

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

1.2 West Central Street

WCS - TM59 - Overheating analysis results using weather file DSY1

Room Name	Criterion 1	Criterion 2	Pass/Fail
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	
Pass/Fail Threshold	3	32	
101 Open Plan Living/Kitchen	1.7	N/A	Pass
101 Double Bedroom	0.8	31	Pass
101 Single Bedroom	0.8	26	Pass
103 Open Plan Living/Kitchen	1.3	N/A	Pass
103 Single Bedroom	1	13	Pass
103 Double Bedroom	0.9	16	Pass
201 Open Plan Living/Kitchen	1.8	N/A	Pass
201 Double Bedroom	0.8	30	Pass
201 Single Bedroom	0.8	25	Pass
203 Open Plan Living/Kitchen	1.4	N/A	Pass
203 Single Bedroom	1	13	Pass
203 Double Bedroom	0.9	15	Pass
102 Double Bedroom	1	16	Pass
102 Open Plan Living/Kitchen	1.4	N/A	Pass
202 Double Bedroom	0.8	24	Pass
202 Open Plan Living/Kitchen	1.7	N/A	Pass
402 Double Bedroom	1	20	Pass
402 Open Plan Living/Kitchen	1.8	N/A	Pass
401 Single Bedroom	0.9	26	Pass
401 Kitchen	1.7	N/A	Pass
401 Living	2	N/A	Pass
401 Double Bedroom	1.6	25	Pass
401 Single Bedroom	1	30	Pass
401 Single Bedroom	1	28	Pass
401 Double Bedroom	1.2	15	Pass

WCS - TM59 - Overheating analysis results using weather file DSY2

Room Name	Criterion 1	Criterion 2	Pass/Fail
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	
Pass/Fail Threshold	3	32	
101 Open Plan Living/Kitchen	4.1	N/A	Fail
101 Double Bedroom	2.4	71	Fail
101 Single Bedroom	2.4	64	Fail
103 Open Plan Living/Kitchen	3.6	N/A	Fail
103 Single Bedroom	2.2	34	Fail
103 Double Bedroom	2.2	39	Fail
201 Open Plan Living/Kitchen	4.3	N/A	Fail
201 Double Bedroom	2.3	60	Fail
201 Single Bedroom	2.4	60	Fail
203 Open Plan Living/Kitchen	3.6	N/A	Fail
203 Single Bedroom	2.3	34	Fail
203 Double Bedroom	2.2	38	Fail
102 Double Bedroom	2.2	44	Fail
102 Open Plan Living/Kitchen	3.8	N/A	Fail
202 Double Bedroom	2.2	56	Fail
202 Open Plan Living/Kitchen	3.9	N/A	Fail
402 Double Bedroom	2.3	47	Fail
402 Open Plan Living/Kitchen	4	N/A	Fail
401 Single Bedroom	2.3	63	Fail
401 Kitchen	4.3	N/A	Fail
401 Living	4.6	N/A	Fail
401 Double Bedroom	3.2	56	Fail
401 Single Bedroom	2.7	62	Fail
401 Single Bedroom	2.6	64	Fail
401 Double Bedroom	2.8	40	Fail

WCS - TM59 - Overheating analysis results using weather file DSY3

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
101 Open Plan Living/Kitchen	5.3	N/A	Fail
101 Double Bedroom	2.8	67	Fail
101 Single Bedroom	2.9	61	Fail
103 Open Plan Living/Kitchen	4.7	N/A	Fail
103 Single Bedroom	3	32	Fail
103 Double Bedroom	2.8	37	Fail
201 Open Plan Living/Kitchen	5.5	N/A	Fail
201 Double Bedroom	2.7	69	Fail
201 Single Bedroom	2.9	59	Fail
203 Open Plan Living/Kitchen	4.7	N/A	Fail
203 Single Bedroom	3.1	32	Fail
203 Double Bedroom	2.9	37	Fail
102 Double Bedroom	2.9	39	Fail
102 Open Plan Living/Kitchen	4.8	N/A	Fail
202 Double Bedroom	2.8	54	Fail
202 Open Plan Living/Kitchen	5	N/A	Fail
402 Double Bedroom	3.1	46	Fail
402 Open Plan Living/Kitchen	5.4	N/A	Fail
401 Single Bedroom	2.9	60	Fail
401 Kitchen	5	N/A	Fail
401 Living	5.6	N/A	Fail
401 Double Bedroom	3.7	55	Fail
401 Single Bedroom	3.2	63	Fail
401 Single Bedroom	3	60	Fail
401 Double Bedroom	3.2	39	Fail

