

Approved Document O report
Overheating risk in residential buildings
for
Albany Road - 1 Bed

Albany Road - 1 Bed

Page 1 of 17

Building details

Project name: Albany Road - 1 Bed	Date: 11-07-2024 11:03:59
Location: Manchester Ap, United Kingdom	
Address: Albany Road, Chorlton	
Building use: Domestic	
Are there any security, noise, or pollution issues:	

Designer's details

Designer's name:
Designer's organisation:
Designer's address:

Dynamic thermal model

Software: IESVE version 2023.5.1.0	
Weather file: Manchester_DSY1_2020High50_.epw	
Results file: OH13 - 22089 Albany Road.aps	
Number of rooms analysed: 42	
TM59: summer elevated air speed: 0.1	
TM59: occupant category: Category II (normal)	
Overheating mitigation strategy:	
Has the building construction proposal been modelled accurately?	YES
Have the analysed rooms passed the assessment for Approved Doc O Dynamic Thermal Modelling Method (CIBSE TM 59)?	YES
Designer's signature:	

Albany Road - 1 Bed

Page 2 of 17

Summary

CIBSE TM59 overheating methodology for predominantly naturally ventilated rooms assesses against two criteria, (a) and (b) (for Category I occupancy, T_{max} is reduced by 1K):

- Criterion (a) states that for living rooms, kitchens and bedrooms, the number of hours during which ΔT is greater than or equal to 1K from May to September (or November to March for southern hemisphere locations) shall not exceed 3% of occupied hours
- Criterion (b) states that the operative temperature of the bedrooms from 22:00-07:00 shall not exceed 26°C for more than 1% of annual hours (33 hours is therefore recorded as a fail). Approved document O applies limits to CIBSE TM59 section 3.3 (openings); these requirements are applied by appropriate assignment of MacroFlo types / scripted profiles in the model (see Modelled Openings Section).

CIBSE TM59 overheating methodology for predominantly mechanically ventilated rooms states the operative temperature of all rooms shall not exceed 26°C for more than 3% of annual occupied hours.

CIBSE TM59 also states that the inclusion of corridors in the overheating analysis is mandatory where community heating pipework runs through them. While there is no mandatory target for communal corridors, if an operative temperature of 28°C is exceeded for more than 3% of the total annual hours this should be identified as a significant risk.

Room name	Naturally ventilated Criterion a check	Naturally ventilated Criterion b check	Mechanically ventilated check	Corridor overheating risk check
00.04 1 Bed - Double Bedroom	Pass	Pass	-	-
00.04 1 Bed - Living/Kitchen	Pass	N/A	-	-
00.05 1 Bed - Double Bedroom	Pass	Pass	-	-
00.05 1 Bed - Living/Kitchen	Pass	N/A	-	-
00.06 1 Bed - Double Bedroom	-	-	Pass	-
00.06 1 Bed - Living/Kitchen	-	-	Pass	-
00.07 1 Bed - Double Bedroom	-	-	Pass	-
00.07 1 Bed - Living/Kitchen	-	-	Pass	-
00.08 1 Bed - Double Bedroom	-	-	Pass	-
00.08 1 Bed - Living/Kitchen	-	-	Pass	-
01.14 1 Bed - Double Bedroom	Pass	Pass	-	-
01.14 1 Bed - Living/Kitchen	Pass	N/A	-	-
01.15 1 Bed - Double Bedroom	Pass	Pass	-	-
01.15 1 Bed - Living/Kitchen	Pass	N/A	-	-
01.16 1 Bed - Double Bedroom	-	-	Pass	-
01.16 1 Bed - Living/Kitchen	-	-	Pass	-

