



The Society of
Light and Lighting

Opinion: Daylight in homes must be safeguarded

The importance of daylight in homes is widely understood. The ability of good daylighting to reduce reliance on electric lighting is only the beginning. People equate well daylight spaces with quality and enjoy the variation of natural light and direct sunlight that daylight brings. The key role of light exposure for health is also a major driver for good daylighting, as it is ideal for circadian entrainment. The importance of daylight and connection with nature has been brought into sharp focus during the Covid-19 pandemic, when many of us have found ourselves spending almost all of our time in our homes.

The increase in urban populations and the policies of successive governments have led to a shortage of affordable homes in our cities. Add to this the economic equation of residential development, in which the number of homes that can be provided within a single plot is critical to commercial viability. These factors create pressure to maximise the number of homes that are provided by new developments, leading to increased building heights, higher densities, or both.

The drive for net-zero carbon will squeeze glazing ratios in order to achieve the thermal performance standards needed. Left unchecked, glazing ratios as low as 30% could become more common. This is wholly inadequate for urban developments with high degrees of obstruction from surrounding buildings.

For these reasons, daylight in homes must be safeguarded with a mandatory daylight standard. But before this happens, we need to take a serious look at the standards we have.

The current standard for daylight in UK homes is given by the UK National Annex of BS EN 17037:2018. Many local authorities still use BRE document BR209,¹ which itself refers

to the previous daylight standard, BS 8206-2:2008. At the time of writing, it is understood that BR209 is under revision. The national annex will look familiar to anyone who knows BS 8206-2, because it is essentially a translation of the old Average Daylight Factor targets for living rooms, kitchens and bedrooms into median daylight illuminance targets. Hence, the new standard has the same problems as the old one. It is too narrowly focused on daylight on the working plane. It does not give credit for providing balconies or private terraces. Furthermore, the standard fails to recognise the contemporary practice of open plan living.

The application of daylight standards to residential buildings would also benefit from fresh thinking. The current approach assesses habitable rooms within a development and reports the proportion that are compliant with the standards. 100% compliance is rare: some rooms (and therefore homes) have sub-standard daylighting. A more holistic approach would consider the whole of each dwelling rather than individual rooms, moving away from the binary 'pass/fail' culture that has been allowed to flourish.

These issues need to be addressed so that the standard is fit for purpose. Only then will we have a robust framework within which to safeguard daylight in housing for all.

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Reference

- 1 Littlefair PJ. *Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice (BR209)*. Bracknell: BRE Press, 2011.