LABC HERTFORDSHIRE

Building Control

Householder Guidance Leaflet No. 14

Replacement Windows & Doors

This leaflet is one of a series produced by the Hertfordshire Building Control Technical Forum

After April 2002, all replacement glazing came within the scope of the Building Regulations. Anyone installing replacement windows or doors has to comply with strict thermal performance standards. One of the main reasons for the change is the need to reduce energy loss. The Building Regulations have controlled glazing in new buildings for many years but these represent a very small proportion of our housing stock. We now seek to improve the performance of the much larger numbers of existing buildings if we are to meet the stringent but essential new national and global energy saving targets.

When the time comes to sell your property, your purchaser's solicitor will ask for evidence that any replacement glazing installed after April 2002 complies with the Building Regulations. There are two ways to prove compliance: -

1. Provide a certificate showing that the work was carried out by an installer registered under one of the following schemes:
   - Fenestration Self Assessment (***FENSA***) scheme;
   - Certification And Self Assessment (***Certass***) scheme;
   - BM Trada (***BM TRADA***);
   - British Standards Institute (***BSI***) or
2. Provide a certificate from the Local Authority confirming that the installation was approved under the Building Regulations.

The Self-Assessment Schemes

It is estimated that around 2 million replacement glazing installations are completed each year. Local Authorities would be placed under immense pressure if all these were to be assessed under the normal application process. It is however essential to find a way to ensure that work is done properly without imposing an excessive financial and administrative burden on householders and installers. The schemes highlighted above all meet Central Government requirements. A sample of the work of each installer will be assessed by appointed inspectors to ensure standards are maintained. These bodies will also notify Local Authorities of all completed CPS installations, and issue their own certificates to householders confirming compliance.

The Local Authority Scheme

Any installations carried out that are not registered to a self certification scheme, or undertaken as a DIY project, will need full Local Authority Building Control approval under the Building Regulations.

As the householder, you are ultimately liable for ensuring that your installation complies with the Building Regulations and is registered under one of the above schemes.

Before you sign a contract to buy replacement glazing, be sure to ask whether the installer is able to self-certify. If not, you must ensure that an application and the appropriate fee are deposited with your Local Authority before work starts.

Further information can be obtained from your local Building Control Department.

Technical guidance on how to satisfy sections of the Building Regulations

Structure
When installing new windows or doors an assessment should be undertaken by the contractor as to the suitability of the support of lintel above the replacement window or door.

Means of Escape In Case Of Fire
All windows to habitable rooms (but not kitchens, utility rooms, dressing rooms, bathrooms, WC's or shower rooms) at floors above ground level are required to be suitable for escape in fire. In addition, rooms at ground floor level whose only escape route is via another room must be provided with suitable escape windows.
A suitable escape window is defined as 'a window whose unobstructed openable area is at least 0.33m^2 and at least 450mm high and 450mm wide (e.g.: a 450mm wide opening will need to be 735mm high and vice-versa). The bottom of the openable area should be no more than 1100mm above the floor'. Any key required to open the window should be readily available.

Means of Ventilation
See table 1 below for current requirements. If your original windows have trickle ventilators any replacement frames should also be provided with such. The area of opening windows should not be less than that which was originally provided.
As and alternative approach to the ventilation provisions listed in table 1 below, the overall provisions for background ventilations for the dwelling should be equivalent to an average of 5000mm^2 per room for the rooms listed, with a minimum provision of 2500mm^2 in each room.

Table 1 Ventilation: Current requirements for various rooms

Room	Rapid ventilation	Background ventilation
Habitable room	1/20th of the floor area of the room served	5000mm^2
Kitchen and utility	Opening window (No minimum size)	2500mm^2
Bathroom/Shower rooms	Opening window (No minimum size)	2500mm^2
Sanitary accommodation	1/20th of the floor area of the room served	2500mm^2

Combustion Appliances
Certain fires and heating appliances rely on air infiltration for them to function correctly. They may require purpose made ventilators, or may have relied on air infiltration through existing ill-fitting windows and doors, If you have an open flued appliance in the house that does not have separate provision of combustion air, a check should be made by a suitably qualified person to ensure that adequate permanent combustion ventilation is provided.

