Daylight and Sunlight and Overshadowing Assessment

270 Finchley Road

For Bliss Space

November 2013

XCO2 energy

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About us:
XCO2 Energy are a low-carbon consultancy working in the built environment. We are a multi-disciplinary company consisting of both architects and engineers, with specialists including CIBSE low carbon consultants, Code for Sustainable Homes, EcoHomes and BREEAM assessors, BRE trained daylight consultants and LEED accredited professionals.

	Issue 01	Issue 02	Issue 03		
Remarks	Draft				
Prepared by	DR				
Checked by	CM				
Authorised by	JF				
Date	05/11/2013				
Project reference	8364				

Executive Summary

Sunlight and daylight analysis was carried out for the proposed development at 270 Finchley Road, located within the London Borough of Camden.

This report outlines the results of the analysis for the planning application, assessing the daylight and sunlight impacts on surrounding developments.

The methodology set out in this report is in accordance with BRE's "*Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice*" by PJ Littlefair (2011) which is accepted as good practice by Planning Authorities.

The following assessments were carried out:

- Daylight: 25 Degree Line
- Daylight: Vertical Sky Component
- Sunlight: Sunlight Access
- Sunlight: Sunlight Overshadowing

A computer modelling software was used to carry out the daylight and sunlight impact assessment.

Daylight Assessment

The daylight analysis indicates that the impact on surrounding properties arising from the proposed development will be within acceptable limits. A total number of 114 windows were assessed for daylight access. Daylight assessment results are as follows:

- 79 of the 114 windows passed 25 degree line test;
- 8 of the 114 windows achieved a VSC of greater than 27%;
- 17 windows achieved the recommended relative VSC value of 80% of their former value;
- 2 windows had the relative VSC value slightly below the recommended relative VSC of 0.8;
- the remaining 8 windows were excluded from the assessment as they belong to spaces such as bathrooms, corridors or storage, which are spaces that, according to the BRE Guide, should not be analysed.
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There are only 2 windows that did not meet the recommended relative VSC value. One window belongs to 38 Heath Drive and achieves an actual VSC of above 20% under proposed conditions. This is a fairly acceptable result for an urban environment like London.

The second window was just slightly below the recommended value of 0.8 (achieved value of 0.79) and belongs to 262 Finchley Road. There would be no perceivable difference between a relative VSC of 0.79 and 0.8. Therefore, the marginal loss of daylight at this particular window is not considered to be detrimental.

The two windows that did not achieve a recommended relative VSC of 0.8 or above, represent only 1.7% of the total number of potentially affected windows by the proposed development at 270 Finchley Road.

Therefore, in conclusion, the proposed development will not result in significant adverse impact on daylight to the surrounding properties.

Sunlight Assessment

A total of 41 south facing windows (within 90 degrees of south) on surrounding properties were assessed for annual and winter sunlight hours. Sunlight assessment results are as follows:

- 16 out of 41 windows passed 25 degree line test;
- all of the remaining windows assessed achieved 25% of probable annual sunlight hours and 5% of probable winter sunlight hours, or they achieved 80% of their existing annual/winter sunshine hours.

The proposed development is considered to have no significant adverse impact on the sunlight hours received by the surrounding properties.

Overshadowing Assessment

Three amenity areas or open spaces were identified to be in close proximity to the proposed development, and have been included in the overshadowing assessment. All assessed spaces receive no less than 2 hours of sunlight on 21 March on at least 50% of their area under proposed condition. The proposed development is not considered to have any significant impact on sunlight access to the existing amenity spaces.

Summary

In summary, the majority of the existing windows on properties surrounding the proposed development passed the relevant BRE tests for daylight sunlight access. The windows that did not pass the daylight assessment represent only 1.7% of the total number of potentially affected windows by the proposed development.

Overall, the proposed development will not cause significant negative impact to daylight and sunlight access for surrounding properties and amenity spaces.

Introduction

This report assesses the daylight, sunlight and overshadowing impacts of the proposed new build residential development may have on the existing properties and open spaces surrounding the site.

The approach is based on the BRE's "Site Layout Planning for daylight and sunlight, a Guide to good practice" PJ Littlefair 2011, which is generally accepted as good practice by Town and Country Planning authorities.

It should be noted that although the numerical values stated in the BRE provide useful guidance to designers, consultants and planning officials, these are purely advisory and may vary depending on context. Dense urban areas, for example, may often experience greater site constraints when compared to low-rise suburban areas, and thus a high degree of obstruction is often unavoidable.

Site

The proposed development at 270 Finchley Road is a residential building located along 270 Finchley Road. The development will replace an existing residential building on site.

Site analysis was carried out to identify any potential daylight and sunlight impacts on the surrounding developments. Relevant properties that may be impacted by the proposed development are annotated in the figure below.

Plan of surrounding areas for proposed development at 270 Finchley Road. Site area highlighted in pink.

Methodology

The following methodology was used to carry out the daylight, sunlight and overshadowing assessments. The methodology is based on the guidelines set out in the BRE "*Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice" (2011).*

Daylight

1. Daylight to surrounding windows

A plane is drawn at 25 degrees from the horizontal, at the centre of an existing window. If the new development intersects with this plane, the internal daylight levels of the surrounding windows may be reduced. When an obstruction of the 25 degree plane occurs, a more detailed assessment involving the Vertical Sky Component of the affected window would need to be carried out.

