

Daylight & Sunlight Assessment

BRE 'Site Layout Planning for Daylight and Sunlight' Assessment

Proposed Garage Development – Planning Appendix

Prepared for planning submission

Assessment methodology based on BRE guidance (2022 edition)

1. Introduction

This report provides a daylight and sunlight assessment undertaken in accordance with the principles set out in the Building Research Establishment (BRE) guidance 'Site Layout Planning for Daylight and Sunlight – A Guide to Good Practice'. The report is intended to support a planning application for a proposed garage building located close to the boundary of a neighbouring residential property.

2. Proposed Development

The proposal comprises a detached garage structure with a conventional dual-pitched roof. The building is positioned within the southern portion of the site near the boundary with a neighbouring dwelling.

- Garage ridge height: 4.5 m
- Distance from garage ridge to boundary: 4.75 m
- Garage depth: 5.5 m
- Distance from boundary to neighbour window measured at: 9.7 m
- Boundary hedge: approx. 2 m high and approx. 2 m thick
- Garage positioned south of the neighbouring dwelling

3. Planning Policy Context

Local planning authorities commonly rely on BRE daylight and sunlight guidance when considering impacts on neighbouring amenity. The North Hertfordshire Local Plan Policy D3 (General Design Principles) requires development proposals to avoid significant loss of daylight or sunlight to neighbouring properties. BRE guidance provides the industry-accepted methodology for assessing such impacts.

4. BRE Assessment Methodology

The BRE guidance describes several metrics for assessing daylight and sunlight impacts including Vertical Sky Component (VSC), Annual Probable Sunlight Hours (APSH), and simplified screening tests. For development located opposite a neighbouring window, the 25° rule-of-thumb test is commonly applied as an initial assessment.

Under the 25° test, a line is drawn from the centre point of the neighbouring window towards the proposed development. If the development remains below an angle of 25°, the proposal is generally considered unlikely to cause a material loss of daylight or sunlight and further modelling is normally unnecessary.

5. Assessment Inputs

- Bottom of neighbor window measured at 0.85 m above ground.
- Window height measured approximately 1.2 m.
- Window centre height calculated 1.45 m above ground.
- Ground levels are approximated by the neighbour to be 0.3m lower on their side.
- The boundary hedge has not been relied upon to demonstrate compliance.

6. Daylight Geometry and Calculations

Horizontal distance from window centre to garage ridge:

$$9.7 \text{ m} + 4.75 \text{ m} = 14.5 \text{ m}$$

Vertical difference between window centre and ridge:

$$4.5\text{m} + 0.3\text{m} - 1.45 \text{ m} = 3.05 \text{ m}$$

Angle of obstruction calculation:

$$\theta = \arctan (3.35 / 14.5)$$

$$\theta \approx 13^\circ$$

7. Results

The calculated obstruction angle is approximately 13° , which is significantly below the BRE guideline threshold of 25° . The proposed garage therefore comfortably passes the BRE rule-of-thumb test.

8. Sunlight Considerations

The garage lies to the south of the neighbouring property. South-facing windows are typically the most sensitive to sunlight obstruction. However, because the development falls well below the BRE 25° threshold, the proposal is unlikely to materially reduce sunlight availability to the neighbouring window.

9. Conclusion

The proposed garage development has been assessed using the BRE 25° rule-of-thumb methodology. The calculated obstruction angle of approximately 13° is substantially below the BRE guideline threshold of 25° . On this basis, the development is unlikely to cause a significant loss of daylight or sunlight to the neighbouring property.

The proposal is therefore considered to comply with the amenity principles set out in BRE guidance and relevant local planning policy.

Figures

Figure 1 – Section used for daylight angle calculation

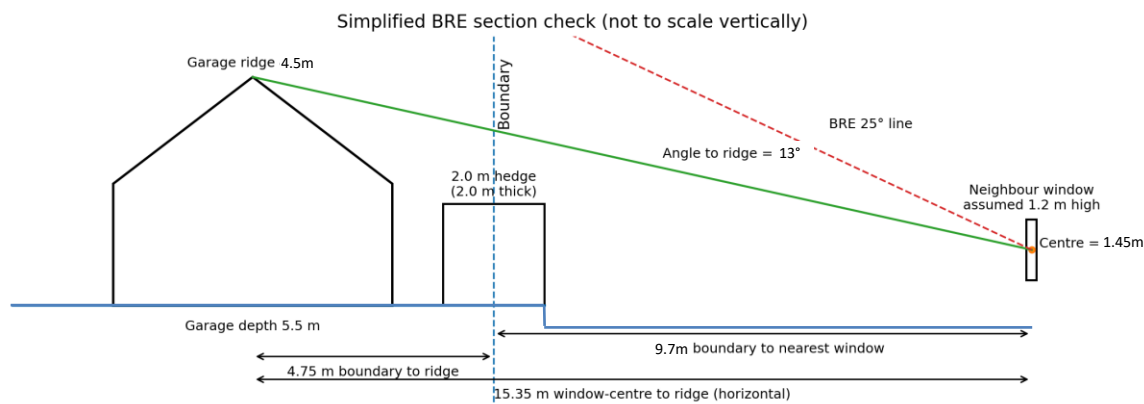


Figure 2 – Simplified plan showing relationship between garage and neighbour

