
Daylight & Sunlight

Response to BRE Review dated 08/12/2025

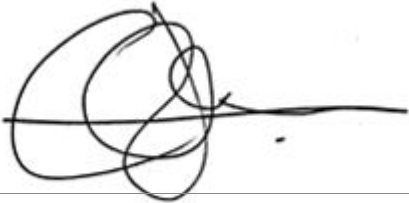
Peveril Securities Limited

Napier Court



31st March 2026



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About MES Building Solutions

MES Building Solutions (MES) is an established consultancy practice specialising in providing building solutions throughout the UK.

We offer a full range of services for both residential and commercial buildings from small individual properties through to highly complex mixed use developments.

We are an industry leader in delivering a professional, accredited and certified service to a wide range of clients including architects, developers, builders, housing associations, the public sector and private householders.

Employing highly qualified staff, our team comes from a variety of backgrounds within the construction industry with combined knowledge of building design, engineering, assessment, construction, development, research and surveying.

MES Building Solutions maintains its position at the forefront of changes in building regulations as well as technological advances. Our clients, large or small, are therefore assured of a cost effective, cohesive and fully integrated professional service.

About the Author

Chris Jones is a Director at MES Building Solutions. Chris has a Masters Degree in Energy Efficient & Sustainable Building, as well as an Honours degree in Mechanical Engineering. Chris has over 20 years' experience in providing sustainable building solutions and assists the Neighbourly Matters team at MES. He undertakes daylighting, sunlight and shadow cast analysis for planning applications. Chris is also a qualified BREEAM and Code for Sustainable Homes assessor and has worked with some of the UK's top developers, as well as housing associations and local authorities.

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1.0 Introduction

This document is a response to the BRE's Review of daylight and sunlight, assessment at Napier Court, Reading (P130050-1001) 08/12/2025, which in turn was a review of the MES Building Solutions Daylight and Sunlight Report (Assessment of the Proposed Development) dated 16/09/2025

Previous reviews undertaken by the BRE (P128713-1000 06/09/2024 and P130050-1000 03/04/2025 of the original daylight and sunlight reports by MES that were submitted as part of planning application (PL/24/0846). Our 16/09/2025 report was produced in part as a response to comments made in these original review reports by the BRE.

The BRE review includes comments on methodology used and results for impact on the neighbouring buildings. We have made no comment here on these, as they remain the same as for the previous BRE review and have been addressed previously.

2.0 Methodology

The BRE review document acknowledges that our report follows the guidance contained in the BRE Report 'Site Layout Planning for Daylight and Sunlight: A guide to good practice' (SLPDS) and BS EN17037:2018 'Daylight in Buildings'

BS EN17037:2018 sets minimum daylight targets for habitable rooms in new dwelling as follows:

Room type	Target Illuminance over at least 50% of a reference plane 0.85m from the floor, for at least half of the daylight hours (lx)	Equivalent Daylight Factor (D, %) for London area (appropriate for Reading)
Bedroom	100	0.7%
Living Room	150	1.1%
Kitchen	200	1.4%

With regard to daylight provision in the proposed rooms the BRE acknowledges that although BS EN17037:2018 states that where a room has a shared use, the higher target value should apply, in practice many local authorities will accept the target value for living rooms in a shared kitchen space, as it would "make little sense to have a separate small non-daylit kitchen to force compliance with the recommendation".

Our report contains two sets of results for daylight provision within LKDs, one using the 200lux target to kitchens and one using the 150lux target for living rooms. We have also provided results fusing two surface reflectance values for internal walls of 0.8 and 0.7. The BRE document suggests that the latter figure of 0.7 is more appropriate and their review is therefore based upon this set of results within our report.

In relation to surface reflectance, the BRE comment that they feel the figure of 0.65 chosen for the underside of balconies is higher than the maximum suggested in SLPDS. Given that the balconies in question are behind the façade, set within the building, they will be well protected from weather and as a result are unlikely to pick up as much dirt and grime as might be expected for an exposed surface. We therefore feel that our assumed reflectance of 0.65 is reasonable in these circumstances.

