

Smoke Ventilation System Regular Maintenance Requirements & Recommendations

BS9999 2008 clause V.6.1 details the requirement for maintenance of smoke ventilation systems.

The Regulatory Reform (Fire Safety) Order 2005 also states: “where necessary in order to safeguard the safety of relevant persons the responsible person must ensure that the premises and any facilities, equipment and devices provided in respect of the premises under this order are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good repair.”

The order therefore places the onus onto the Responsible Person to conduct a risk assessment to determine adequate and reasonable safety precautions specific to their premises.

All tests below are to be conducted at recommended frequency and appropriate action taken if they are not found to be functioning correctly:

Weekly	<p>Test fire alarm at call points.</p> <p>Check LED indicators to make sure stand-by batteries are in good condition.</p> <p>Activation of override switches to ensure all equipment operating correctly.</p>
Monthly	<p>Test fire alarm at call points.</p> <p>Check LED indicators to make sure stand-by batteries are in good condition.</p> <p>Activation of override switches to ensure all equipment operating correctly.</p> <p>Simulate failure of normal power supply and activate system to ensure standby equipment working correctly.</p> <p>After restarting normal supply, test charging of system starting battery functioning correctly.</p> <p>Test operation of failsafe mechanisms either by 'breaking-out' the door set or by simulating failure of mains power supply as appropriate.</p>
3 - Monthly	<p>Test fire alarm at call points.</p> <p>Check LED indicators to make sure stand-by batteries are in good condition.</p> <p>Activation of override switches to ensure all equipment operating correctly.</p> <p>Simulate failure of normal power supply and activate system to ensure standby equipment working correctly. After restarting normal supply, test charging of system starting battery functioning correctly.</p> <p>Test operation of failsafe mechanisms either by 'breaking-out' the door set or by simulating failure of mains power supply as appropriate.</p> <p>All zones separately tested to ensure all fans and powered exhaust systems operate correctly. Extract systems require checks and operation zone by zone and shaft systems one floor at a time.</p>

<p>6 - Monthly</p>	<p>Test fire alarm at call points.</p> <p>Check LED indicators to make sure stand-by batteries are in good condition.</p> <p>Activation of override switches to ensure all equipment operating correctly.</p> <p>Simulate failure of normal power supply and activate system to ensure standby equipment working correctly. After restarting normal supply, test charging of system starting battery functioning correctly.</p> <p>Test operation of failsafe mechanisms either by 'breaking-out' the door set or by simulating failure of mains power supply as appropriate.</p> <p>All zones separately tested to ensure all fans and powered exhaust systems operate correctly. Extract systems require checks and operation zone by zone and shaft systems one floor at a time.</p> <p>Using a maintenance checklist, check all actuators for integrity and correct operation. Check roof vents and hinges. The manual override must be checked in alarm conditions together with any additional moving parts of the installation to ensure operating effectively. For powered extract systems, take flow readings on extract points and check against design data.</p> <p>Tests to be carried out by competent person(s) (a competent person is defined as a person who is properly or sufficiently qualified and capable). Certificates of testing must be obtained.</p>
<p>Annually</p>	<p>Test fire alarm at call points.</p> <p>Check LED indicators to make sure stand-by batteries are in good condition.</p> <p>Activation of override switches to ensure all equipment operating correctly.</p> <p>Simulate failure of normal power supply and activate system to ensure standby equipment working correctly. After restarting normal supply, test charging of system starting battery functioning correctly.</p> <p>Test operation of failsafe mechanisms either by 'breaking-out' the door set or by simulating failure of mains power supply as appropriate.</p> <p>All zones separately tested to ensure all fans and powered exhaust systems operate correctly. Extract systems require checks and operation zone by zone and shaft systems one floor at a time.</p> <p>Using a maintenance checklist, check all actuators for integrity and correct operation. Check roof vents and hinges. The manual override must be checked in alarm conditions together with any additional moving parts of the installation to ensure operating effectively. For powered extract systems, take flow readings on extract points and check against design data.</p> <p>Additionally a full functional test is to be carried out to ensure all mechanisms are operating correctly and determine whether smoke detection occurs at the appropriate design density. All CO emissions must be tested and zeroed. Calibration kit must be used with zero gas and 50ppm gas.</p> <p>Tests to be carried out by competent person(s) (a competent person is defined as a person who is properly or sufficiently qualified and capable). Certificates of testing must be obtained.</p>