## Ground floor extensions must not cause overshadowing

Overshadowing is listed as a negative impact in Section 14.10.2.4, First Floor Extensions. It should also be listed as a possible negative impact for all ground floor extensions.

Consider a typical modern pair of semi-detached houses with an east-west axis, where each house has a kitchen occupying half the width of the rear of the house. A ground floor extension to the house on the south side should not be allowed to overshadow the house on the north side.

Section 14.6.6.1, Daylight and Sunlight, states:
Development shall be guided by the principles of "Site Layout Planning for Daylight and Sunlight, A Guide to Good Practice - (Building Research Establishment Report) 2011" and/or any updated guidance.

A ground floor extension can fail the ' $45^{\circ}$ approach' guidance from paragraph 2.2.15 of Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice:
... Take the elevation of the window wall and draw diagonally down at an angle of $45^{\circ}$ away from the near top corner of the extension... Then take the plan and draw diagonally back at the angle of $45^{\circ}$ towards the window wall from the end of the extension... If the centre of a main window of the next door property lies on the extension may well cause a significant reduction in the skylight received by the window.



A ground floor extension can also cause loss of sunlight to windows facing the extension.
Paragraph 2.2.5 of Site Layout Planning for Daylight and Sunlight: A Guide to Good Practice includes:
$\cdots$ a modified form of the procedure adopted for new buildings can be used to find out whether an existing building receives enough skylight. First, draw a section in a plane perpendicular to each affected main window wall of the existing building
(Figure 14). Measure the angle to the horizontal subtended by the new development at the level of the centre of the lowest window. ... If, for any part of the new development, this angle is more than $25^{\circ}$, a more detailed check is needed to find the loss of daylight to the existing building.