1.3 High Holborn – Openable windows

HH - TM59 - Overheating analysis results using weather file DSY1

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	2.7	N/A	Pass
G2 1B/2P Kitchen	2.2	N/A	Pass
G2 1B/2P Living	2.4	N/A	Pass
G3 1B/2P Kitchen	2.2	N/A	Pass
G3 1B/2P Living	2.5	N/A	Pass
G4 3B/5P Bedroom	1.8	29	Pass
G4 3B/5P Bedroom	1.8	27	Pass
G2 1B/2P Bedroom	1.8	30	Pass
G3 1B/2P Bedroom	1.9	30	Pass
G1 1B/2P Living	3.4	N/A	Fail
G4 3B/5P Master Bedroom	1.9	13	Pass
G1 1B/2P Bedroom	2.1	30	Pass
G5 3B/5P Kitchen/Dining/Living	4	N/A	Fail

HH - TM59 - Overheating analysis results using weather file DSY2

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	5.4	N/A	Fail
G2 1B/2P Kitchen	5.4	N/A	Fail
G2 1B/2P Living	5.1	N/A	Fail
G3 1B/2P Kitchen	5	N/A	Fail
G3 1B/2P Living	5.1	N/A	Fail
G4 3B/5P Bedroom	5.1	65	Fail
G4 3B/5P Bedroom	3.2	56	Fail
G2 1B/2P Bedroom	3.5	64	Fail
G3 1B/2P Bedroom	3.4	64	Fail
G1 1B/2P Living	3.5	N/A	Fail
G4 3B/5P Master Bedroom	3.3	35	Fail
G1 1B/2P Bedroom	3.4	65	Fail
G5 3B/5P Kitchen/Dining/Living	6.3	N/A	Fail

HH - TM59 - Overheating analysis results using weather file DSY3

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	5.9	N/A	Fail
G2 1B/2P Kitchen	6.9	N/A	Fail
G2 1B/2P Living	5.7	N/A	Fail
G3 1B/2P Kitchen	6	N/A	Fail
G3 1B/2P Living	5.8	N/A	Fail
G4 3B/5P Bedroom	6	63	Fail
G4 3B/5P Bedroom	3.6	55	Fail
G2 1B/2P Bedroom	3.7	64	Fail
G3 1B/2P Bedroom	3.6	65	Fail
G1 1B/2P Living	4.1	N/A	Fail
G4 3B/5P Master Bedroom	3.8	33	Fail
G1 1B/2P Bedroom	3.8	66	Fail
G5 3B/5P Kitchen/Dining/Living	7.3	N/A	Fail

1.4 High Holborn – Closed Windows

HH - TM59 - Overheating analysis results using weather file DSY1

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	90	N/A	Fail
G2 1B/2P Kitchen	84.8	N/A	Fail
G2 1B/2P Living	89.2	N/A	Fail
G3 1B/2P Kitchen	87.3	N/A	Fail
G3 1B/2P Living	92.8	N/A	Fail
G4 3B/5P Bedroom	91.9	1352	Fail
G4 3B/5P Bedroom	91.8	1351	Fail
G2 1B/2P Bedroom	97.5	1326	Fail
G3 1B/2P Bedroom	97.9	1335	Fail
G1 1B/2P Living	87.3	N/A	Fail
G4 3B/5P Master Bedroom	88.5	1328	Fail
G1 1B/2P Bedroom	92.6	1322	Fail
G5 3B/5P Kitchen/Dining/Living	96.4	N/A	Fail

HH - TM59 - Overheating analysis results using weather file DSY2

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	90.3	N/A	Fail
G2 1B/2P Kitchen	85.1	N/A	Fail
G2 1B/2P Living	88.8	N/A	Fail
G3 1B/2P Kitchen	88.6	N/A	Fail
G3 1B/2P Living	92.2	N/A	Fail
G4 3B/5P Bedroom	91.9	1326	Fail
G4 3B/5P Bedroom	90.7	1319	Fail
G2 1B/2P Bedroom	95.4	1238	Fail
G3 1B/2P Bedroom	95.8	1260	Fail
G1 1B/2P Living	85.7	N/A	Fail
G4 3B/5P Master Bedroom	87	1237	Fail
G1 1B/2P Bedroom	89.9	1229	Fail
G5 3B/5P Kitchen/Dining/Living	96.4	N/A	Fail

