

# TESTING OF FIRE ALARMS

## Introduction

Fire alarms should be installed in accordance with BS 5839. Experience has shown that most alarm installations in domestic properties fail to fully meet the required standard. In some cases, deviations will seriously undermine the effectiveness of the system.

In all cases, the electrician should supply an installation and commissioning certificate. However as an independent person does not supply this, it cannot generally be relied upon even if the person is NICEIC registered.

How far you should test any fire alarm is a matter for risk assessment. For instance, if the electrician is well known and trusted you may be happy with just the commissioning certificate. If he is unknown and not NICEIC a number of checks may be necessary. Listed below are the types of tests/checks that can be carried out.

## Recommended Checks

1. Sound testing to ensure 75dbA at each bedhead and 65dbA in common parts. This test is not needed if a sounder is positioned in bedroom.
2. Use a smoke canister to test one detector on each floor. It is recommended that the detector off the common parts is the main one tested .
3. Set off at least one call point in the building.
4. Check the electrical supply. It should normally be from a landlord's supply. It **should not** be via a key meter or from a consumer unit with an RCD protection. If in doubt, press the RCD test button and see if power to alarm is shut off.
5. Check that the consumer unit supplying the alarm is clearly marked "*fire alarm do not switch off*". Turn the supply off, after a few seconds the alarm panel warning alarm should sound. In most cases this will also test the emergency lighting which is usually on the same supply.
6. Ask the electrician, builder or landlord to remove one or two detectors at random. In all cases, the panel alarm should sound. If it does not, then the system has not been installed correctly. This fault allows an occupier to remove a detector head without any one knowing. As well as reducing early warning in that room, the missing detector may cut off power to all other detectors and call points on that zone.

The above tests are mainly applicable to an L system installed under part 1. If there is no information panel, then there is no need to turn off the power supply to test or to carry out test 6. These tests should be with someone who can reset the alarm. Please note that detectors have an average life of 10 years. Testing of these with a smoke canister should be carried out periodically. Ensure the landlord is aware of this.