

SYSTEM TESTING, INSPECTION AND MAINTENANCE ROUTINES

Fire alarm system

Fire alarm tests should be carried out in accordance with the manufacturer's instructions and British Standard BS 5839-1:2013

It is important that any testing of the fire alarm should not result in a false signal of fire.

Weekly test by user -

Carry out a test and examination to ensure that the system is capable of operating under alarm conditions, namely:

Operate a manual call point at approximately the same time each week using a different call point for each successive test. Where appropriate inform the monitoring control centre prior to the test.

Quarterly inspection of batteries - Vented batteries and their connections should be examined by a person who is competent in battery maintenance. Electrolyte levels should be checked and topped up as necessary.

Periodic inspections and tests by a fire alarm engineer -

These should be carried out by a competent per-son, e.g. a fire alarm engineer. Requirements for these inspections and tests will depend upon the type and design of the system but will generally be carried out six monthly.

Where a detection system without a panel is installed press the test button on the alarm or manual callpoint.

Fire detectors

- Carry out a regular visual inspection of each detector to check for damage, excessive
 accumulations of dirt, heavydeposits of paint and other conditions likely to interfere with correct
 operation.
- 2. Each detector should be checked and tested for correct operation and sensitivity in accordance with the manufacturer's instructions and the current British Standard.

Measures to reduce unwanted alarms

False alarms will not only disrupt business operations but may also contribute to death or injury should Fire and Rescue Service resources be deployed answering false alarms when they should be attending incidents where life or property is in danger. To reduce the probability of false alarms on systems incorporating automatic fire detectors it is very important that a suitable system of testing and maintenance is in place. The cause of any false alarm should be properly investi-gated with measures being taken to avoid a repetition.



Automatic door release mechanisms activated by the fire alarm system

Weekly - In conjunction with the fire alarm test, check that all the fire doors are being released and closing fully into the door rebates.

Note - All checks, tests and maintenance including faults and remedial action taken, should be recorded. The date on which each fault is rectified should also be recorded.

Where a detection system without a panel is installed press the test button on the alarm or manual callpoint.

Fire alarm test records

Fire Alarm		Automatic Door			
	Satis-	Releases	Remedial Action Needed	Date Completed	Signature
tion / Number	factory Yes / No	Satisfactory Yes / No			
	Loca- tion /	Loca- tion / Yes /	Loca- tion / Yes / Satisfactory Yes	Loca- tion / Yes / Satisfactory Yes Automatic Door Releases Remedial Action Needed	Loca- tion / Number Yes / Satisfactory Yes Automatic Door Releases Remedial Date Action Needed Completed



MISCELLANEOUS TEST AND CHECKS



As these systems are not found in the all premises this logbook only provides one page for recording the associated tests. **You should enter tests and results in this log book.**

Weekly Tests

There is normally a requirement to maintain a specific logbook for these systems. Check with your maintenance contractor or insurers.

Sprinkler System (the following should be checked)

- 1. Water and air pressure gauge readings on installations, trunk mains and pressure tanks and water levels inelevated private reservoirs, rivers, canals, lakes, water storage tanks and all gauge readings and levels recorded.
- 2. That each water motor alarm has been sounded for at least 30 seconds.
- 3. Fuel and oil levels of diesel engines used to power automatic pumps.
- 4. That automatic pumps start when the water pressure is reduced to the specified level and, if powered by a dieselengine, the oil pressure, the flow of cooling water through open-circuit cooling systems or the water level in theprimary circuit of closed-circuit cooling systems, and whether the engine will restart, using the manual start test button.
- 5. The electrolyte level and density of all lead acid battery cells and if the density is low the battery charge is workingcorrectly, ensure that the affected cells have been replaced.
- 6. The operation of the mode monitoring system for stop valves in life safety installations.
- 7. The continuity of connection between the alarm switch and the control unit and between the control unit and the FireService (usually via a remote manned centre) for automatically monitored connections.
- 8. The correct functioning of trace heating systems provided to prevent freezing in the sprinkler system.

Smoke Control Systems for Means of Escape

Simulate actuation of the system and ensure 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).

Monthly Tests

Smoke Control Systems to Assist Fire Fighting

Simulate actuation of the system and ensure that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems etc.

Monthly Inspections and Tests

Arrange for the quarterly inspections and tests of the sprinkler system to be carried out by competent persons, for any defects found to be logged and the necessary action to be taken and ensure that certificates of satisfactory testing are received.



Yearly Tests

Arrange for the annual inspections and tests of the following to be carried out by competent persons, for anydefects found to be logged and the necessary action to be taken and ensure that certificates of satisfactory testing are received:

- 1. Sprinkler SystemsThat each water motor alarm has been sounded for at least 30 seconds.
- 2. Smoke Control Systems

Escape Route

Means of escape, together with the measures provided for the protection of means of escape, should be inspected at periodic intervals. The inspections should ensure all internal and external exit routes are unobstructed and that exit door furniture and fire-door self-closing devices operate efficiently. Additionally, fire resisting doors and partitions should be in satisfactory repair and all safety signs and notices should be legible and properly displayed.

Note - All checks, tests and maintenance including faults and remedial action taken, should be recorded. The date on which each fault is rectified should also be recorded.

Generators

GeneratorsThe manufacturer 's instructions as given in the associated instruction manual or other literature should always be followed. It should be noted, however, that the failure of engines to start up readily often arises from poor maintenance or defect in the starting battery or in electromechanical apparatus, e.g. relays incorporated in the starting system.

Dust and damp, singly or in combination, can have an adverse effect on electromechanical apparatus and it is therefore important that a system of regular cleaning and, where necessary, adjustment is carried out. Some parts of the starting system may be sited where they are subjected to vibration and great care should therefore be taken in such instances to ensure that all connections are mechanically and electronically sound. It is essential that air intakes and exhausts are unobstructed.

Date	Items Tested	Satisfactory Yes / No	Remedial Action	Signature



Date	Items Tested	Satisfactory Yes / No	Remedial Action	Signature