2. Absolute Vertical Sky Component

The Vertical Sky Component is the ratio of the direct sky illuminance falling on the vertical wall at a reference point, to the simultaneous horizontal illuminance under an unobstructed sky. To maintain good levels of daylight, the Vertical Sky Component of a window needs to be 27% or greater. If the VSC is less than 27%, then a comparison of existing and proposed levels of VSC level would need to be calculated.

3. Relative Vertical Sky Component

Good levels of daylighting can still be achieved if VSC levels are within 0.8 of their former value.

Sunlight

Access to sunlight (APSH)

The BRE test relates mainly to existing living room windows, although care should be taken to ensure that kitchens and bedrooms receive reasonable amounts of sunlight.

An Annual Probable Sunlight Hour (APSH) assessment is carried when:

- there is an obstruction within the 25 degree line, calculated from the centre of the window
- the proposed development is situated within 90 degrees due south of the window

The APSH assessment states that the existing living room window should receive at least:

- 25% of annual probable sunlight hours throughout the year and
- 5% of annual probable sunlight hours during the winter months and
- the difference between the APSH is not less than 0.8 times its former value; or
- Reduction in sunlight received over the whole year is greater than 4% of annual probable sunlight hours

The term 'annual probable sunlight hours' refers to the long-term average of the total of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account). The 'winter probable sunlight hours' is used to mean the same but only for the winter period (21 September – 21 March).

In order for the windows to be receiving adequate sunlight access, it must achieve at least 372 hours of annual probable sunlight during the year and 22 hours of winter probable sunlight. Note that the BRE guidance expects the above to be met for living room windows only.

Overshadowing

Sunlight to Amenity Spaces

Open spaces should retain a reasonable amount of sunlight throughout the year. The BRE states that for an amenity space to "appear adequately sunlit throughout the year, at least half of the area should receive at least two hours of sunlight on 21 March".

The following sections presents the daylight, sunlight and overshadowing assessment results for the proposed development.

Daylight Assessment

Analysed windows

A total of 114 windows from different buildings surrounding the site were highlighted as being potentially affected by the proposed development.

These buildings include:

- 38 Heath Drive (window nos. 1-17);
- 262 Finchley Road (window nos. 18-30);
- 272 Finchley Road (window nos. 31-42);
- 37 Heath Drive (window nos. 43-54);
- Residential building to the south (window nos. 55-114);

The following section shows the results for the daylight assessment of the above windows. The results are shown for the tests below, as detailed in the methodology on Page 6:

- 25 degree line;
- Vertical Sky Component (VSC), for those windows not passing the 25 degree line;
- Relative VSC, for those windows not achieving 27% VSC;

The results are presented for each building group on the following pages.

38 Heath Drive

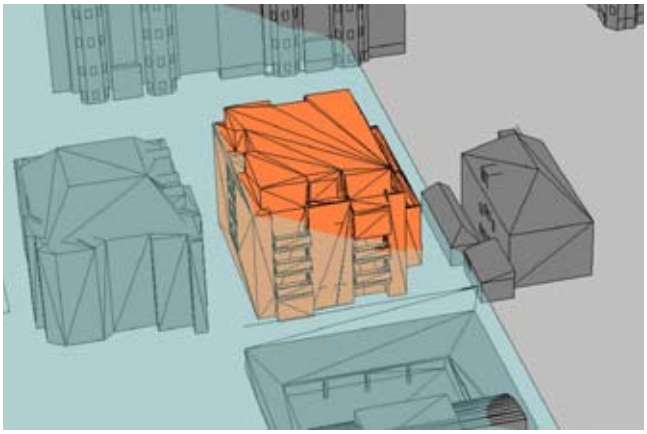
A total of 17 windows located on 38 Heath Drive have been identified as facing the proposed development and therefore may suffer from daylight impacts.

Solar envelope analysis indicates that 11 windows had VSC levels above the BRE target of 27% or they achieved the recommended relative VSC value of 0.8. 6 remaining windows did not achieve the recommended relative VSC levels. However, according to the BRE Guide, daylight analyses should include only windows serving habitable areas (e.g. kitchens, living rooms and bedrooms) while spaces such as bathrooms and corridors should be excluded from the assessment.

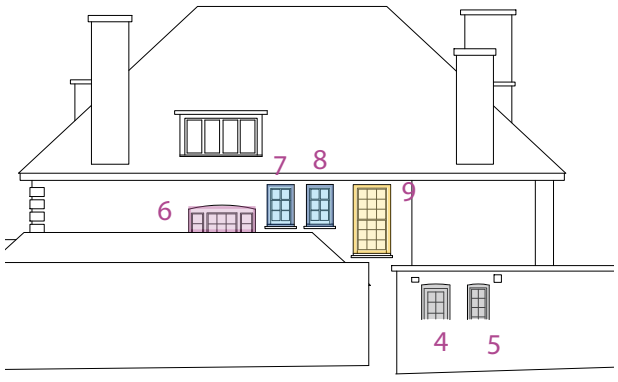
Therefore, further analysis was carried out for windows at 38 Heath Drive that did not meet the recommended VSC values. These are shown on the elevation below (windows nos. 4-9).

