Location of Smoke Alarms
Installing detectors in the kitchen and lounge areas can provide a high standard of protection. In a single storey, two or three bedroom dwelling, a single smoke detector may be adequate if sited in the main circulation area (see figure 2).

![Figure 2](image)

In a typical two storey dwelling, smoke detectors should be installed both at ground and at landing levels, and an audible alarm fitted near to the bedroom doors. Therefore at least two smoke alarms will be required (see figure 3).

![Figure 3](image)

Maintenance
The Building Control Section has no authority to ensure that smoke alarms are maintained. Therefore, it is vitally important that you check your smoke alarm regularly. Further information may be obtained from the manufacturer’s instructions relating to each device.

For further information:
Website: www.oadby-wigston.gov.uk
Telephone: (0116) 2888961
E-mail: buildingcontrol@oadby-wigston.gov.uk
or write to:
Building Control Section, Oadby & Wigston Borough Council, Council Offices, Station Road, WIGSTON, Leicestershire, LE18 2DR.

Borough of Oadby & Wigston

Building Control

Smoke & Heat Detectors in Dwellings
Each year in the United Kingdom over 9300 people are injured or almost 400 people die in domestic fires, many from smoke inhalation. It is widely accepted that those deaths and injuries would be significantly reduced by installing and maintaining smoke alarms within dwellings.

**Purchasing a Smoke Alarm**
When purchasing a smoke alarm, ensure it will comply with a British Standard or the International Standard Organisation (ISO) Standard.

The smoke and heat alarms must be mains operated and conform to BS 5446: Part 1: 2000 (Smoke Alarm) or BS 5446: Part 2: 2003 (Heat Alarm). Never buy a second-hand smoke detector. They should have a standby power supply, such as a battery or capacitor. Look for the BS kitemark or the CE mark, with the standards displayed.

Self-contained smoke alarms are not recommended for use in areas such as kitchens, garages or places where steam, condensation or fumes could give rise to false alarms. More appropriate and effective detectors are available for such situations, for instance heat detectors.

**Where are Smoke Alarm Systems Required?**
Domestic smoke/heat alarms are required to be installed by the Building Regulations in the following circumstances:

- All new dwellings
- Extensions to existing dwellings.
- Roof space conversions.

**Installation of Smoke Alarms**
It is recommended that a qualified person, for example, a registered electrician, carry out the installation of a smoke detector, as the electrical installation must comply with Approved Document P (Electrical Safety).

Smoke alarms must be permanently connected to a main electrical supply. The mains supply to the smoke alarm(s) should be from a single independent circuit which is fused separately at the distribution board or alternatively via a single regularly used lighting circuit as long as there is means of isolating the alarms without isolating the lighting.

**Position of Smoke Alarms**
Detailed guidance on the design and installation of fire detection and alarm systems is given in BS 5839. However the following guidance is appropriate to most common situations.

Smoke/heat alarms/detectors should be sited so that:

- In a circulation route such as the hall or landing, so that there is one in the circulation space within 7.5 metres of the door to every habitable room.
- In order to operate as effectively as possible, care should be taken when positioning smoke detectors. It is recommended that they be fixed as shown in figure 1.
- Heat detectors should not be fixed above a heater or ducted heat outlets.
- Smoke detectors should not be fixed in bathrooms, showers, cooking areas or garages, where steam, fumes or condensation can give false alarms.
- Alarms should not be fitted in very hot or very cold rooms (eg. boiler rooms or unheated porches), where the air currents may move smoke away from the unit.
- A smoke detector must be easy and safe to reach for maintenance purposes. For this reason the alarm should not be fixed over a stair shaft or an opening in a floor.

![Figure 1](image)

Continued overleaf/....