The boiler or fire manufacturer's manufacturer's advice should be followed with regard to proximity of opening windows and doors.

Protection from falling
Where a first floor window cill height is less than 800 mm above the floor level suitable guarding should be provided to prevent a person falling through an open window.
This requirement may conflict with Regulation B1 and provision of escape windows. One way of achieving the requirement may be to provide a restricted opening device that can be easily overridden in the event of an emergency.

Energy ratings & U-Values
Any PVC-U or timber framed window (installed vertically) or fully glazed door should have a Window Energy Rating (WER) of band C or better. Alternatively, the window should have a U-value of 1.6W/m^2k or better.
All doors should have a U-Value of 1.8W/m^2k or better.

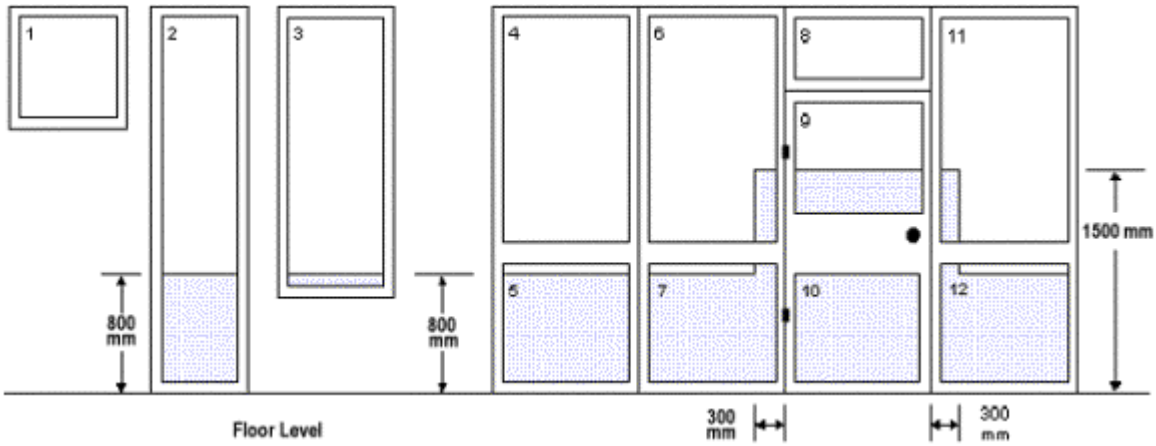
Access and facilities for disabled people
Where the property has such provisions for disabled persons, any new principal entrance door should have a minimum 775mm clear opening with a level access threshold.

Glazing protection against impact

Glazing should either:

- Break safely as defined in BS 6206:1981 Specification for impact performance requirements for flat safety glass and safety plastics for use in buildings, clause 5.3
- Be inherently robust, i.e. annealed glass, glass blocks, polycarbonate or glass that gains strength through thickness.
- Be in small panes (a maximum area of 0.5m^2 with a maximum width of 250mm is acceptable). Annealed glass should be not less than 6mm thick, except where it is in traditional leaded- or copper- lights in which 4mm glass is considered acceptable when fire resistance is not a factor.
- Be permanently protected by a suitable screen which has a minimum height of 800mm and which incorporates a gap no greater than 75mm.

Glazing in Windows, Partitions Glazing in Doors and Side Panels and Walls



The diagram above gives examples of glazing in windows, partitions, walls, doors and side panels. 'Critical locations' are shaded grey. Any glazing within a shaded area must comply with BS 6206.

Glazing unit No. 10 falls wholly within a 'critical location' and so the glazing must comply with BS 6206.

Where only part of a glazing unit falls within a 'critical location' the whole of that unit must comply with BS 6206. This applies to units Nos. 2, 3, 5, 6, 7, 9, 11 and 12.

Only glazing units Nos. 1, 4 and 8 fall wholly outside the 'critical location' and need not comply with BS 6206.