Albany Road - 1 Bed

Page 3 of 17

Room name	Naturally ventilated Criterion a check	Naturally ventilated Criterion b check	Mechanically ventilated check	Corridor overheating risk check
01.17 1 Bed - Double Bedroom	-	-	Pass	-
01.17 1 Bed - Living/Kitchen	-	-	Pass	-
01.18 1 Bed - Double Bedroom	-	-	Pass	-
01.18 1 Bed - Living/Kitchen	-	-	Pass	-
02.25 1 Bed - Double Bedroom	Pass	Pass	-	-
02.25 1 Bed - Living/Kitchen	Pass	N/A	-	-
02.26 1 Bed - Double Bedroom	Pass	Pass	-	-
02.26 1 Bed - Living/Kitchen	Pass	N/A	-	-
02.27 1 Bed - Double Bedroom	-	-	Pass	-
02.27 1 Bed - Living/Kitchen	-	-	Pass	-
02.28 1 Bed - Double Bedroom	-	-	Pass	-
02.28 1 Bed - Living/Kitchen	-	-	Pass	-
02.29 1 Bed - Double Bedroom	-	-	Pass	-
02.29 1 Bed - Living/Kitchen	-	-	Pass	-
03.34 1 Bed - Double Bedroom	Pass	Pass	-	-
03.34 1 Bed - Living/Kitchen	Pass	N/A	-	-
03.35 1 Bed - Double Bedroom	Pass	Pass	-	-
03.35 1 Bed - Living/Kitchen	Pass	N/A	-	-
03.36 1 Bed - Double Bedroom	Pass	Pass	-	-
03.36 1 Bed - Living/Kitchen	Pass	N/A	-	-
03.37 1 Bed - Double Bedroom	Pass	Pass	-	-
03.37 1 Bed - Living/Kitchen	Pass	N/A	-	-
03.38 1 Bed - Double Bedroom	-	-	Pass	-

Albany Road - 1 Bed

Page 4 of 17

Room name	Naturally ventilated Criterion a check	Naturally ventilated Criterion b check	Mechanically ventilated check	Corridor overheating risk check
03.38 1 Bed - Living/Kitchen	-	-	Pass	-
03.39 1 Bed - Double Bedroom	-	-	Pass	-
03.39 1 Bed - Living/Kitchen	-	-	Pass	-

Albany Road - 1 Bed

Page 5 of 17

Naturally ventilated rooms – criterion (a)

Criterion (a) states that for living rooms, kitchens and bedrooms, the number of hours during which ΔT is greater than or equal to 1K from May to September (or November to March for southern hemisphere locations) shall not exceed 3% of occupied hours.

Room name	Occupied hours	No. hours $\Delta T \geq 1^\circ\text{K}$	% Occupied hours $\Delta T \geq 1^\circ\text{K}$	Criterion a check
00.04 1 Bed - Double Bedroom	3672	0	0.0	Pass
00.04 1 Bed - Living/Kitchen	1989	0	0.0	Pass
00.05 1 Bed - Double Bedroom	3672	0	0.0	Pass
00.05 1 Bed - Living/Kitchen	1989	0	0.0	Pass
01.14 1 Bed - Double Bedroom	3672	0	0.0	Pass
01.14 1 Bed - Living/Kitchen	1989	0	0.0	Pass
01.15 1 Bed - Double Bedroom	3672	0	0.0	Pass
01.15 1 Bed - Living/Kitchen	1989	0	0.0	Pass
02.25 1 Bed - Double Bedroom	3672	0	0.0	Pass
02.25 1 Bed - Living/Kitchen	1989	0	0.0	Pass
02.26 1 Bed - Double Bedroom	3672	0	0.0	Pass
02.26 1 Bed - Living/Kitchen	1989	0	0.0	Pass
03.34 1 Bed - Double Bedroom	3672	0	0.0	Pass
03.34 1 Bed - Living/Kitchen	1989	0	0.0	Pass
03.35 1 Bed - Double Bedroom	3672	0	0.0	Pass
03.35 1 Bed - Living/Kitchen	1989	0	0.0	Pass
03.36 1 Bed - Double Bedroom	3672	0	0.0	Pass
03.36 1 Bed - Living/Kitchen	1989	0	0.0	Pass
03.37 1 Bed - Double Bedroom	3672	0	0.0	Pass
03.37 1 Bed - Living/Kitchen	1989	0	0.0	Pass

Albany Road - 1 Bed

Page 6 of 17

Naturally ventilated rooms – criterion (b)

Criterion (b) states that the operative temperature of the bedrooms from 22:00-07:00 shall not exceed 26°C for more than 1% of annual hours (33 hours is therefore recorded as a fail). Any rooms that are not bedrooms are therefore not assessed, hence the corresponding N/A values.