Potentially affected windows on 38 Heath Drive

Potentially affected windows on 38 Heath Drive



25° line emanating from lowest floor window on 38 Heath Drive



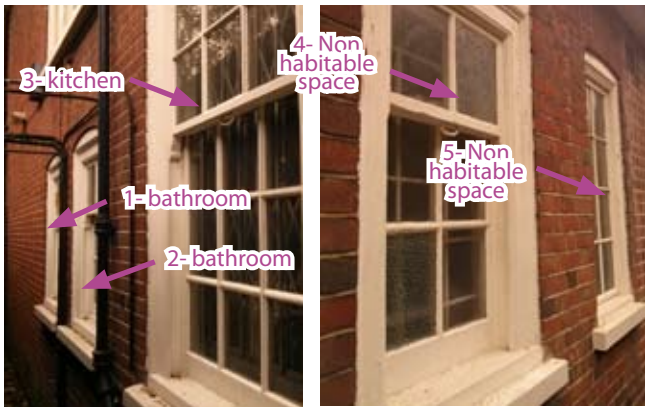
Elevation 38 Heath Drive

Staircases
Non habitable space
Bathroom/Toilet
Bedroom

Analysis shows that majority of windows at 38 Heath Drive that did not meet the recommended VSC values (windows nos. 4-9) belong to spaces such as bathrooms, corridors or storage which, according to the BRE, should not be assessed. Only one of the windows (window nos. 6) with the relative VSC value below 0.8 serves a habitable space. However, the loss of daylight at this particular window is not considered to be detrimental as the actual VSC achieved under proposed conditions is above 20%, which for urban areas like London is a fair result.

Therefore, the proposed development is not considered to have a significant adverse impact to the existing house at 38 Heath Drive.

38 Heath Drive



38 Heath Drive

Result Summary for 38 Heath Drive

Win No.	Room use	25 degree line test	VSC test			PASS / FAIL
			Before (%)	After (%)	Relative VSC	
1	Bathroom	Not passed	16.5	14.7	0.89	PASS
2	Bathroom	Not passed	16.7	14.7	0.88	PASS
3	Kitchen	Not passed	18.1	15.6	0.86	PASS
4	Non habitable	Not passed	27.6	19.8	0.72	N/A
5	Non habitable	Not passed	29.1	22.0	0.76	N/A
6	Bedroom	Not passed	28.8	21.3	0.74	FAIL
7	Bathroom	Not passed	32.3	23.5	0.73	N/A
8	Bathroom	Not passed	32.8	24.2	0.74	N/A
9	Staircases	Not passed	32.8	25.2	0.77	N/A
10-17	-	Not passed	-	>27	-	PASS

Number of windows	17
Windows passing 25 degree line test	0
Windows with a VSC greater than 27%	8
Windows that have a VSC of at least 80% of existing value	3
Windows excluded from the assessment	5
Windows that do not meet either criteria	1

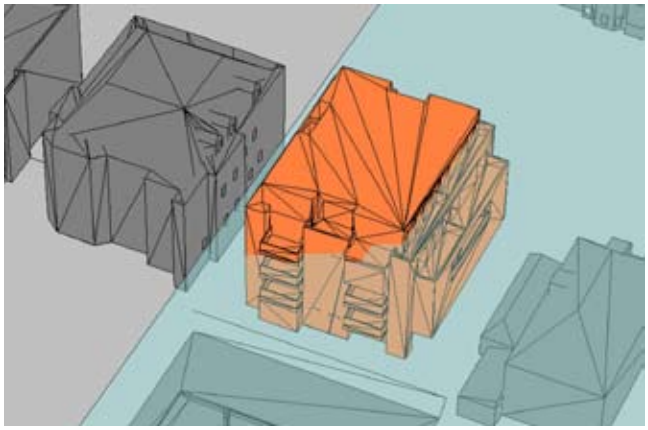
262 Finchley Road

A total of 13 windows located on 262 Finchley Road have been identified as facing the proposed development and therefore may suffer from daylight impacts.

Solar envelope analysis indicates that 3 windows pass the 25 degree line test. 7 of the remaining 26 windows had relative VSC levels below the recommended value of 0.8 under original condition. For those windows, revised VSC targets were set in accordance with the BRE guide Appendix F and are explained in detail on the following pages. The remaining 3 windows are excluded from the assessment as those windows do not serve habitable spaces, which is in line with the BRE Guide.

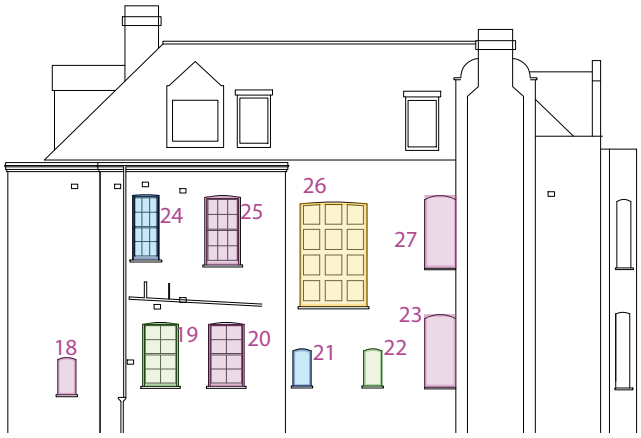
Similarly to the 38 Heath Drive, room uses to the windows facing the proposed development were determined for 262 Finchley Road. Only windows that did not previously meet BRE requirements were further analysed.

