Daylight and Sunlight Analysis

44 Commercial Way, Woking

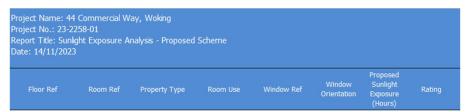
Summary

Illuminance Method (IM) / Spatial Daylight Autonomy (SDA)

All rooms achieve the guidance values as set out in the BRE guide.

It is worth noting that the main Living/Dining area is served by a horizontal roof-light. As such the BRE references (Appendix C6)the BSEN17037 which suggests a more stringent test. The current proposal meets these recommendations. The north facing bedrooms and Living Dining area have high median illuminance values however any potential solar gain should be mitigated by their north facing aspect. The only exception to this is the horizontal roof-light however this is essential for allowing light into the rear parts of the main living space.





44 Commercial Way

First	R3	Residential	LD	W4	315°N	1.6	
				W5	90° Hz	9	
						9	High
First	R4	Residential	Bedroom	W6	135°	3.4	
				W7	135°	4.8	
						4.8	High
First	R5	Residential	Bedroom	W8	135°	3.6	
				W9	135°	2.4	
						4.1	High

Statement Extract from Approved application PLAN/2023/2019 Daylighting report and assessment:

The GPDO requires an assessment of natural light to habitable rooms. Habitable rooms are defined in the GPDO as meaning:-

"..any rooms used or intended to be used for sleeping or living which are not solely used for cooking purposes, but does not include bath or toilet facilities, service rooms, corridors, laundry rooms, hallways or utility rooms".

Therefore, for the purposes of this assessment it is not necessary to assess the separate cooking only kitchens.

Settings

Materials Reflectance Used:

Internal Ceiling = 0.7

Internal Walls = 0.7

Internal Floor = 0.3

External Building = 0.2

External Baseline= 0.2

Targets

Bedroom 100 Lux / 50% of area

LD (served by horizontal aperture) 300 Lux / 95% of area

Ref: BRE209 V3 Appendix C / BSEN17037 Table A2

Window Settings

Glazing Transmittance = 0.68

Ref: BRE Appendix C26

Maintenance Factor = 0.92%

Ref: BRE Appendix C27