Room name	No. hours > 26°C 22:00-24:00	No. hours > 26°C 00:00-07:00	Total hours > 26°C	Criterion b check
00.04 1 Bed - Double Bedroom	5	3	8	Pass
00.04 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
00.05 1 Bed - Double Bedroom	1	1	2	Pass
00.05 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
01.14 1 Bed - Double Bedroom	3	0	3	Pass
01.14 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
01.15 1 Bed - Double Bedroom	2	0	2	Pass
01.15 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
02.25 1 Bed - Double Bedroom	2	0	2	Pass
02.25 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
02.26 1 Bed - Double Bedroom	2	0	2	Pass
02.26 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
03.34 1 Bed - Double Bedroom	2	6	8	Pass
03.34 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
03.35 1 Bed - Double Bedroom	2	6	8	Pass
03.35 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
03.36 1 Bed - Double Bedroom	2	0	2	Pass
03.36 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A
03.37 1 Bed - Double Bedroom	2	0	2	Pass
03.37 1 Bed - Living/Kitchen	N/A	N/A	N/A	N/A

Albany Road - 1 Bed

Page 7 of 17

Mechanically ventilated rooms

CIBSE TM59 overheating methodology for predominantly mech. vent. rooms states the operative temperature of all rooms shall not exceed 26°C for more than 3% of annual occupied hours.

Room name	No. hours > 26°C	% Annual hours > 26°C	Mechanically ventilated check
00.06 1 Bed - Double Bedroom	41	0.5	Pass
00.06 1 Bed - Living/Kitchen	30	0.6	Pass
00.07 1 Bed - Double Bedroom	59	0.7	Pass
00.07 1 Bed - Living/Kitchen	37	0.8	Pass
00.08 1 Bed - Double Bedroom	72	0.8	Pass
00.08 1 Bed - Living/Kitchen	50	1.1	Pass
01.16 1 Bed - Double Bedroom	60	0.7	Pass
01.16 1 Bed - Living/Kitchen	43	0.9	Pass
01.17 1 Bed - Double Bedroom	85	1.0	Pass
01.17 1 Bed - Living/Kitchen	59	1.2	Pass
01.18 1 Bed - Double Bedroom	99	1.1	Pass
01.18 1 Bed - Living/Kitchen	69	1.5	Pass
02.27 1 Bed - Double Bedroom	61	0.7	Pass
02.27 1 Bed - Living/Kitchen	44	0.9	Pass
02.28 1 Bed - Double Bedroom	94	1.1	Pass
02.28 1 Bed - Living/Kitchen	60	1.3	Pass
02.29 1 Bed - Double Bedroom	102	1.2	Pass
02.29 1 Bed - Living/Kitchen	73	1.5	Pass
03.38 1 Bed - Double Bedroom	60	0.7	Pass
03.38 1 Bed - Living/Kitchen	32	0.7	Pass
03.39 1 Bed - Double Bedroom	108	1.2	Pass
03.39 1 Bed - Living/Kitchen	68	1.4	Pass

Communal corridors

CIBSE TM59 states that whilst there is no mandatory target for communal corridors, if an operative temperature of 28°C is exceeded for more than 3% of annual hours, then this should be identified as a significant risk within the TM59 overheating report.

Room name	No. hours > 28°C	% Annual hours > 28°C	Corridor overheating risk check
No corridors	N/A	N/A	N/A

Albany Road - 1 Bed

Page 8 of 17

Modelled details & overheating mitigation strategy

Approved document O: Providing Information & Appendix B requires information about the model and the overheating mitigation strategy. The following tables detail the modelling method and mitigation strategies applied to each analysed room. Where multiple active openings per space (windows & louvres) exist they are all listed. Occupancy, equipment and lighting profiles for occupied rooms comply with TM59 section 5.