Potentially affected windows on 262 Finchley Road

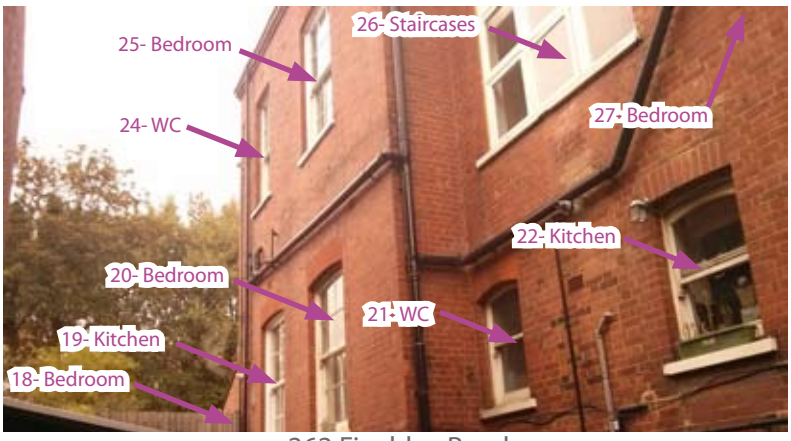

25° line emanating from lowest floor window on 262 Finchley Road

Photographs and an elevation drawing of the 262 Finchley Road show the rooms uses to the windows that did not meet the recommended relative VSC targets.

The table below shows that all the windows on the façade of 262 Finchley Road which faces the development site do not meet the standard BRE VSC targets. However, this does not mean that the loss of daylight to those windows is unacceptable.



Elevation 262 Finchley Road



262 Finchley Road

262 Finchley Road

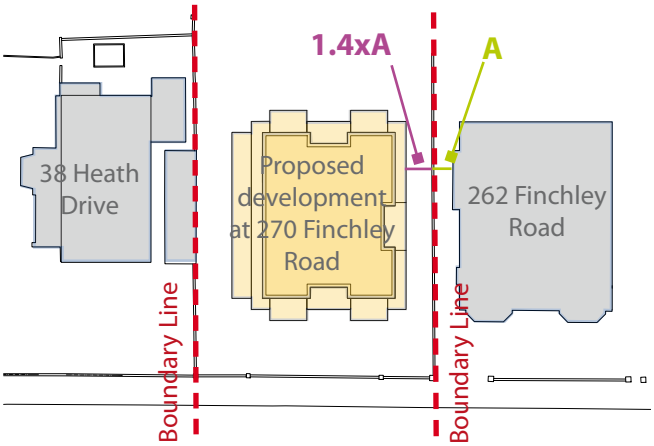
Result Summary for 262 Finchley Road

Window No.	Room use	25 degree line test	VSC test			PASS / FAIL
			Before (%)	After (%)	Relative VSC	
18	Bedroom	Not passed	25.6	12.1	0.47	FAIL
19	Kitchen	Not passed	23.7	7.8	0.33	FAIL
20	Bedroom	Not passed	16.7	7.0	0.42	FAIL
21	Bathroom	Not passed	12.9	6.1	0.48	N/A
22	Kitchen	Not passed	16.7	7.7	0.46	FAIL
23	Bedroom	Not passed	23.1	9.6	0.42	FAIL
24	Bathroom	Not passed	37.8	14.7	0.39	N/A
25	Bedroom	Not passed	35.6	13.6	0.38	FAIL
26	Staircases	Not passed	30.2	12.4	0.41	N/A
27	Bedroom	Not passed	35.2	15.8	0.45	FAIL

The building at 262 Finchley Road sits very close to the site boundary of the development site. In fact, this pattern is consistent all along Finchley Road where buildings sit very close to their sideward site boundary and the direct neighbour, of similar mass and scale, sits a similar distance from the site boundary itself. Both properties limiting the expected daylight levels within rooms with windows on those sideward facades.

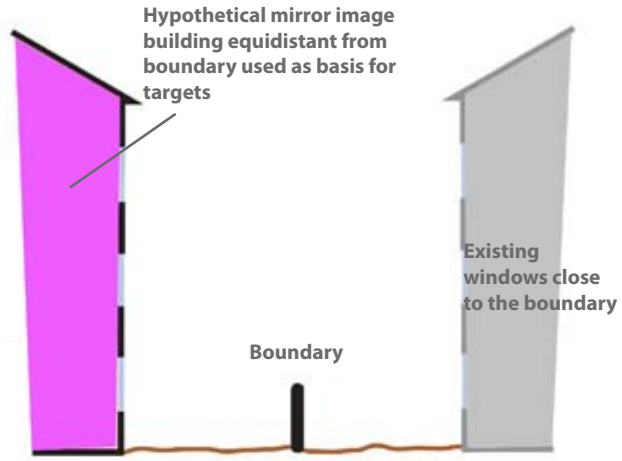
Finchley Road massing pattern

The poor results from the standard BRE test is a result of the existing building on the proposed development site being of much smaller scale and massing of its direct neighbours' who are larger in volume and sit close to their site boundary. Arguably, the windows on 262 Finchley Road which face onto the proposed development site now receive more than their fair share of daylight in comparison to other similar buildings along the same road. e.g. the relationship of 262 to 260 and likewise 260 to Osprey Court at 256.



