

SMOKE ALARMS - NEW SOUTH WALES

Location of smoke alarms (minimum requirements)

Where smoke alarms are to be located in a building, and the number required, depends on the [building's use \(classification\), size and layout](#). The new Regulation sets out what is required, as explained below.

The general principle is that smoke alarms should be positioned to **detect smoke before it reaches sleeping occupants**. The sound emitted by the alarm is designed to wake occupants, giving them time to evacuate.

Houses, villas etc. and relocatable homes (Class 1a)

In Class 1a buildings and relocatable homes, smoke alarms 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 remainder 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 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)

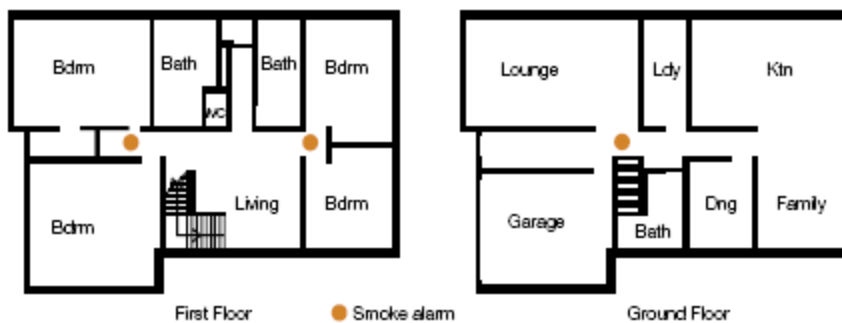


Diagram 4: Cross section through a dwelling showing smoke alarms in the storey containing bedrooms (top floor) and the storeys not containing bedrooms. Smoke alarms located within area of stairway



Small boarding houses, guest houses, hostels, B&Bs etc (Class 1b)

In Class 1b buildings, smoke alarms must be installed on every storey.

Storeys with bedrooms

In storeys containing bedrooms, smoke alarms must be installed on or near the ceiling in every:

- bedroom
- corridor or hallway associated with a bedroom, or, if there is no such corridor or hallway, between each part of the building containing a bedroom and the remainder of the building.

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.

Apartments, units and flats (Class 2)

Smoke alarms must be installed within each home unit or apartment in a Class 2 building. At this point in time, the Regulation does not require smoke alarms to be installed in common areas such as public hallways, corridors, lobbies and stairways. The focus of the Regulation for this type of building is on those parts of the building in which persons reside and sleep.

The requirements for the location of smoke alarms for dwellings in Class 2 buildings are the same as those for Class 1a buildings.

Large boarding houses, guest houses, hostels, backpacker accommodation; residential parts of hotels, motels, schools, health care buildings, detention centres; certain accommodation for the aged, children and people with disabilities etc. (Class 3)

In a Class 3 building smoke alarms must be installed in each Sole-occupancy unit (SOU). In addition, if the building is not protected with a functioning sprinkler system, smoke alarms must also be installed in each:

- habitable room not within a SOU
- public corridor and other internal public space.

Note. 'Sole-occupancy unit' as used in the new Regulation has the same meaning as in the Building Code of Australia.

Smoke alarms in Sole-occupancy units (SOUs)

What is a Sole-occupancy unit?

Sole occupancy unit means a room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes:

- a dwelling; or
- a room or suite in a Class 3 building which includes sleeping facilities; or
- a room or suite of associated rooms in a Class 5, 6, 7, 8, or 9 building; or
- a room or suite associated rooms in a Class 9c aged care building, which includes sleeping facilities and any area for the exclusive use of a resident.

Smoke alarms must be installed in every storey in the SOU.

Storeys with bedrooms

In storeys in the SOU that contain bedrooms, smoke alarms must be located on or near the ceilings:

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

Storeys with no bedrooms

A smoke alarm must be installed in storeys in the SOU not containing bedrooms. In these storeys smoke alarms should be located on or near the ceiling in the path of travel people will most likely take to evacuate the unit.

Smoke alarms in parts of the building not within a SOU

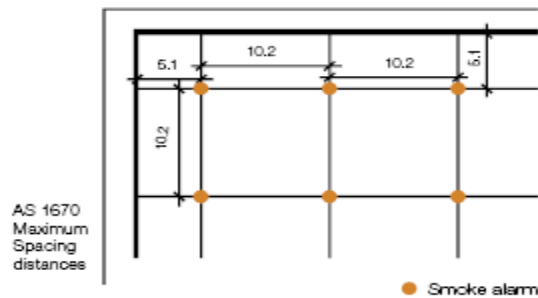
In Class 3 buildings not protected with a functioning sprinkler system the new Regulation also requires smoke alarms to be installed in:

- habitable rooms not within any SOU, for example common dining rooms, lounge rooms and recreation spaces, and common kitchens (more information on [heat alarms](#))
- public corridors
- other internal public spaces including foyers, lobbies and the like.

The new Regulation requires that smoke alarms in these areas be located in accordance with the requirements of AS 1670.12004, Fire detection, warning, control and intercom systems design, installation and commissioning Part 1: Fire as if the smoke alarms are smoke detectors. In general terms, in areas with flat ceilings, AS 1670.1 requires smoke alarms to be located not more than 5.1 metres from any wall and not more than 10.2 metres apart. (For a

complete set of location requirements including those for all types of ceilings you need to refer to AS 1670.1.)

Diagram 6: Maximum spacing distances as set by AS 1670.1



Caretaker flats and shop-top housing (Class 4 parts of buildings)

The requirements for locating smoke alarms in Class 4 parts of buildings are the same as those for [Class 1a buildings and relocatable homes installation](#). The new Regulation, at this point in time, focuses on the dwelling only and does not require smoke alarms in any public stairway, hallway or corridor serving the Class 4 part of the building.

Bedsits and other small dwellings, apartments and sole-occupancy units

Some small dwellings and units do not have distinct or separate bedrooms. They consist substantially of one room comprising sleeping and other facilities. For these types of dwellings and units, smoke alarms are to be located on or near the ceiling between the sleeping area and the rest of the dwelling or unit.