

HIGHLY GLAZED DOMESTIC EXTENSIONS

Modern extension designs now tend to incorporate large amounts of openings for glazed walls, doors, windows, and roofs. Unfortunately, lightweight, and glazed systems – even highly specialised windows – do not tend to perform as efficiently as highly insulated opaque walls and roofs.

Approved Document L - Conservation of Fuel and Power – Volume 1: Dwellings, contains guidance to support the requirement on energy efficiency and can place a limit on the number of windows, doors and roof windows that can be incorporated into an extension.

The rule is relatively simple: **the total amount of all external doors, windows, and roof windows, as a proportion of the internal floor area of the extension, should not be more than 25%.**

As a result, that total area of all the windows, doors, walls, rooflights, bi-fold or patio doors etc. contained in an extension, should – when added together – amount to no more than $\frac{1}{4}$ of the floor area of the extension; for example, an extension with a planned internal floor area of 40m² (which might span over the ground and 1st floor levels) should have no more than 10m² of windows, roof windows, and doors; however, there is also an additional factor that can permit more window or door area. If the new extension also covers over some existing windows or doors etc. then it is permitted to add the area of these to the 25% limit mentioned above.

So, using the previous example, the extension will cover a large part of the existing rear elevation of a house, covering both the existing rear lounge and kitchen windows, a kitchen door and a 1st floor bedroom and bathroom window. The total area of all the windows and door amounts to 10m². As a result, this 10m² can be added to the 10m² allowed for the 25% rule, which gives a total area of 20m². This means that the area of all the doors and windows will be 50% of the floor area of the extension.

It's not unusual though, with modern extensions, to see almost fully glazed walls and large areas of glazing on roofs, all of which is likely to amount to much more than the 25% limit (or even an extended proportion, to account for existing windows and doors that might be covered over).

To comply with building regulations a highly glazed extension would normally require the services of a trained energy assessor to carry out an energy calculation – using approved software, known as SAP (standard assessment procedure) 2012. This approach shows that the calculated carbon dioxide (CO₂) emission rate from the dwelling, together with the proposed extension, is not greater than that for the dwelling with a similar (notional) extension built to current standards.

If you are unsure whether or not the work you propose requires approval please contact East Midlands Building Consultancy for advice. If you carry out work which requires approval without first submitting an application, you will not benefit from having the work independently inspected and you risk enforcement action. The lack of a completion certificate from the Council may affect the future sale of your home.

Please note that these guidance notes are for advice only and may not cover all situations. It is your responsibility to ensure that they are appropriate for use in your particular circumstance.

For further information contact East Midlands Building Consultancy.