

## **Steel Window Association**

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## Building Regulations England & Wales Part F 2010 Ventilation: summary of Approved Document

**Historic and traditional buildings:** special considerations apply as for Part L. The aim should be to provide adequate ventilation as far as is reasonably and practically possible. The work should not prejudice the character of the host building...

**Trickle ventilators** are intended to be normally left open in occupied rooms in dwellings. A window with a night latch position is not recommended... It is preferable to use ventilators which have the equivalent area (in mm<sup>2</sup> at 1 Pa pressure difference) marked on the product...

**Domestic ventilation compliance guide** includes an installation check list and an installation inspection sheet, to be submitted to Building Control, where the equivalent area of background ventilators should be recorded. Information on operation should be given to the building owner at handover.

*Equivalent area* is a measure of the aerodynamic performance of a ventilator. It is the area of a sharpedged circular orifice which air would pass through at the same volume flow rate, under an identical applied pressure difference, as the opening under consideration.

**Purge ventilation** provision is required in each habitable room capable of extracting a minimum of four air changes per hour. Openable windows or external doors providing this function must have a height x width of opening parts of at least  $1/20^{th}$  of floor area, provided they open at least  $30^{\circ}$ , or at least  $1/10^{th}$  of floor area if they open between  $15^{\circ}$  and  $30^{\circ}$ .

**New dwellings** require larger areas of trickle ventilators than under previous regulation (from 33% to 67% more) - see table 5.2a. - unless designed to an air permeability leakier than 5  $m^3/(h.m^2)$  at 50 Pa.

**Existing buildings:** where the original windows were fitted with trickle ventilators the replacement windows should include them. Where the original windows were not so fitted, it would be good practice to fit trickle ventilators (or an equivalent means of ventilation). A minimum equivalent area is required of 5000 mm<sup>2</sup> in habitable rooms and 2500 mm<sup>2</sup> in kitchen, utility room and bathroom.