

# **Maintenance And Testing Of Smoke Ventilation Systems**



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**Design – Supply – Install - Commissioning**

## MAINTENANCE AND TESTING OF SMOKE VENTILATION SYSTEMS

The following are guidance notes around the mandatory maintenance and testing requirements for both powered and natural smoke ventilation systems.

### **THE REGULATORY REFORM (FIRE SAFETY) ORDER 2005 states:**

Maintenance 17:- (1) 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of the premises under this Order or, subject to paragraph (6), under any other enactment, including any enactment repealed or revoked by this Order, are subject to a suitable system of maintenance and are maintained in an efficient state, in efficient working order and in good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.

### **BRITISH STANDARD BS 9999:2008 states:**

Annex V (normative) Routine inspection and maintenance of fire safety installations

#### **V.1 General**

NOTE Fire safety installations comprise the items and elements of which examples are listed in Annex J.

It is essential for the safety of the occupants of a building that fire safety equipment (including passive fire protection provisions) is inspected frequently. Although much of the inspection can be undertaken by suitably trained personnel, a formal agreement should be made with the installer or the installer's representative to provide the regular inspection and testing described in the relevant British Standards for individual fire safety installations. Unless temporary alternative fire safety systems can be put in place, it might be appropriate for certain of the inspections carried out at three-monthly or longer intervals to be done outside normal working hours.

#### **V.2 Daily inspections**

##### V.2.1 General

The checks described in V.2.2 to V.2.6 should be undertaken daily. For premises with defined opening times such as shops, theatres and cinemas, these checks should be undertaken prior to members of the public entering the building.

##### V.2.2 Fire detection and alarm systems

n/a

##### V.2.3 Emergency and escape lighting systems

n/a

##### V.2.4 Sprinkler systems

n/a

##### V.2.5 Fire door automatic release mechanisms

n/a

##### V.2.6 Portable fire extinguishers and hose reels

n/a

cont.



# Smoke Ventilation Controls

## V.3 Weekly

### V.3.1 General

In addition to the checks recommended in V.2, the checks described in V.3.3 to V.3.7 should be undertaken once a week.

### V.3.2 Fire detection and alarm systems

n/a

### V.3.3 Sprinkler systems

n/a

### V.3.4 Gaseous, foam and powder extinguishing systems

n/a

### V.3.5 Smoke control systems for means of escape

Actuation of the system should be simulated once a week. It should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), natural exhaust ventilators open, automatic smoke curtains move into position, etc.

### V.3.6 Evacuation lifts and fire-fighting lift installations

n/a

### V.3.7 Fire hydrants

n/a

## V.4 Monthly

### V.4.1 General

In addition to the checks recommended in V.2 and V.3, the checks described in V.4.2 to V.4.9 should be undertaken once a month.

### V.4.2 Fire detection and alarm systems

n/a

### V.4.3 Emergency and escape lighting systems

n/a

### V.4.4 Gaseous, foam and powder extinguishing systems

n/a

### V.4.5 Evacuation lifts and fire-fighting lift installations

n/a

### V.4.6 Hose reels

n/a

### V.4.7 Automatic opening doors

n/a

### V.4.8 Doors on hold-open devices

n/a

### V.4.9 Emergency and panic escape doors

n/a



# MAINTENANCE AND TESTING OF SMOKE VENTILATION SYSTEMS

## V.5 Three-monthly

In addition to the checks recommended in V.2, V.3 and V.4, the actuation of all smoke control systems should be simulated once every three months. All zones should be separately tested and it should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), etc.

## V.6 Six-monthly

### V.6.1 General

In addition to the checks recommended in V.2, V.3, V.4 and V.5, the checks described in V.6.2 and V.6.3 should be undertaken once every six months. Arrangements should be made for six-monthly inspections and tests to be carried out by competent persons on the fire detection and alarm systems, the sprinkler systems, any extinguishing systems, the emergency and escape lighting systems and the fire-fighting lift, for any defects found to be logged and the necessary action taken, and for certificates of testing to be obtained.

### V.6.2 Fire doors

n/a

### V.6.3 Fire mains

n/a

## V.7 Yearly

NOTE Attention is drawn to the testing and inspection requirements of BS 7671.

In addition to the checks recommended in V.2, V.3, V.4, V.5 and V.6, arrangements should be made for annual inspections and tests of the following to be carried out by competent persons, for any defects to be logged and the necessary action taken, and for certificates of testing to be obtained:

- .
- .
- d) smoke ventilators and smoke control systems;
- .
- .

Whilst this is a comprehensive assessment (and is for general guidance only), it should be noted that manufacturers have their own maintenance and testing requirements and if different these should be followed. For full guidance you should read the Regulatory Reform Order 2005 along with BS9999 to satisfy that you are meeting your statutory obligations.

Smoke Control Systems offer a range of service and maintenance contracts to suit your requirement and budget.

Contact us on 0844 499 6366 for further details

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