Modelled occupancy

Room name	Floor area m ²	Thermal template	Occupancy profile	Equipment profile	Lighting profile
00.04 1 Bed - Double Bedroom	16.55	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
00.04 1 Bed - Living/Kitchen	27.47	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
00.05 1 Bed - Double Bedroom	15.09	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
00.05 1 Bed - Living/Kitchen	24.91	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
00.06 1 Bed - Double Bedroom	15.6	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
00.06 1 Bed - Living/Kitchen	25.93	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
00.07 1 Bed - Double Bedroom	12.81	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
00.07 1 Bed - Living/Kitchen	22.96	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
00.08 1 Bed - Double Bedroom	13.54	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
00.08 1 Bed - Living/Kitchen	25.28	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
01.14 1 Bed - Double Bedroom	16.55	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
01.14 1 Bed - Living/Kitchen	27.47	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
01.15 1 Bed - Double Bedroom	15.09	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
01.15 1 Bed - Living/Kitchen	24.91	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h

Albany Road - 1 Bed

Page 9 of 17

Room name	Floor area m ²	Thermal template	Occupancy profile	Equipment profile	Lighting profile
01.16 1 Bed - Double Bedroom	15.6	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
01.16 1 Bed - Living/Kitchen	27.92	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
01.17 1 Bed - Double Bedroom	12.81	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
01.17 1 Bed - Living/Kitchen	22.03	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
01.18 1 Bed - Double Bedroom	13.55	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
01.18 1 Bed - Living/Kitchen	25.28	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
02.25 1 Bed - Double Bedroom	16.55	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
02.25 1 Bed - Living/Kitchen	27.47	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
02.26 1 Bed - Double Bedroom	15.09	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
02.26 1 Bed - Living/Kitchen	24.91	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
02.27 1 Bed - Double Bedroom	15.6	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
02.27 1 Bed - Living/Kitchen	27.92	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
02.28 1 Bed - Double Bedroom	12.81	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
02.28 1 Bed - Living/Kitchen	22.03	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
02.29 1 Bed - Double Bedroom	13.55	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h

Albany Road - 1 Bed

Page 10 of 17

Room name	Floor area m ²	Thermal template	Occupancy profile	Equipment profile	Lighting profile
02.29 1 Bed - Living/Kitchen	25.28	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.34 1 Bed - Double Bedroom	11.05	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.34 1 Bed - Living/Kitchen	28.62	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.35 1 Bed - Double Bedroom	11.05	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.35 1 Bed - Living/Kitchen	29.4	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.36 1 Bed - Double Bedroom	15.09	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.36 1 Bed - Living/Kitchen	24.91	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.37 1 Bed - Double Bedroom	16.55	TM59 - Double Bedroom	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.37 1 Bed - Living/Kitchen	27.47	TM59 - 1 Bedroom - Living / Kitchen	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.38 1 Bed - Double Bedroom	15.6	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.38 1 Bed - Living/Kitchen	41.32	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h
03.39 1 Bed - Double Bedroom	12.12	TM59 - Double Bedroom - Closed Windows	Double Bedroom Occupancy	Double Bedroom Equipment	18-23h
03.39 1 Bed - Living/Kitchen	29.1	TM59 - 1 Bedroom - Living / Kitchen - Closed Windows	Living / Kitchen Occupancy	Living / Kitchen Equipment	18-23h

