

By Email

Right of Light Consulting

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Mr N Kalms & Mr B Radstone Sumatra House 215 west End Lane London NW6 1XJ

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Dear Mr Kalms & Mr Radstone,

BRE Daylight and Sunlight 160 Iverson Road, London NW6 2HH

Thank you for inviting us to consider the daylight and sunlight aspects of your design – and in particular, the lower ground habitable rooms as detailed on drawings:

S13/3926/01	Existing Floor Plans
1314-4-P-500	Proposed Plans – Lower Ground, Ground and First Floors
1314-4-P-501	Proposed Plans – Second and Third Floors
1314-4-E-600	Proposed Elevations Sheet 1
1314-4-E-601	Proposed Elevations Sheet 2

I have appraised the scheme with reference to the standard daylight and sunlight criteria used to assess planning applications; as set out in Building Research Establishment (BRE) Guide entitled 'Site Layout Planning for Daylight and Sunlight' 2011 by P J Littlefair.

The interior daylighting recommendations set out in the BRE guide are based on British Standard BS 8206 Part 2 and the Chartered Institute of Building Services Engineers Applications Manual on window design. Collectively, the guides set out three main criteria for interior daylighting. These are summarised with reference to the proposed scheme as follows:



Average Daylight Factor

The Average Daylight Factor takes into account a range of variables. For example, the size of the window, the type of glazing, whether the room has more than one window and factors such as the reflectivity of the internal finishes.

The Average Daylight factor test is applied to habitable rooms within domestic properties. A kitchen is generally deemed to be a habitable room if it is large enough to accommodate a dining area. If the kitchen is small or if the property has a separate dining area then the accepted practice is to treat the kitchen as a non-habitable room. The guide gives Average Daylight Factor minimum recommendations for dwellings of 2% for kitchens, 1.5% for living rooms and 1% for bedrooms.

The bedroom within the lower ground floor at No. 160 contains a large amount of glazing relative to the size of the room. I am therefore of the opinion that the habitable room within the basement will meet or surpass the minimum Average Daylight Factor recommendation.

Room Depth Test

If a daylit room is lit by windows in one wall only, the depth of the room L should not exceed the limiting value given by:

$$L + L \le 2$$
W H 1-R_b

Where

W is the room width

H is the window-head height above floor level

R_b is the average reflectance of the surfaces in the rear half of the room

The bedroom within the lower ground floor is served by a window in one wall only. As the depth of the room is relatively shallow relative to the head height of the window, I am of the opinion that this room would satisfy the room depth test.

Position of the no sky line

If a significant area of the working plane lies beyond the no sky line (i.e. it receives no direct skylight), then the distribution of daylight in the room will look poor and supplementary electric lighting will be required. The no sky line assessment is not applicable where a room derives its daylight solely from a light well or atrium. In these situations the room relies on borrowed light instead of direct skylight.

As the room within the lower ground floor is served by windows within a lightwell, I can confirm that the no sky line test is not applicable in this instance. Nevertheless, drawings '1314-4-E-600 & 1314-4-E-601', confirms that as the head heights of the front bedroom windows are located quite high up within the lightwell, a high level of direct sky will be visible deep into the bedroom.

In terms of direct sunlight, the BRE guide recommends that where possible, each dwelling should have at least one main living room window that faces within 90 degrees of due

south. Although the main window within the lower ground floor is not a living room, it does however face within 90 degrees of due south.

In summary, I am of the opinion that the habitable lower ground floor room would satisfy the minimum recommendations set out in BRE Guide 'Site Layout Planning for Daylight and Sunlight' 2011.

Yours sincerely,

Jonathan Ray

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