Proposed development at 270 Finchley road and distance to the site boundary comparison

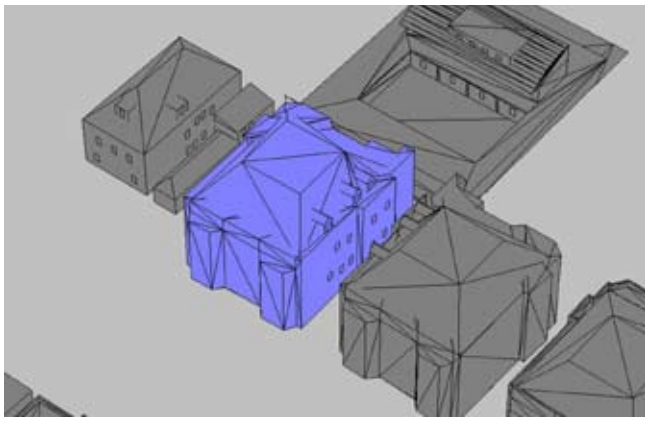
The BRE guide covers examples such as this where existing neighbouring buildings sit very close to the boundary of a development site. Appendix F of the BRE Daylight and Sunlight Guide advises that in such cases alternative VSC targets can be set. The suggested way of setting the revised target for each window is to mirror a copy the existing neighbouring building across the site boundary onto the development site and calculate the VSC levels based on this arrangement. This suggests that it is only fair for a development site to accommodate a building of similar mass and scale to that of its neighbour. This is also commonly accepted on principles of townscape, planning and urban massing. Looking at the local context, there is a repeat of the mansion block model which exists at 262 all along Finchley Road. The proposed building at the development site will follow this same pattern. Therefore, the VSC testing for the impact on 262 was re-assessed based on the revised VSC targets as advised by the BRE.



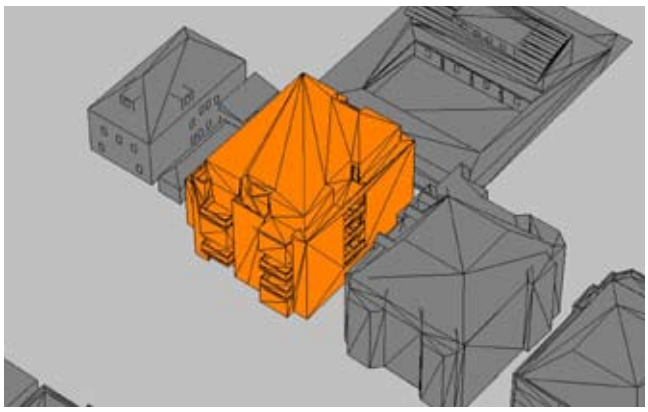
Use of hypothetical mirror image building to set target daylight values (Source, BRE Site Layout Planning for Daylight and Sunlight)

The revised results for the 262 Finchley Road show that 3 windows passed the 25 degree line, whilst 6 windows achieved a relative VSC greater than 0.8. 3 windows were excluded from the assessment as they belong to non habitable spaces, which is in line with the BRE Guide. Only 1 window (win. no. 25) at 262 Finchley Road facing the proposed development had a relative VSC ratio of below 0.8. Although this window did not meet the BRE requirement for daylight, the relative VSC for this window is 0.79, which is very close to the recommended 0.8. There would be no perceivable difference between a relative VSC of 0.79 and 0.8 and therefore we do not believe that this will cause a detrimental impact to daylight received.

Overall, it is concluded that the proposed development will not have a significant impact on daylight access to the surrounding windows.



Determining VSC targets with the mirror image building



Determining VSC levels under the proposed condition

Result Summary- Revised VSC targets based on Appendix F

Win. No.	Room use	25 degree line test	VSC test			PASS / FAIL
			Before (%)	After (%)	Relative VSC	
18	Bedroom	Not passed	12.3	13.5	1.10	PASS
19	Kitchen	Not passed	9.9	9.8	0.98	PASS
20	Bedroom	Not passed	8.9	8.3	0.93	PASS
21	Bathroom	Not passed	7.7	6.6	0.86	N/A
22	Kitchen	Not passed	9.9	8.7	0.87	PASS
23	Bedroom	Not passed	12.5	11.1	0.88	PASS
24	Bathroom	Not passed	20.7	16.4	0.79	N/A
25	Bedroom	Not passed	18.8	14.8	0.79	FAIL
26	Staircases	Not passed	16.9	13.3	0.79	N/A
27	Bedroom	Not passed	20.9	16.9	0.81	PASS
28-30	-	Passed	-	-	-	PASS