Albany Road - 1 Bed

Page 11 of 17

Modelled openings

Room name	Window to wall ratio %	Window g-value (EN 410)	Opening gross area m ²	Opening free area (avg) %	Opening free area / floor area ratio %	Opening profile(s)
00.04 1 Bed - Double Bedroom	9.73	0.3	0.5, 0.95, 1.89	0.0, 50.34000 015258789, 9 8.3399963378 9062	14.12	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26a
00.04 1 Bed - Living/Kitchen	9.18	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 50 .34000015258 789	8.51	off continuously, ADO.Section_ 26a, on continuously
00.05 1 Bed - Double Bedroom	13.79	0.3	0.6, 0.6, 0.6, 1.89	0.0, 50.34000 015258789, 5 0.3400001525 8789, 98.3399 9633789062	16.32	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26a
00.05 1 Bed - Living/Kitchen	31.55	0.3	2.31, 1.05, 1.89	98.339996337 89062, 0.0, 98 .33999633789 062	16.58	off continuously, ADO.Section_ 26a, on continuously
00.06 1 Bed - Double Bedroom	8.39	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 0.0	11.91	Internal Doors Bedroom Weekly, off continuously
00.06 1 Bed - Living/Kitchen	8.33	0.3	0.5, 0.95, 1.89	0.0, 0.0, 98.33 99963378906 2	7.17	off continuously, on continuously
00.07 1 Bed - Double Bedroom	14.29	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	14.51	Internal Doors Bedroom Weekly, off continuously
00.07 1 Bed - Living/Kitchen	15.52	0.3	1.47, 1.47, 2.0, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	8.1	off continuously, on continuously
00.08 1 Bed - Double Bedroom	17.14	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	13.73	Internal Doors Bedroom Weekly, off continuously
00.08 1 Bed - Living/Kitchen	39.17	0.3	1.89, 1.47, 1.99, 1.47	98.339996337 89062, 0.0, 0.0, 0.0	7.35	off continuously, on continuously

Albany Road - 1 Bed

Page 12 of 17

Room name	Window to wall ratio %	Window g-value (EN 410)	Opening gross area m ²	Opening free area (avg) %	Opening free area / floor area ratio %	Opening profile(s)
01.14 1 Bed - Double Bedroom	9.73	0.3	0.5, 0.95, 1.89	0.0, 50.34000 015258789, 9 8.3399963378 9062	14.12	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26ab
01.14 1 Bed - Living/Kitchen	9.18	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 50 .34000015258 789	8.51	off continuously, ADO.Section_ 26ab, on continuously
01.15 1 Bed - Double Bedroom	13.79	0.3	0.6, 0.6, 0.6, 1.89	0.0, 50.34000 015258789, 5 0.3400001525 8789, 98.3399 9633789062	16.32	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26ab
01.15 1 Bed - Living/Kitchen	32.0	0.3	2.31, 1.05, 1.89	98.339996337 89062, 0.0, 98 .33999633789 062	16.58	off continuously, ADO.Section_ 26a, on continuously
01.16 1 Bed - Double Bedroom	8.39	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 0.0	11.91	Internal Doors Bedroom Weekly, off continuously
01.16 1 Bed - Living/Kitchen	7.92	0.3	0.5, 0.95, 1.89	0.0, 0.0, 98.33 99963378906 2	6.66	off continuously, on continuously
01.17 1 Bed - Double Bedroom	14.29	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	14.51	Internal Doors Bedroom Weekly, off continuously
01.17 1 Bed - Living/Kitchen	15.97	0.3	1.47, 1.47, 2.0, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	8.44	off continuously, on continuously
01.18 1 Bed - Double Bedroom	17.14	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	13.72	Internal Doors Bedroom Weekly, off continuously
01.18 1 Bed - Living/Kitchen	39.17	0.3	1.89, 1.47, 1.99, 1.47	98.339996337 89062, 0.0, 0.0, 0.0	7.35	off continuously, on continuously