HH - TM59 - Overheating analysis results using weather file DSY3

Room Name	Criterion 1	Criterion 2	
	%Hrs $T_{op}-T_{max} \geq 1K$	No. of hrs T_{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
G1 1B/2P Kitchen	84.5	N/A	Fail
G2 1B/2P Kitchen	80.2	N/A	Fail
G2 1B/2P Living	83.6	N/A	Fail
G3 1B/2P Kitchen	83.3	N/A	Fail
G3 1B/2P Living	87.7	N/A	Fail
G4 3B/5P Bedroom	87.7	1314	Fail
G4 3B/5P Bedroom	85.6	1310	Fail
G2 1B/2P Bedroom	92.6	1211	Fail
G3 1B/2P Bedroom	93.4	1244	Fail
G1 1B/2P Living	80.2	N/A	Fail
G4 3B/5P Master Bedroom	82	1231	Fail
G1 1B/2P Bedroom	85.7	1189	Fail
G5 3B/5P Kitchen/Dining/Living	92.4	N/A	Fail

1.5 Vine Lane

VL - TM59 - Overheating analysis results using weather file DSY1

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
1 - E Flat 1 Bedroom	1	30	Pass
1 - N Flat 1 Bedroom 1	1	27	Pass
1 - N Flat 1 Bedroom 2	1.3	22	Pass
1 - SE Flat 2 Bedroom	0.9	20	Pass
1 - SE Flat 1 Bedroom	0.7	28	Pass
3 - N Flat 1 Bedroom 2	2	36	Fail
3 - N Flat 1 Bedroom 1	1.5	32	Pass
4 - N Flat 1 Bedroom	1.5	33	Fail
5 - N Flat 1 Bedroom	1.7	31	Pass
3 - N Flat 1 Living room & Kitchen	1.7	N/A	Pass
4 - N Flat Living room & Kitchen	1.4	N/A	Pass
5 - N Flat 1 Living room & Kitchen	1.4	N/A	Pass
1 - SE Flat 1 Living room & Kitchen	1	N/A	Pass
1 - N Flat 1 Living room & Kitchen	1.2	N/A	Pass
1 - E Flat 1 Living room & Kitchen	0.7	N/A	Pass
1 - SE Flat 2 Living room & Kitchen	1.3	N/A	Pass

VL - TM59 - Overheating analysis results using weather file DSY2

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
1 - E Flat 1 Bedroom	2.8	71	Fail
1 - N Flat 1 Bedroom 1	2.8	71	Fail
1 - N Flat 1 Bedroom 2	3.3	60	Fail
1 - SE Flat 2 Bedroom	2.8	56	Fail
1 - SE Flat 1 Bedroom	2.1	65	Fail
3 - N Flat 1 Bedroom 2	3.9	78	Fail
3 - N Flat 1 Bedroom 1	3.7	69	Fail
4 - N Flat 1 Bedroom	3.6	67	Fail
5 - N Flat 1 Bedroom	3.6	65	Fail
3 - N Flat 1 Living room & Kitchen	3.8	N/A	Fail
4 - N Flat Living room & Kitchen	3.6	N/A	Fail
5 - N Flat 1 Living room & Kitchen	3.7	N/A	Fail
1 - SE Flat 1 Living room & Kitchen	2.7	N/A	Pass
1 - N Flat 1 Living room & Kitchen	3	N/A	Fail
1 - E Flat 1 Living room & Kitchen	2.4	N/A	Pass
1 - SE Flat 2 Living room & Kitchen	3.3	N/A	Fail

Room Name	Criterion 1	Criterion 2	
	%Hrs T _{op} -T _{max} ≥1K	No. of hrs T _{op} in bedrooms from 22:00-07:00 exceeding 26°C	Pass/Fail
Pass/Fail Threshold	3	32	
1 - E Flat 1 Bedroom	3.5	62	Fail
1 - N Flat 1 Bedroom 1	3.4	74	Fail
1 - N Flat 1 Bedroom 2	4.2	48	Fail
1 - SE Flat 2 Bedroom	3.4	47	Fail
1 - SE Flat 1 Bedroom	2.4	70	Fail
3 - N Flat 1 Bedroom 2	4.9	87	Fail
3 - N Flat 1 Bedroom 1	4.7	61	Fail
4 - N Flat 1 Bedroom	4.5	58	Fail
5 - N Flat 1 Bedroom	4.5	59	Fail
3 - N Flat 1 Living room & Kitchen	5.1	N/A	Fail
4 - N Flat Living room & Kitchen	4.9	N/A	Fail
5 - N Flat 1 Living room & Kitchen	4.8	N/A	Fail
1 - SE Flat 1 Living room & Kitchen	3.3	N/A	Fail
1 - N Flat 1 Living room & Kitchen	4.1	N/A	Fail
1 - E Flat 1 Living room & Kitchen	3	N/A	Pass
1 - SE Flat 2 Living room & Kitchen	4.3	N/A	Fail