

## 1. GENERAL

This guidance applies to replacement windows. It applies whether or not the new window is to be the same style and material as the existing window.

Repairs to an existing window can be done to return the window to the original standard without the need for the repaired window to meet current standards.

## 2. VENTILATION

Every bedroom, living room, dining room, study or any room of a similar use must have a window(s) or door(s) to the external air with a total combined opening area of at least  $1/30^{\text{th}}$  of the floor area of that room.

When the opening area of the existing window is less than  $1/30^{\text{th}}$  of the floor, the opening area of the replacement window must not be less than the original size.

Replacement windows to rooms other than those above, such as a kitchen, must provide ventilation of not less than that provided by the original windows unless the room is served by a mechanical extract fan.

Dwellings require background ventilation to maintain a healthy indoor environment. Poor indoor air quality can have an adverse effect on the health of some occupants, for example people with asthma.

The main method of providing background ventilation is trickle ventilators in windows but other methods may be used. For example in certain circumstances background ventilation may be provided by a top hopper style of window.

Where an existing window provides background ventilation the replacement window should also incorporate this. It should be at least the same size as that being replaced.

Some part of the opening window and the trickle ventilator must be at least 1.75 m above floor level.

## 3. SAFETY FROM COLLISION

Windows must not open over footpaths or any place to which the public has access, where they could form a hazard or obstruction.

## 4. SAFETY GLASS

Glazing which is less than 800 mm above the floor must be toughened or laminated. Alternatively, a permanent barrier could be installed as described in item 9 below.

## 5. SECURITY

All windows that are easily accessible from the outside should provide a basic level of security. This generally applies to ground floor windows but may apply to windows on another level which can be easily accessed by, for example, standing on an adjacent structure. They should meet the general recommendations of the relevant product standard. (BS7412 – PVCu, BS644 – Timber, BS4873 – Aluminium and BS6510 – Steel.)

Additionally an opening window that is secured by a handle without a key operated lock should be fitted with laminated glass.

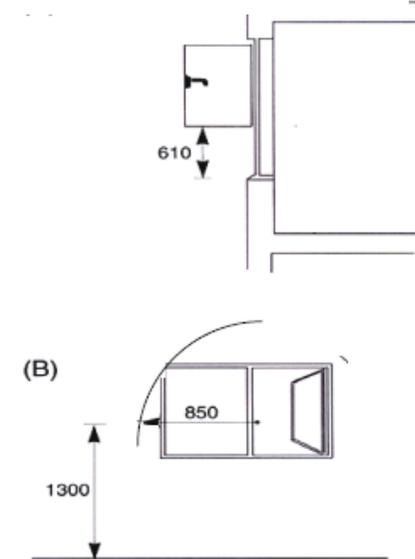
The frame should be securely fixed to the surrounding structure in accordance with BS 8213-4 : 2007 or the manufacturers written instruction where they exceed the British Standard.

## 6. SAFE CLEANING

All windows must be safely cleanable. Windows, all or part of which are more than 4 m above the adjacent ground level must be designed so that any external and internal glazed surfaces can be cleaned safely from inside the building.

They must be cleanable whilst standing on the floor and without over-reaching. The maximum reach must not exceed that shown in the diagrams below, and the maximum upwards reach is 2150 mm. If parts of the existing window are out with the maximum reach, the replacement window should be of a type which allows those parts to be brought within the safe reach in order to allow safe cleaning. Fully reversible windows which can be locked in the reverse position are acceptable, but must still be cleanable from the standing position.

All dimensions are in mm



(A) downwards reach through an opening light  
(B) side reach through an opening light

## 7. ACCESS TO WINDOW CONTROLS

The controls for opening windows, i.e. handles, should be located 350 mm from an internal corner, projecting wall or similar obstruction. The controls should also be positioned not more than the following dimensions above floor level.

- 1.7 m where access is unobstructed;
- 1.5 m where access is obstructed such as by a kitchen work top; or
- 1.2 m where the window is within the principal living room.

## 8. THERMAL INSULATION

Windows must have a U-value (thermal insulation rating – the lower the figure the better) of not more than 1.6 W/m<sup>2</sup>K or, alternatively, a 'Window Energy Rating' of C or better.

There are many types of window construction which meet the required degree of thermal insulation. It is advisable that written information, confirming the thermal performance of the windows, should always be sought from the supplier or installer.

## 9. PROTECTIVE BARRIERS

Openable windows to a storey with a floor level of at least 600 mm above the outside ground level, and with a cill height less than 800 mm above floor level, must be provided with a protective barrier to minimise the risk of falling from the window. The barrier can be internal or external to suit the operation of the window. The barrier must be not less than 800 mm above the floor level. There must not be any gaps in the barrier which would allow a 100 mm ball to pass through. Hand and footholds should be minimised so that the barrier cannot be easily climbed by a young child.

Permanently fixed safety glass may be used instead of a barrier (see item 4 above)

## 10. EMERGENCY ESCAPE WINDOWS

An escape window must be provided in every bedroom, living room, dining room, study or any room of a similar use, on the first floor of the house. Escape windows must also be provided in the rooms mentioned above on the ground storey where the room does not have a door leading direct to the outside or access to the outside via a hallway which itself has a door to the outside.

Escape windows are not necessary from rooms where there are alternative routes from the room to circulation areas or other rooms. Escape windows must have an unobstructed openable area that is at least 0.33 m<sup>2</sup> and at least 450 mm high and 450 mm wide (the route through the window maybe at an angle rather than straight through). The bottom of the openable area must not be more than 1100 mm above the floor except in cases where the existing cill height is greater than 1100 mm.

## 11. GENERAL

You should ensure that you are aware of your statutory obligations under building regulations, planning legislation and any other relevant permission and that any firm or person employed to carry out work is competent.

The Building Standards Division provides guidance on how to comply with the building regulations and this can be accessed on their web site at [www.scotland.gov.uk/bsd](http://www.scotland.gov.uk/bsd). Follow the links to 'Publications library' 'Technical' 'Domestic Handbook'



## REPLACEMENT WINDOWS TO 1 AND 2 STOREY HOUSES

Based on the 2013 Technical Handbooks

This leaflet is designed to help you if you intend to replace windows in your home. There is no need to obtain a building warrant for these replacements, but the work you undertake must meet the requirements of the building regulations. This leaflet sets out one common way that this can be achieved.

If you don't follow this guidance you should seek professional advice to make sure your proposals will meet the building regulations.

The leaflet does not apply to more complex work such as altering the structural opening size in a wall. It also does not apply to alterations within houses having a floor level more than 4.5 m above external ground level, or flats and maisonettes. Such work will require a warrant and you should discuss the proposals with the Building Standards Section of your local authority. Where a warrant is required it is against the law to start work without first obtaining it.