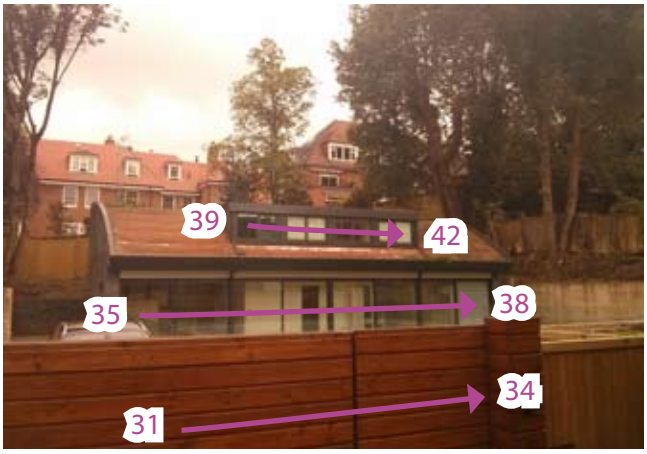
Number of windows	13
Windows passing 25 degree line test	3
Windows with a VSC greater than 27%	0
Windows that have a VSC of at least 80% of existing value	6
Windows excluded from the assessment	3
Windows that do not meet either criteria	1

272 Finchley Road and 37 Heath Drive

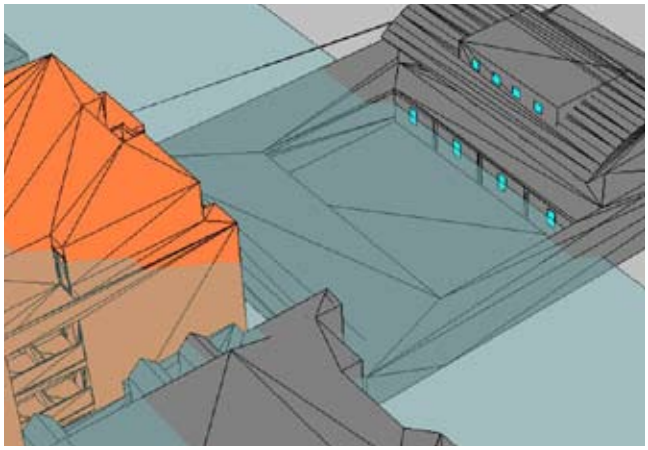
A total of 24 windows located on 272 Finchley Road and 37 Heath Drive immediately north and northwest of the site, have been identified as facing the proposed development and therefore may suffer from daylight impacts.

Solar envelope analysis indicate that 16 windows pass the 25 degree line test. The remaining 8 windows had VSC levels above the BRE target of 80% of their existing value..

Therefore, the proposed development is not considered to have any significant adverse impact to the assessed windows at 272 Finchley Road and 37 Heath Drive.

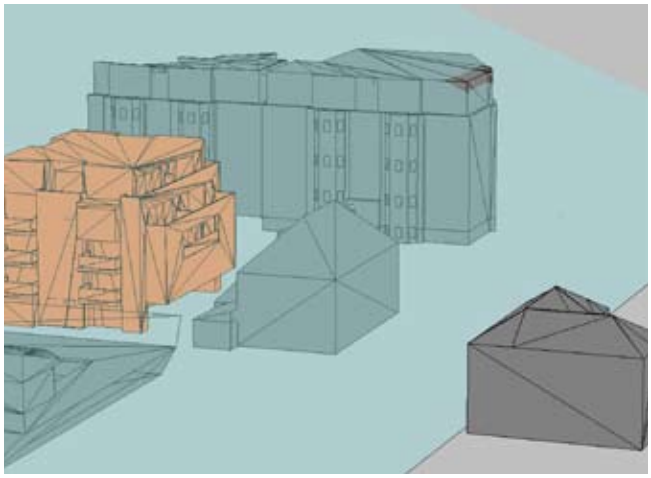


Potentially affected windows 272 Finchley Road



25° line emanating from lowest floor window on 272 Finchley Road

Potentially affected windows on 37 Heath Drive



25° line emanating from lowest floor window on 37 Heath Drive

Result Summary

Window No.	25 degree line test	VSC test			PASS / FAIL
		Before (%)	After (%)	Relative VSC	
31	Not Passed	28.5	26.1	0.92	PASS
32	Not Passed	29.8	26.5	0.89	PASS
33	Not Passed	29.3	26.4	0.90	PASS
34	Not Passed	28.1	26.2	0.93	PASS
35	Not Passed	13.4	11.4	0.85	PASS
36	Not Passed	13.0	10.5	0.81	PASS
37	Not Passed	12.6	10.1	0.80	PASS
38	Not Passed	12.9	10.4	0.81	PASS
39-54	Passed	-	-	-	PASS

Number of windows	24
Windows passing 25 degree line test	16
Windows with a VSC greater than 27%	0
Windows that have a VSC of at least 80% of existing value	8
Windows that do not meet either criteria	0

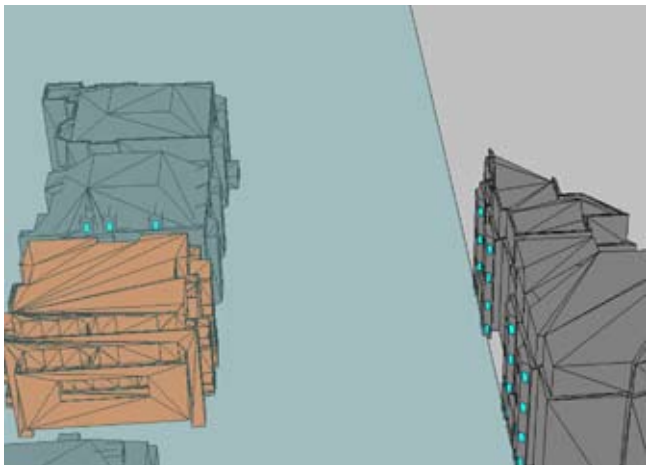
Residential building to the south

A total of 60 windows located on the residential buildings to the south, west and northwest of the site, have been identified as facing the proposed development and therefore may suffer from daylight impacts.

