

PART O OVERHEATING REPORT

4 October 2026

Project: Worked example: Plots 12-15, Example Close, Lytchett Matravers

Client: Example Homes Ltd

Reference: EC-DEMO-PARTO

Date: 4 October 2026

MEETS THE PART O SIMPLIFIED METHOD

Moderate-risk location (BH16) - cross-ventilated - glazing 14.3% of the floor area (limit 18%) - opening area 7.98 m2 (needs 7.92 m2) - bedrooms: 3 of 3 meet the minimum

Plots: all 4 pass - each checked in its own direction (see Plots).

The checks (Approved Document O, Section 1)

Check	Approved Document O	Standard	This design	Result
Glazing, whole home	Table 1.1, para 1.6a	18% of the floor area = 15.84 m2	12.60 m2 = 14.3%	Meets
Most glazed room	Table 1.1, para 1.6b	37% of the room	Kitchen/dining: 4.00 m2 on 16.50 m2 = 24.2%	Meets
Opening area, whole home	Table 1.3, paras 1.10-1.12	7.92 m2 equivalent area	7.98 m2	Meets
Opening area, bedrooms	Table 1.3 (bedroom minimum 4%)	4% of each bedroom	3 of 3 bedrooms meet it	Meets
Every plot, in its own direction	paras 1.3-1.4, Tables 1.1-1.4	Every plot, in the direction it is built	4 of 4 plots meet it	Meets

Site location (para 1.3) England outside the high-risk part of London (ADO para 1.3a)

Building category (para 1.4) Cross-ventilated: openable windows on the S and N façades

Largest glazed facade N (North), 6.90 m2 of glass

Limits taken from Table 1.1 and Table 1.3

Front of the home faces S (South)

Reveal depth (para 3.9a) 150 mm from the inside face of the wall to the frames, unless stated per window

Example: QR code on a purchased report

Example report - no Report ID

Scan the code, or enter the ID at energycount.co.uk/verify. A match confirms this report was produced with O-Monkey and registered on 4 October 2026; adding the PDF there confirms it has not been altered since. It does not confirm that the inputs describe the building: that judgement stays with the designer and Building Control.

Appendix B: compliance checklist (Approved Document O, 2021 edition)

Parts 1 and 2a are completed from this assessment. All three parts should be completed (para B2); Part 2a.3 is signed by a person competent to design the residential building, and Part 3 by the builder and the building control body inspector at completion. All references to paragraphs are to Approved Document O.

Part 1 - Building details and declarations

1.1 Building and site details

Residential building name/number, street, town, county	Worked example: Plots 12-15, Example Close, Lytchett Matravers
Postcode	BH16 6HX
Proposed building use/type of building	New dwelling - house
Are there any security, noise or pollution issues?	No

1.2 Designer's details

Designer's name	Jo Example
Company	Example Architects Ltd
Address line 1	1 Example Street
Address line 2	Exampletown
Postcode	EX1 2MP
Telephone number	01234 567890
Email address	jo@example-architects.test

Part 2a - Simplified method (as detailed in Section 1)

Part 2b (dynamic thermal modelling, Section 2) does not apply: this design is assessed by the simplified method.

2a.1 Site details

Site location, assigned using paragraph 1.3	Moderate-risk location - postcode district BH16. England outside the high-risk part of London (ADO para 1.3a).
Building category, assigned using paragraph 1.4	Cross-ventilated (openable windows on the S and N façades)

2a.2 Designed overheating mitigation strategy - details of standards selected

a. Maximum area of glazing	18% of the floor area (Table 1.1; largest glazed facade N): 15.84 m2. Design: 12.60 m2 (14.3% of 88.00 m2). Meets the standard.
b. Maximum area of glazing in the most glazed room	37% of the room's floor area. Most glazed room (the room with the most glass): Kitchen/dining, 24.2%. Meets the standard.
c. Shading strategy	Not required: moderate-risk location (para 1.9 applies in high-risk locations, or where MHCLG FAQ 2 is used).
d. Total minimum free area	The greater of 9% of the floor area and 55% of the glazing area (Table 1.3): 7.92 m2. Provided: 7.98 m2 equivalent area (Appendix D). Outward-opening windows counted at the angle where the handle is 650 mm from the inside face of the wall (para 3.9a, MHCLG FAQ 15). Meets the standard.
e. Bedroom minimum free area	4% of each bedroom's floor area (Table 1.3): Bedroom 1 0.53 m2 needed, 1.13 m2 provided; Bedroom 2 0.43 m2 needed, 0.98 m2 provided; Bedroom 3 0.29 m2 needed, 0.56 m2 provided. Meets the standard.

