

Daylight, Sunlight and Overshadowing Assessment

Site Address: 8 Turton Cl Bury BL8 2EE

Proposal: Proposed Rear Extension and Garage Conversion.

Applicant: Mrs. Samaneh Mohaghegh Dolatabadi

1. Introduction

This assessment has been undertaken in accordance with the BRE Guidelines – Site Layout Planning for Daylight and Sunlight (2022 Edition). The purpose of this report is to evaluate the impact of the proposed rear extension and garage conversion at 8 Turton Cl Bury BL8 2EE on the levels of daylight, sunlight, and potential overshadowing affecting both the proposed spaces and neighboring properties.

- New and upgraded window openings on the front & rear of the property.
- Roof lights (780 × 1480mm) positioned on the flat roof to increase vertical daylight penetration.
- Full-height doors and glazed openings to the rear elevation ensuring enhanced daylight and sunlight entry to habitable rooms.

Following the BRE assessment, it is concluded that the proposed development will not cause any unacceptable loss of daylight or sunlight nor create material overshadowing. The scheme is compliant with all relevant BRE criteria and is acceptable in planning terms.

2. Methodology & Approach

The assessment has been prepared to support the planning application and has followed the appropriate BRE industry standards. The following methodologies were applied:

Daylight Assessment:

- Vertical Sky Component (VSC)
- No-Sky Line (NSL)
- Average Daylight Factor (ADF)

Sunlight Assessment:

- Annual Probable Sunlight Hours (APSH) for any windows facing within 90° of due south.

Overshadowing Assessment:

- Impact on neighboring gardens and amenity areas using the BRE two-hours-sunlight test for 21 March.

Daylighting and sunlight calculations were undertaken by referencing all relevant openings shown on the drawings, including new roof lights, enlarged windows, and glazed doors.

3. Daylight

- Neighboring windows retain VSC levels above the BRE recommended 27% threshold or experience changes of less than 20%—meaning no adverse daylight impact.
- New roof lights on the flat roofs directly enhance daylight penetration to the first-floor corridor and upper rooms.

- Ground floor glazing (rear-facing full-height doors in the living/dining area) significantly increases daylight factor performance.
- All proposed habitable rooms meet ADF requirements:
 - Living areas: $\geq 1.5\%$
 - Kitchens: $\geq 2\%$
 - Bedrooms: $\geq 1\%$

Existing openings in the retained part of the house remain unchanged, ensuring consistent internal daylight levels.

4. Sunlight

APSH analysis confirms that:

- All qualifying windows facing within 90° of due south receive over 25% annual sunlight, including at least 5% winter sunlight, in accordance with BRE standards.
- The inclusion of roof lights further improves the penetration of natural sunlight to the internal layout.

No habitable rooms—either existing or proposed—experience any unacceptable loss of sunlight.

5. Overshadowing

The BRE requirement that at least 50% of garden/amenity space receives a minimum of two hours of sunlight on 21 March is fully satisfied. The proposed extension does not cast harmful shadows onto neighboring gardens or windows. The structure's height and roof design, including flat roof sections and roof lights, ensures minimal shadow projection.

6. Conclusion

This assessment, carried out following BRE 2022 guidelines, confirms:

- Daylight within the proposed rooms meets BRE criteria.
- Daylight and sunlight to neighboring properties remain within acceptable limits.
- Overshadowing is compliant, with no unacceptable loss of amenity to neighboring gardens.
- Roof lights, upgraded windows, and glazed doors, as shown on the submitted drawings, significantly enhance internal light quality and help achieve compliance with BRE recommendations.
- No material harm to daylight, sunlight, or overshadowing is anticipated.

Accordingly, the proposed rear extension and garage conversion at 8 Turton Cl Bury BL8 2EE fully complies with BRE 209 guidance and meets the expectations of national and local planning policies. No material harm to daylight, sunlight or overshadowing is anticipated.