

Part 2





SELECTING AND INSTALLING SUITABLE EXTRACT VENTILATION

Effective ventilation provides a safe and healthy environment for the occupants of a dwelling by removing excess moisture and indoor air pollutants.

All ventilation work must comply with the relevant requirements of building regulations, and this guide sets out requirements for the installation and performance of a mechanical extract fan in a single room in the home.

Selecting an extract fan

There is a wide range of extract fans available, depending on room type and functionality, and it is essential to choose a model that performs to the required standards in order to comply with building regulations and building control inspections.

THE MINIMUM EXTRACT RATES FOR INTERMITTENT EXTRACT FANS ARE AS FOLLOWS:			
	Kitchens – 60 l/s (or 30 l/s if the extract is a cooker hood)		Bathrooms – 15 l/s
	Utility rooms – 30 l/s		Sanitary accommodation (toilets) – 6 l/s

Where any wet room has no external walls the minimum extract rate should be four air changes per hour.

Fitting an extract fan

1. All installations of intermittent extract fans with either manual or automatic control must provide the minimum required extract rate. NOTE: The stated extract rate of a fan may be lower when installed due to resistance from ductwork, grilles etc. It is the installer's responsibility to ensure that the fan can deliver the required extract rate for the room once the installation is complete. The fan should not operate near maximum capacity under normal operating conditions. Extract fans that have been performance tested to meet the requirements of building regulations for specific rooms under typical installed conditions are listed [here](#).
2. Flexible ductwork should only be used for final connections, should never exceed 1.5 m in length and should be pulled tight. Duct connections should also be mechanically secured and sealed to prevent leaks.
3. Doors to the room where the fan is located should be adapted to allow sufficient air flow when the door is closed; a door undercut of 10 mm above the final floor covering would be sufficient.
4. The installer should ensure that sufficient fresh air can enter the building (e.g. through trickle ventilators in window frame) to replace the air extracted by the fan. Background ventilators to the outside should be fitted if there is any doubt. The specific fan power for the system should not exceed 0.5 W/l/s
5. The final extract rate from installed fans should be measured to make sure that minimum flow rates are achieved.

NOTE: This is a summary of some of the critical requirements of the new building regulations for ventilation in England. For details of the full regulations, please visit: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1045918/ADF1.pdf