2a.3 Designer's declaration

Designer's name	Jo Example
Designer's organisation	Example Architects Ltd
Designer's signature	
Registration number (if applicable)	
Date of design	

Part 3 - Completion details

Both the builder and the building control body inspector should complete this section.

3.1 Builder's declaration

Has the residential building been constructed and completed according to the specifications set out in Parts 1 and 2 of this checklist?	Yes [] No []
Builder's name	
Builder's organisation	
Builder's signature	
Date of signature	

3.2 Building control body inspector's declaration

Is the residential building's construction consistent with the details provided in Parts 1 and 2 of this checklist?	Yes [] No []
Inspector's name	
Inspector's signature	
Registration number (if applicable)	
Date of inspection	

Rooms

Room	Type	Floor	Area m2	Glass m2	Glass/floor	Bedroom: needed / provided m2	Bedroom check
Living room	Living room	Ground	15.00	2.40	16.0%	-	
Kitchen/dining (most glazed room)	Kitchen or dining	Ground	16.50	4.00	24.2%	-	
Hall	Hall, landing or stairs	Ground	5.00	0.30	6.0%	-	
Bedroom 1	Bedroom	Upper	13.20	2.00	15.2%	0.53 / 1.13	Meets
Bedroom 2	Bedroom	Upper	10.80	1.60	14.8%	0.43 / 0.98	Meets
Bedroom 3	Bedroom	Upper	7.20	1.00	13.9%	0.29 / 0.56	Meets
Bathroom	Bathroom or WC	Upper	5.00	0.60	12.0%	-	
Landing	Hall, landing or stairs	Upper	4.50	0.70	15.6%	-	

Floor areas to the inside face of the walls (Appendix A); for an open-plan room, the area within 4.5 m of its most glazed wall. The most glazed room is the room with the most glass in m2 (Future Homes Hub Part O guidance); only that room is held to the room limit. Bedroom provision counts only windows that can be open at night: on the ground floor, or where easily accessible, only those secure when open (paras 3.6-3.7).

Windows and doors

#	Ref	Room	Faces	Type	Glass m2	Opening part, mm (n x W x H)	Angle	What limits it	Equiv. area m2	Method
1		Living room	S	Casement, side-hung (opens out)	2.40	2 x 600 x 1200	56.4 deg	650 mm handle rule, reveal 150 mm (para 3.9a, FAQ 15)	1.13	ESFA calculator
2		Kitchen/dining	N	French or patio door (hinged)	2.60	2 x 750 x 2050	90.0 deg		2.63	ESFA calculator
3		Kitchen/dining	N	Casement, side-hung (opens out)	1.40	2 x 500 x 1000	90.0 deg		0.86	ADO Table D9
4		Hall	S	Front or entrance door (glass only)	0.30	glass only	-	Front door: glass counts, opening does not	0.00	-
5		Bedroom 1	S	Casement, side-hung (opens out)	2.00	2 x 600 x 1200	56.4 deg	650 mm handle rule, reveal 150 mm (para 3.9a, FAQ 15)	1.13	ESFA calculator
6		Bedroom 2	N	Casement, side-hung (opens out)	1.60	2 x 550 x 1100	65.4 deg	650 mm handle rule, reveal 150 mm (para 3.9a, FAQ 15)	0.98	ESFA calculator
7		Bedroom 3	S	Casement, side-hung (opens out)	1.00	1 x 600 x 1200	56.4 deg	650 mm handle rule, reveal 150 mm (para 3.9a, FAQ 15)	0.56	ESFA calculator
8		Bathroom	N	Top-hung (opens out)	0.60	1 x 500 x 600	56.4 deg	650 mm handle rule, reveal 150 mm (para 3.9a, FAQ 15)	0.27	ESFA calculator
9		Landing	N	Casement, side-hung (opens out)	0.70	1 x 500 x 1000	90.0 deg		0.43	ADO Table D9
Total					12.60				7.98	

Equivalent area to Approved Document O Appendix D. Where an opening's size and angle fall on the grid of Tables D1-D9, the printed table value is used (D2b); otherwise the discharge coefficient calculator that Appendix D refers to (the ESFA calculator, D2a; MHCLG FAQ 8). Each line names the one used. Width runs from the hinge to the handle side; top-hung windows are assessed with the height and width reversed (D3a), centre-pivot windows as two hung sections (D3b), and sash, sliding and bifold openings on their clear opening at 90 degrees, one pane of a sash or slider (D3c; Future Homes Hub guidance). Top-hung roof windows are counted in their centre-pivot position at 90 degrees. Outward-opening windows count only up to the angle at which the handle is 650 mm from the inside face of the wall (para 3.9a, MHCLG FAQ 15), on every floor; upper-floor openings without guarding to 1.1 m count as a 100 mm opening (paras 3.8-3.9, Table 3.1).

