Blacktown City Council

General Information
on

SMOKE ALARM INSTALLATIONS

Many lives are lost each year in NSW because of fires in homes and other places where people sleep. The cause of death is found mostly to be from the inhalation of toxic smoke, fumes and gases generated by the fire while the victims are asleep.

The Building Code of Australia (BCA) required the installation of smoke alarms in all new private dwellings and other places of shared accommodation constructed since mid 1986.

The Environmental Planning and Assessment Amendment (Smoke Alarms) Regulation 2006 came into effect on 1 May 2006 and requires the installation of appropriate smoke alarms in all private dwellings and places of shared accommodation.

Smoke alarm installations must be in accordance with the requirements of Australian Standard 3786-1993, *Smoke alarms* (AS 3786). **The required location of alarm installations is indicated in the diagrams on the reverse side of this sheet.**

The type of smoke alarm that must be installed depends on the type of building, as summarised below:

Type of Building and BCA Classification Number	**Type of Smoke Alarm**
Private dwellings Class 1a buildings (eg: detached houses, town houses, villa units) Class 2 buildings (eg: apartments, home units, flats) Class 4 parts of buildings (eg: caretaker's flats, single residence above shops) Relocatable homes (eg: manufactured homes and moveable dwellings, but not tents, campervans, caravans or the like)	AS 3786 compliant: Hard-wired to the mains electricity power supply, with battery back-up, or Powered by a battery (Building owner's choice)
Shared accommodation Class 1b buildings (eg: small boarding houses, guest houses, hostels, bed and breakfast accommodation) Class 3 buildings (eg: large boarding houses, residential parts of hotels, motels, schools, health care buildings, certain residential accommodation for the aged, children and people with disabilities) Class 9a health care buildings (eg: hospitals, nursing homes)	AS 3786 compliant, but must be: Hard-wired to the mains electricity power supply, with battery back-up, or Powered by a non-removable 10-year long-life battery permanently connected to the smoke alarm (Building owner's choice)

The Regulation requires the building owner to install and maintain each smoke alarm. The Regulation also provides for penalties exceeding $200 to apply after 1 November 2006.

Should you require any additional information, please contact the Smoke Alarms Help Line on **Phone 1300 858 812** or refer to the following web links:

NSW Fire Brigades
www.nswfb.nsw.gov.au/community/athome/smokealarms/legislation.php

NSW Department of Planning
www.planning.nsw.gov.au/smokealarms/index.asp

In Class1a buildings and relocatable homes, smoke alarm must be installed on every storey.

Storeys with bedrooms

In storeys containing bedrooms smoke alarms are to be located on or near the ceiling:

- in every corridor or hallway associated with a bedroom or
- if there is no corridor or hallway, between the part of the building containing the bedroom and the remainde of the building or home.

Diagram 1 shows where to locate a smoke alarm in a dwelling where bedrooms are grouped together and connected to the living areas by a corridor or hallway.

Diagram 1: Dwellings with bedrooms grouped together.

In those dwellings where the bedrooms are not grouped together or no connecting hallway exists, then smoke alarms should be located as shown in Diagram 2.

Diagram 4: Cross section through a dwelling showing smoke alarms in the storey containing bedrooms (top floor) and the storeys not containing bedrooms. Smoke alarms located within area of stairway

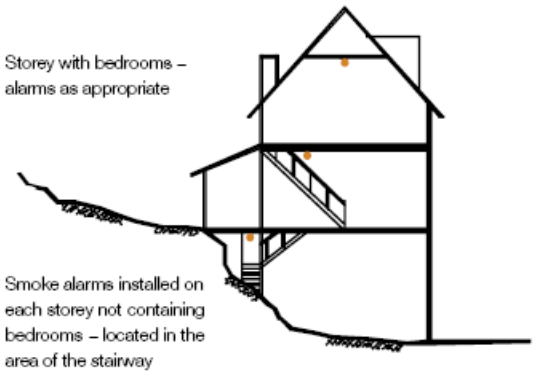


Diagram 5: Example for small boarding houses, guest houses, hostels, B&Bs etc.

Storeys with no bedrooms

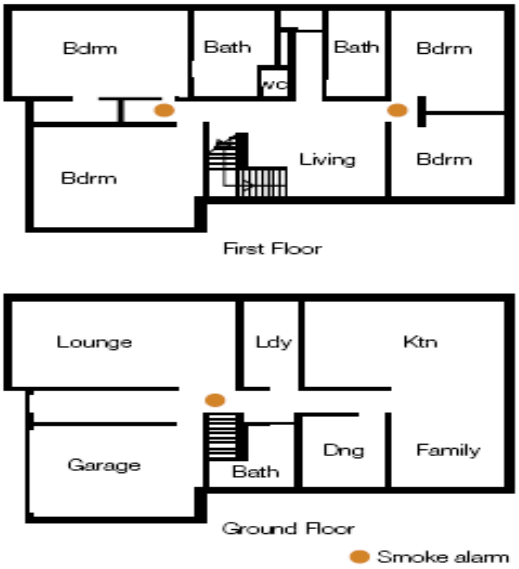
A smoke alarm must be installed in storeys not containing bedrooms. In these storeys smoke alarms should be located in the path of travel people will most likely take to evacuate the building, similar to that for Class 1a buildings. See 'Houses, villas etc. and relocatable homes' above.

Diagram 2: Dwellings with separated sleeping areas

Storeys with no bedrooms

A smoke alarm must be installed in storeys not containing bedrooms. In these storeys a smoke alarm should be located in the path of travel people will most likely take to evacuate the building. This will ensure an alarm is sounded before smoke makes the escape route impassable. If the bedrooms are on the first floor, then an alarm should be positioned near the area of the interconnecting stair, as shown in Diagram 3 and 4.

Diagram 3: Two storey dwelling showing smoke alarms in the storey containing bedrooms (first floor) and the storey not containing bedrooms (ground floor)



Smoke alarms must be installed on or near the ceiling. Special care is required to avoid 'dead air spaces'. A dead air space is an area in which trapped air will prevent smoke from reaching the alarm. This generally occurs at the apex of cathedral ceilings, the corner junction of walls and ceilings, or between exposed floor joists. If it is impractical to mount the smoke alarm on the ceiling, it may be located on the wall—as long as the smoke alarm is suitable for this application. In this case, the top of the smoke alarm should be between 300mm and 500mm from the ceiling. The distance from the apex of a cathedral ceiling to the top of the alarm should be between 500mm and 1500mm. (See Diagram 7).

Diagram 7: Proper mounting of smoke alarms