3.0 Daylight Results

The BRE review contains the following summary of the results, assuming a surface reflectance of 0.7 for internal walls and, for the LKDs, using both the 200lux target for kitchens and 150lux target for living rooms:

Block	Total LKDs	LKDs meeting living room recommendation (percentage meeting) [rooms below recommendation]	LKDs meeting kitchen recommendation (percentage meeting) [rooms below recommendation]
Block A	177	129 (73%) [48 rooms below]	104 (59%) [73 rooms below]
Block B	141	120 (85%) [21 rooms below]	97 (69%) [44 rooms below]
Block C	141	126 (89%) [15 rooms below]	109 (77%) [32 rooms below]
Block D	117	82 (70%) [35 rooms below]	73 (62%) [44 rooms below]
Total	576	457 (79%) [119 rooms below]	383 (66%) [193 rooms below]

They then go on to say that the results suggest that 79% of LKDs would meet at least the living room recommendation while 66% would meet the higher kitchen daylight recommendation. They acknowledge that this is a large improvement compared to the previous scheme review.

They do however state that there is a discrepancy between their assessment of the results and that contained within Appendix 4.1 of our report suggesting that our report suggests six fewer LKDs below the living room target in Block D.

Upon our own further review of the results in our report, there is indeed an error in the summary table in Appendix 4.1. However, our summary shows six more LKDs below the living room target, not six fewer. Below is a reproduction of the table from Appendix 4.1:



BRE Room Daylight Assessment (Spatial Daylight Autonomy) LKD Summary

Project; Napier Court (Revised Design with LKDs at 150Lux & Cream Walls)

Date of Analysis: 19/08/2025

FLOOR	BLOCK A			BLOCK B			BLOCK C			BLOCK D			ALL BLOCKS		
	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M
0	3	1	1	7	3	1	7	1	1	9	3	3	26	8	6
1	18	7	6	14	4	2	14	2	2	11	5	1	57	18	11
2	18	7	6	14	3	2	14	2	2	11	4	1	57	16	11
3	18	6	6	14	2	2	14	2	2	11	4	1	57	14	11
4	18	6	6	14	2	2	14	2	2	11	4	1	57	14	11
5	18	6	5	14	2	2	14	2	1	11	5	1	57	15	9
6	18	6	4	14	2	2	14	2	1	11	4	0	57	14	7
7	17	5	2	13	2	1	13	1	1	11	3	0	54	11	4
8	17	3	0	13	1	0	13	1	0	11	3	0	54	8	0
9	16	0	0	12	0	0	12	0	0	10	3	0	50	3	0
10	16	0	0	12	0	0	12	0	0	10	3	0	50	3	0
TOTAL	177	47	36	141	21	14	141	15	12	117	41	8	576	124	70
%	100%	27%	20%	100%	15%	10%	100%	11%	9%	100%	35%	7%	100%	22%	12%

The table from our report shows 41 of the 117 LKDs assessed in Block D falling short of the target for living rooms, where as the table from the BRE review shows only 35 falling short.

Upon checking the full results spreadsheet an error was found in the summary table, the correct data is shown in the updated table below:



BRE Room Daylight Assessment (Spatial Daylight Autonomy) LKD Summary

Project; Napier Court (Revised Design with LKDs at 150Lux & Cream Walls)

Date of Analysis: 31/03/2026

FLOOR	BLOCK A			BLOCK B			BLOCK C			BLOCK D			ALL BLOCKS		
	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M	Total	No. Fail	No. Fail - M
0	3	1	1	7	3	1	7	1	1	9	3	3	26	8	6
1	18	7	6	14	4	2	14	2	2	11	4	1	57	17	11
2	18	7	6	14	3	2	14	2	2	11	3	1	57	15	11
3	18	6	6	14	2	2	14	2	2	11	3	1	57	13	11
4	18	6	6	14	2	2	14	2	2	11	3	1	57	13	11
5	18	6	5	14	2	2	14	2	1	11	4	1	57	14	9
6	18	6	4	14	2	2	14	2	1	11	3	0	57	13	7
7	17	5	2	13	2	1	13	1	1	11	3	0	54	11	4
8	17	3	0	13	1	0	13	1	0	11	3	0	54	8	0
9	16	0	0	12	0	0	12	0	0	10	3	0	50	3	0
*10	16	0	0	12	0	0	12	0	0	10	3	0	50	3	0
TOTAL	177	47	36	141	21	14	141	15	12	117	35	8	576	118	70
%	100%	27%	20%	100%	15%	10%	100%	11%	9%	100%	30%	7%	100%	20%	12%

As a result, there is actually an improvement in the pass rate of the LKDs when using the living room target. With the pass rate rising from 78% to 80%.

4.0 Sunlight Results

The BRE review acknowledges that the results for sunlight provision to the new dwelling is reasonable overall, “since in a large development it may be unrealistic to expect all living areas to meet the recommendations since north facing areas will be naturally limited in the sunlight they can receive, particularly in this case as the site is rectangular on an east-west stretch of land.”

They then go on to acknowledge that “the southerly projections help create more units capable of receiving sunlight.”