Solar envelope analysis indicate that all windows on the residential buildings to the south, west and northwest of the site pass the 25 degree line test.

Therefore, the proposed development is not considered to have any significant adverse impact to the assessed windows.

Potentially affected windows on residential building to the south



25° line emanating from lowest floor window on residential building to the south

Result Summary

Window No.	25 degree line test	VSC test			PASS / FAIL
		Before (%)	After (%)	Relative VSC	
55-114	Passed	-	-	-	PASS

Number of windows	60
Windows passing 25 degree line test	60
Windows with a VSC greater than 27%	0
Windows that have a VSC of at least 80% of existing value	0
Windows that do not meet either criteria	0

Summary of Offsite Daylight Results

Daylighting levels for the existing windows adjacent to the proposed site were found to be acceptable. Majority of the existing windows on the surrounding properties passed the 25 degree line test or one of VSC tests.

In summary,

- 79 of the 114 windows passed 25 degree line test;
- 8 of the 114 windows achieved a VSC of greater than 27%;
- 17 windows achieved the recommended relative VSC value of 80% of their former value;
- 2 windows had the relative VSC value slightly below the recommended relative VSC of 0.8;
- the remaining 8 windows were excluded from the assessment as they belong to spaces such as bathrooms, corridors or storage, which are spaces that, according to the BRE Guide, should not be analysed.

There are only 2 windows which did not meet the recommended relative VSC value of 0.8. One of them belongs to 38 Heath Drive and achieves a VSC of above 20% under proposed conditions. This is a fairly acceptable result in an urban environment like London.

The second window was just slightly below the recommended value of 0.8 (achieved value of 0.79) and belongs to 262 Finchley Road. There would be no perceivable difference between a relative VSC of 0.79 and 0.8. Therefore, the marginal loss of daylight at this particular window is not considered to be detrimental. In addition, the windows that did not achieve the recommended BRE represent only 1.7% of the windows potentially affected by the proposed development at 270 Finchley Road.

Therefore, in conclusion, the proposed development will not result in significant adverse impact on daylight to the surrounding properties.

Summary of Daylight Results for Surrounding Windows

Total no. of windows	Test 1: Windows passing 25 degree line	Test 2: Windows passing 27% VSC	Test 3: Windows passing Relative VSC	Windows not meeting test 1, 2 and 3	Windows for which VSC test is not applicable (non habitable space)
114	79	8	17	2	8

Sunlight Assessment

Sunlight Assessment

A sunlight assessment was carried out on the existing facades to determine acceptable sunlight levels. Note the sunlight tests only apply to those windows which face within 90 degrees of due south. Therefore, the total number of windows analysed was 41.

This test calculates the amount of sunlight hours the window receives across a whole year and over the winter period (21 September - 21 March), allowing for average levels of cloudiness for the location. The following criteria must be met to pass this test:

- the 25 degree line plan emanating from the window is not obstructed; or
- windows receive at least 25% of annual probable sunlight hours and at least 5% of probable sunlight hours in the winter (21 September - 21 March); or
- windows under proposed conditions receiving more than 0.8 times it's former value during either periods; or
- the reduction in sunlight received over the whole year is less than 4% of annual probable sunlight hours

The term 'annual probable sunlight hours' refers to the long-term average of the total of hours during a year in which direct sunlight reaches the unobstructed ground (when clouds are taken into account). The 'winter probable sunlight hours' is used in the same way but only for the winter period (21 September – 21 March). The sunlight assessment results for the windows analysed are presented in the table below.

Sunlight Results for Surrounding Windows

Window No.	25 degree line test	Annual Probable Sunlight Hours			Winter Probable Sunlight Hours			% annual sunlight hours reduced	PASS / FAIL
		Existing	Proposed	Ratio of existing & proposed	Existing	Proposed	Ratio of existing & proposed		
1	Not passed	378	320	0.85	-	>22	-	-	PASS
2	Not passed	392	336	0.85	-	>22	-	-	PASS
3-17	Not passed	-	>372	-	-	>22	-	-	PASS
31-34	Not passed	-	>372	-	-	>22	-	-	PASS
35	Not passed	392	337	0.86	-	>22	-	-	PASS
36	Not passed	382	323	0.85	-	>22	-	-	PASS
37	Not passed	374	315	0.84	-	>22	-	-	PASS
38	Not passed	-	>372	0.87	-	>22	-	-	PASS
39-54	Passed	-	-	-	-	-	-	-	PASS

Summary of Sunlight Results

Sunlight assessment was carried out for 41 no. off-site south facing windows (within 90 degrees of due south).

Sunlight assessment results are as follows:

- 16 windows passed 25 degree line test;
- all of the remaining windows assessed achieved 25% of probable annual sunlight hours and 5% of probable winter sunlight hours, or they achieved 80% of their existing annual/winter sunshine hours.

The proposed development is not considered to have any significant adverse impact on sunlight hours received by the surrounding properties.