Albany Road - 1 Bed

Page 13 of 17

Room name	Window to wall ratio %	Window g-value (EN 410)	Opening gross area m ²	Opening free area (avg) %	Opening free area / floor area ratio %	Opening profile(s)
02.25 1 Bed - Double Bedroom	9.73	0.3	0.5, 0.95, 1.89	0.0, 50.34000 015258789, 9 8.3399963378 9062	14.12	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26ab
02.25 1 Bed - Living/Kitchen	9.18	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 50 .34000015258 789	8.51	off continuously, ADO.Section_ 26ab, on continuously
02.26 1 Bed - Double Bedroom	13.79	0.3	0.6, 0.6, 0.6, 1.89	0.0, 50.34000 015258789, 5 0.3400001525 8789, 98.3399 9633789062	16.32	Internal Doors Bedroom Weekly, off continuously, ADO.Section_ 26ab
02.26 1 Bed - Living/Kitchen	32.0	0.3	2.31, 1.05, 1.89	98.339996337 89062, 0.0, 98 .33999633789 062	16.58	off continuously, ADO.Section_ 26a, on continuously
02.27 1 Bed - Double Bedroom	8.39	0.3	1.89, 0.5, 0.95	98.339996337 89062, 0.0, 0.0	11.91	Internal Doors Bedroom Weekly, off continuously
02.27 1 Bed - Living/Kitchen	7.92	0.3	0.5, 0.95, 1.89	0.0, 0.0, 98.33 99963378906 2	6.66	off continuously, on continuously
02.28 1 Bed - Double Bedroom	14.29	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	14.51	Internal Doors Bedroom Weekly, off continuously
02.28 1 Bed - Living/Kitchen	15.97	0.3	1.47, 1.47, 2.0, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	8.44	off continuously, on continuously
02.29 1 Bed - Double Bedroom	17.14	0.3	0.6, 0.6, 0.6, 1.89	0.0, 0.0, 0.0, 9 8.3399963378 9062	13.72	Internal Doors Bedroom Weekly, off continuously
02.29 1 Bed - Living/Kitchen	39.17	0.3	1.89, 1.47, 1.99, 1.47	98.339996337 89062, 0.0, 0.0, 0.0	7.35	off continuously, on continuously

Albany Road - 1 Bed

Page 14 of 17

Room name	Window to wall ratio %	Window g-value (EN 410)	Opening gross area m ²	Opening free area (avg) %	Opening free area / floor area ratio %	Opening profile(s)
03.34 1 Bed - Double Bedroom	38.21	0.3	1.89, 1.47, 2.2	98.33999633789062, 0.0, 98.33999633789062	36.4	Internal Doors Bedroom Weekly, off continuously, ADO.Section_26a
03.34 1 Bed - Living/Kitchen	24.98	0.3	1.89, 1.68, 1.47, 2.21	98.33999633789062, 98.33999633789062, 0.0, 98.33999633789062	19.86	off continuously, ADO.Section_26a, on continuously
03.35 1 Bed - Double Bedroom	38.19	0.3	1.89, 2.2, 1.47	98.33999633789062, 98.33999633789062, 0.0	36.4	Internal Doors Bedroom Weekly, off continuously, ADO.Section_26a
03.35 1 Bed - Living/Kitchen	24.97	0.3	1.89, 1.68, 2.2, 1.47	98.33999633789062, 98.33999633789062, 98.33999633789062, 0.0	19.3	off continuously, ADO.Section_26a, on continuously
03.36 1 Bed - Double Bedroom	16.15	0.3	0.6, 0.6, 0.6, 1.89	0.0, 50.34000015258789, 50.34000015258789, 98.33999633789062	16.32	Internal Doors Bedroom Weekly, off continuously, ADO.Section_26ab
03.36 1 Bed - Living/Kitchen	24.41	0.3	2.31, 1.05, 1.89	98.33999633789062, 0.0, 98.33999633789062	16.58	off continuously, ADO.Section_26a, on continuously
03.37 1 Bed - Double Bedroom	11.45	0.3	0.5, 0.95, 1.89	0.0, 50.34000015258789, 98.33999633789062	14.12	Internal Doors Bedroom Weekly, off continuously, ADO.Section_26ab
03.37 1 Bed - Living/Kitchen	7.99	0.3	1.89, 0.5, 0.95	98.33999633789062, 0.0, 50.34000015258789	8.51	off continuously, ADO.Section_26ab, on continuously
03.38 1 Bed - Double Bedroom	9.87	0.3	1.89, 0.5, 0.95	98.33999633789062, 0.0, 0.0	11.91	Internal Doors Bedroom Weekly, off continuously

