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 1	1	31	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 2	0.9	33	Fail
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 3	0.4	32	Pass
1F-3F REFURB APT 4B8P DOUBLE BEDROOM 4	0.1	30	Pass
1F-3F REFURB APT 4B8P KITCHEN	1.6	-	Pass
1F-3F REFURB APT 4B8P LIVING	3.4	-	Fail
3F LISTED APT 1B2P DOUBLE BEDROOM	0.6	31	Fail
3F LISTED APT 1B2P LIVING/DINING/KITCHEN	1.5		Pass
3F REFURB APT 1B2P DOUBLE BEDROOM	0.2	30	Pass
3F REFURB APT 1B2P LIVING/DINING/KITCHEN	1.1	-	Pass
4F NEW 402 1B2P DOUBLE BEDROOM	1	34	Fail
4F NEW 402 1B2P LIVING/DINING/KITCHEN	1.7	-	Pass

Room Name	Weather file DSY 3 2020		
	Criterion 1:	Criterion 2:	Pass/ Fail
4F NEW 403 2B4P DOUBLE BEDROOM 1	1	35	Fail
4F NEW 403 2B4P DOUBLE BEDROOM 1	0.9	31	Fail
4F NEW 403 2B4P LIVING/DINING/KITCHEN	1.4	-	Pass