Every direction

The same design with its front facing each of the 16 compass points, for a house type built on plots that face different ways. Each direction may take whichever route passes: the plain limits, or the high-risk glazing limits with shading under MHCLG FAQ 2. Every plot has to meet the rules in its own direction.

Front faces	Result	Front faces	Result
N	Passes	S *	Passes
NNE	Passes	SSW	Passes
NE	Fails: whole-home glazing, the most glazed room	SW	Passes
ENE	Fails: whole-home glazing, the most glazed room	WSW	Passes
E	Fails: whole-home glazing, the most glazed room	W	Passes
ESE	Fails: whole-home glazing, the most glazed room	WNW	Passes
SE	Fails: whole-home glazing, the most glazed room	NW	Passes
SSE	Passes	NNW	Passes

* the direction assessed in full in this report.

Plots

Plot	Front faces	Handed	Result	Fails on
Plot 12	S (South)	No	Passes	
Plot 13	SW (South-west)	Yes	Passes	
Plot 14	W (West)	No	Passes	
Plot 15	N (North)	No	Passes	

A handed plot is the house type built as its mirror image: its left and right sides swap. A plot passing with FAQ 2 must carry the para 1.9 shading on its glass from north-east round to north-west via south.

The checks in detail

Glazing, whole home - meets the standard (Table 1.1, para 1.6a)

12.60 m2 of glass is 14.3% of the 88.00 m2 floor area. The limit is 18% (15.84 m2).

Most glazed room - meets the standard (Table 1.1, para 1.6b)

Kitchen/dining is the most glazed room, with the most glass: 4.00 m2 on 16.50 m2 is 24.2%. The limit is 37% of the room's floor area.

Opening area, whole home - meets the standard (Table 1.3, paras 1.10-1.12)

The windows and doors give 7.98 m2 of opening area. Required: the greater of 9% of the floor area (7.92 m2) and 55% of the glazing area (6.93 m2), so 7.92 m2.

Opening area, bedrooms - meets the standard (Table 1.3 (bedroom minimum 4%))

Bedroom 1: 1.13 m2 provided, 0.53 m2 needed; Bedroom 2: 0.98 m2 provided, 0.43 m2 needed; Bedroom 3: 0.56 m2 provided, 0.29 m2 needed.

Every plot, in its own direction - meets the standard (paras 1.3-1.4, Tables 1.1-1.4)

All 4 plots pass, each checked in the direction it is built.

Notes and assumptions

- Outward-opening windows are counted only up to the angle at which the handle is 650 mm from the inside face of the wall (ADO para 3.9a; MHCLG FAQ 15 says to use that angle for the opening area). It need not be a physical stop. It is applied on every floor: ADO gives no ground-floor exemption.

- French and patio doors are assessed as side-hung leaves (Appendix D). The 650 mm handle rule in para 3.9a is written for windows, so it is not applied to doors.

- Front and entrance doors are not counted for removing excess heat, because they cannot be left open securely (the Future Homes Hub Part O guidance treats the entrance door as shut). Their glass still counts towards the glazing limits.

Basis of this report

Method: Approved Document O (2021 edition, England), the simplified method of Section 1 (paras 1.1-1.13, Tables 1.1-1.4), with Section 3 (paras 3.1-3.11), Appendix A (key terms), Appendix C (Table C1, high-risk locations) and Appendix D (equivalent area). Also applied: MHCLG "Approved Document O: frequently asked questions" (FAQ 2 west-facing shading, 4-5 orientation, 6 Manchester, 8 the calculator for other sizes, 15 the 650 mm handle), the ESFA discharge coefficient calculator that Appendix D refers to, and the Future Homes Hub Part O guidance on the most glazed room, sashes and doors. The calculation reproduces all 495 values in Tables D1-D9.

This report is a calculation of what was entered by the person who prepared it: floor and room areas, glass areas, opening sizes and how each window opens. It does not check those inputs against the drawings or the building. Compliance is decided by the building control body; Part 2a.3 must be signed by a person competent to design the residential building. Where the simplified method cannot be met, Approved Document O allows dynamic thermal modelling to CIBSE TM59 instead.

Prepared with O-Monkey, the Part O checker from Energycount Limited (energy and sustainability consultants since 2006, Lytchett Matravers, Poole, Dorset; 01202 623236; energycount.co.uk).