

REPLACEMENT WINDOWS TO 1 AND 2 STOREY HOUSES

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.

This guidance does not cover houses which have a floor level higher than 4.5 m above outside ground level, and does not apply to flats or maisonettes. It also does not cover more complex work, such as where you intend to alter the structural opening size in a wall. Such work will require a building warrant and you should check with the Building Standards Team. It is against the law to start work without first obtaining a building warrant, when one is needed.

2. VENTILATION

- Every bedroom, living room, dining room, study or any room of a similar use must have a window(s) or door(s) with an 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.
- If the existing window had an integral trickle ventilator the replacement window must also have an integral trickle ventilator of at least the same size as the original.
- Some part of the opening window and the trickle ventilator must be as high above floor level as the existing wall opening will allow.
- Replacement windows to rooms other than those above must provide ventilation of not less than provided by the original windows.

3. SAFETY FROM COLLISION

Windows must not open over footpaths or any place to which the public has access and 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 7 below.

5. SAFE CLEANING

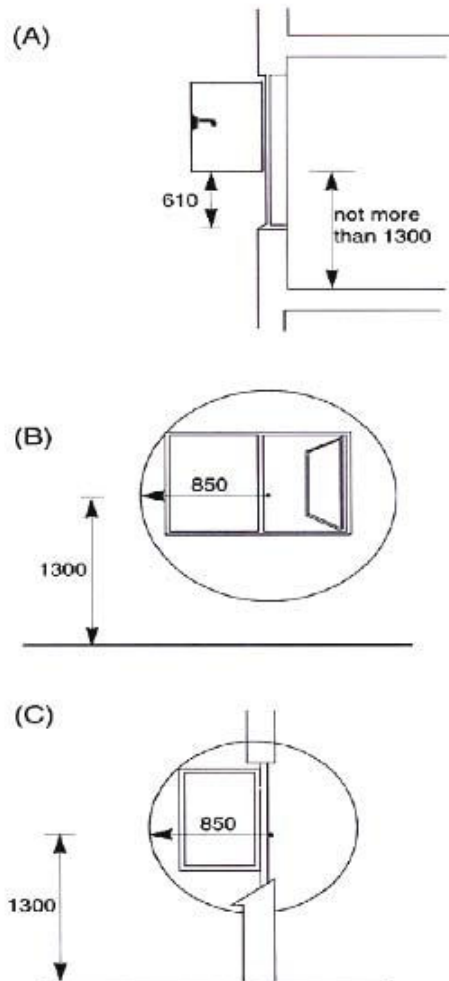
All windows must be safely cleanable. Windows, all or part of which are more than 4m above the adjacent ground level must be designed so that any external and internal glazed surfaces can be cleaned safely from inside the building.

These windows must be cleanable whilst standing on the floor and without over-reaching. The maximum reach must not exceed that shown in the diagrams over, 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
- (C) reach for cleaning an open window with easy-clean hinges

6. THERMAL INSULATION

Windows must have a U-value (thermal insulation rating) of not more than $1.8 \text{ W/m}^2 \text{ K}$. There are many types of window construction which meet the required degree of thermal insulation.

One example of a window which does meet the thermal insulation standard is a window of timber or plastic frames, with double glazed units and a minimum of a 16 mm argon filled cavity between the panes. One of the panes within the double glazed unit must have a low

emissivity coating. This should be confirmed with the window installer.

7. 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.

On the ground and first storeys, 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.

Alternatively, permanently fixed safety glass may be used instead of a barrier (see item 3 above)

8. 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 m² 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.

9. FURTHER INFORMATION

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 Scottish Government Building Standards Division provides guidance on how to comply with the building regulations and this can be accessed on their web site at <http://www.gov.scot/Topics/Built-Environment/Building/Building-standards/techbooks/techhandbooks>