

System-specific guidance

1.45 Paragraphs 1.46 to 1.73 give guidance for the types of ventilation system listed in Table 1.6.

Table 1.6 Types of ventilation system

System type	Dwellings covered by the guidance
Natural ventilation (paragraphs 1.47 to 1.59)	Less airtight dwellings
Continuous mechanical extract ventilation (paragraphs 1.60 to 1.66)	All dwellings
Mechanical ventilation with heat recovery (paragraphs 1.67 to 1.73)	All dwellings

NOTE: For situations outside the scope of Table 1.6, expert advice should be sought for the design, sizing and position of ventilators to provide effective ventilation.

NOTE: As defined in Appendix A, less airtight dwellings are dwellings which have one of the following.

- a. A design air permeability higher than $5\text{m}^3/(\text{h}\cdot\text{m}^2)$ at 50Pa.
- b. An as-built air permeability higher than $3\text{m}^3/(\text{h}\cdot\text{m}^2)$ at 50Pa.

1.46 Where a dwelling has natural ventilation and a measured air permeability that differs from the design air permeability, so that it is defined as a highly airtight dwelling, one of the following applies.

- a. Expert advice should be sought.
- b. A continuous mechanical extract ventilation system should be installed by following the guidance in paragraphs 1.60 to 1.66.

NOTE: Continuous mechanical extract ventilation systems are available as decentralised options. An intermittent extract fan may be replaced with a decentralised continuous mechanical extract ventilation system fan.

Natural ventilation with background ventilators and intermittent extract fans (guidance suitable only for less airtight dwellings)

Intermittent extract

1.47 Intermittent extract fans should be fitted in all wet rooms. For kitchens, utility rooms, bathrooms and sanitary accommodation, the extract rates in Table 1.1 can be met using an intermittent extract fan.

1.48 If a wet room has no external walls, the intermittent extract fan should extract at four air changes per hour to meet the purge ventilation standards in paragraphs 1.26 to 1.31.

1.49 For sanitary accommodation, extract rates can be met using windows by following the purge ventilation guidance in paragraphs 1.26 to 1.31.

1.50 Any automatic controls (e.g. humidity control) for intermittent extract should have a manual override to allow the occupant to turn the extract ventilation on or off.

1.51 In a room with no openable window, an intermittent extract fan should be provided with controls which continue to operate the fan for at least 15 minutes after the room is vacated.

Background ventilators

1.52 All rooms with external walls should have background ventilators. If a habitable room has no external walls, paragraphs 1.42 to 1.44 should be followed.