Summary of Sunlight to Existing Buildings Results

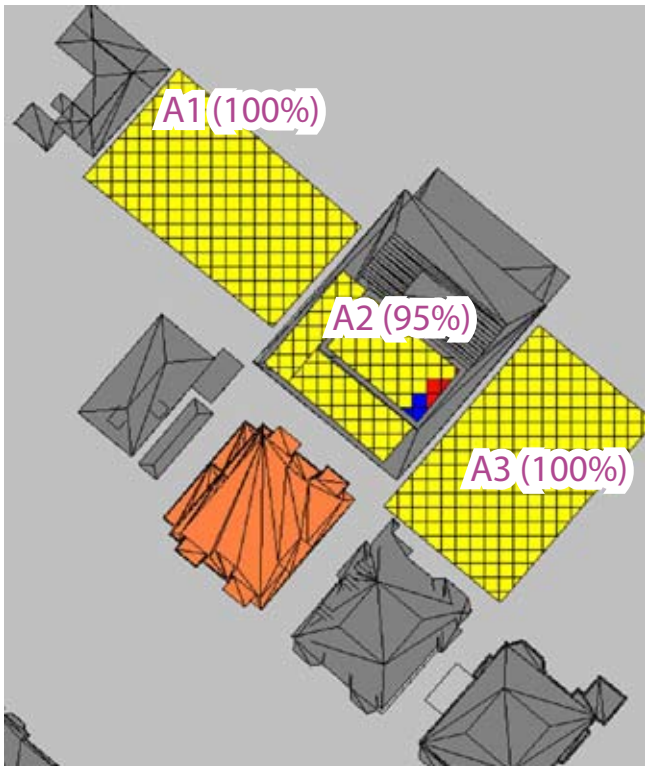
Total no. of windows	Test 1: 25 degree line	Test 2: Windows passing		Test 3: Proposed conditions with 0.8 times sunlight hours of existing condition during either period	Test 4: reduction of sunlight hours over the whole year less than 4% of annual probable sunlight hours	Windows not meeting test 1, 2, 3 and 4
		25% of annual sunlight hours	5% of winter sunlight hours			
41	16	20	25	25	0	0

Overshadowing Assessment

Overshadowing Assessment

A review of the site plan showed that there are three amenity or open spaces in close proximity to the proposed development, as shown in the figure opposite.

A Solar Access Analysis was undertaken on this amenity area for the full 24 hours on 21 March. The image shows that at least 50% of each analysed space will receive more than 2 hours of sunlight on 21 March. The proposed development is not considered to have any significant adverse impact on sunlight access to these amenity and open spaces.



Overshadowing of amenity and open spaces surrounding the proposed development. Percentage of area receiving at least 2 hours of sunlight denoted in figure.

Conclusion

The daylight analysis indicates that the impact on surrounding properties arising from the proposed development at 270 Finchley Road will be within acceptable limits.

Daylight Assessment

The daylight analysis indicates that the impact on surrounding properties arising from the proposed development will be within acceptable limits. A total number of 114 windows were assessed for daylight access. Daylight assessment results are as follows:

- 79 of the 114 windows passed 25 degree line test;
- 8 of the 114 windows achieved a VSC of greater than 27%;
- 17 windows achieved the recommended relative VSC value of 80% of their former value;
- 2 windows had the relative VSC value slightly below the recommended relative VSC of 0.8;
- the remaining 8 windows were excluded from the assessment as they belong to spaces such as bathrooms, corridors or storage, which are spaces that, according to the BRE Guide, should not be analysed.

There are only 2 windows which did not meet the recommended relative VSC value. One of them belongs to 38 Heath Drive and achieves an actual VSC of above 20% under proposed conditions. This result in an urban environment such as is London, is a fairly acceptable result.

The second window was just slightly below the recommended value of 0.8 (achieved value of 0.79) and belongs to 262 Finchley Road. There would be no perceivable difference between a relative VSC of 0.79 and 0.8. Therefore, the marginal loss of daylight at this particular window is not considered to be detrimental.

Therefore, in conclusion, the proposed development will not result in significant adverse impact on daylight to the surrounding properties.

Sunlight Assessment

A total of 41 south facing windows (within 90 degrees of south) on surrounding properties were assessed for annual and winter sunlight hours. Sunlight assessment results are as follows:

- 16 out of 41 windows passed 25 degree line test;
- all of the remaining windows assessed achieved 25% of probable annual sunlight hours and 5% of probable winter sunlight hours, or they achieved 80% of their existing annual/winter sunshine hours.

The proposed development is considered to have no significant adverse impact on the sunlight hours received by the surrounding properties.

Overshadowing Assessment

Three amenity areas or open spaces were identified to be in close proximity to the proposed development, and have been included in the overshadowing assessment. All assessed spaces receive no less than 2 hours of sunlight on 21 March on at least 50% of their area under proposed condition. The proposed development is not considered to have any significant impact on sunlight access to the existing amenity spaces.

Summary

In summary, the majority of the existing windows on properties surrounding the proposed development passed the relevant BRE tests for daylight sunlight access. There are only 2 windows which did not meet the recommended relative VSC value of 0.8 and they represent only 1.7% of the windows potentially affected by the proposed development at 270 Finchley Road.

Overall, the proposed development will not cause significant negative impact to daylight and sunlight access for surrounding properties and amenity spaces.