Albany Road - 1 Bed

Page 15 of 17

Room name	Window to wall ratio %	Window g-value (EN 410)	Opening gross area m ²	Opening free area (avg) %	Opening free area / floor area ratio %	Opening profile(s)
03.38 1 Bed - Living/Kitchen	8.48	0.3	0.5, 0.95, 1.89	0.0, 0.0, 98.33 99963378906 2	4.5	off continuously, on continuously
03.39 1 Bed - Double Bedroom	23.9	0.3	2.2, 1.47, 1.89	0.0, 0.0, 98.33 99963378906 2	15.34	Internal Doors Bedroom Weekly, off continuously
03.39 1 Bed - Living/Kitchen	14.59	0.3	2.0, 1.47, 1.47, 1.2, 1.89	0.0, 0.0, 0.0, 0.0, 98.33999 633789062	6.39	off continuously, on continuously

Albany Road - 1 Bed

Page 16 of 17

Modelled ventilation

Room name	Infiltration rate ACH	Mech vent flow rate ACH
00.04 1 Bed - Double Bedroom	0.2	0.65
00.04 1 Bed - Living/Kitchen	0.2	0.31
00.05 1 Bed - Double Bedroom	0.2	0.72
00.05 1 Bed - Living/Kitchen	0.2	0.34
00.06 1 Bed - Double Bedroom	0.2	1.85
00.06 1 Bed - Living/Kitchen	0.2	1.02
00.07 1 Bed - Double Bedroom	0.2	2.25
00.07 1 Bed - Living/Kitchen	0.2	1.15
00.08 1 Bed - Double Bedroom	0.2	2.13
00.08 1 Bed - Living/Kitchen	0.2	1.04
01.14 1 Bed - Double Bedroom	0.2	0.65
01.14 1 Bed - Living/Kitchen	0.2	0.31
01.15 1 Bed - Double Bedroom	0.2	0.72
01.15 1 Bed - Living/Kitchen	0.2	0.34
01.16 1 Bed - Double Bedroom	0.2	1.85
01.16 1 Bed - Living/Kitchen	0.2	0.95
01.17 1 Bed - Double Bedroom	0.2	2.25
01.17 1 Bed - Living/Kitchen	0.2	1.2
01.18 1 Bed - Double Bedroom	0.2	2.13
01.18 1 Bed - Living/Kitchen	0.2	1.04
02.25 1 Bed - Double Bedroom	0.2	0.65
02.25 1 Bed - Living/Kitchen	0.2	0.31
02.26 1 Bed - Double Bedroom	0.2	0.72
02.26 1 Bed - Living/Kitchen	0.2	0.34
02.27 1 Bed - Double Bedroom	0.2	1.85
02.27 1 Bed - Living/Kitchen	0.2	0.95
02.28 1 Bed - Double Bedroom	0.2	2.25
02.28 1 Bed - Living/Kitchen	0.2	1.2
02.29 1 Bed - Double Bedroom	0.2	2.13
02.29 1 Bed - Living/Kitchen	0.2	1.04
03.34 1 Bed - Double Bedroom	0.2	0.95
03.34 1 Bed - Living/Kitchen	0.2	0.27
03.35 1 Bed - Double Bedroom	0.2	0.95
03.35 1 Bed - Living/Kitchen	0.2	0.26
03.36 1 Bed - Double Bedroom	0.2	0.75
03.36 1 Bed - Living/Kitchen	0.2	0.33
03.37 1 Bed - Double Bedroom	0.2	0.69
03.37 1 Bed - Living/Kitchen	0.2	0.3
03.38 1 Bed - Double Bedroom	0.2	2.02
03.38 1 Bed - Living/Kitchen	0.2	0.95

Albany Road - 1 Bed

Page 17 of 17

Room name	Infiltration rate ACH	Mech vent flow rate ACH
03.39 1 Bed - Double Bedroom	0.2	2.04
03.39 1 Bed - Living/Kitchen	0.2	0.8