

Common Property Requirements

Below is an overview of the requirements for Smoke/Thermal Alarms on Common Property and in Sole Occupancy Units.

Unless we have a copy of the COC for the building or the baseline data it is difficult to determine which category applies to the smoke alarms. However, as a rule we can apply the BCA to all buildings constructed on or after 1997.

Smoke Alarms in Common Property

Smoke Alarms in Common Property must be installed as per the requirements to E2.2a, Clause 3 of the Building Code of Australia, which also calls Clause 6 into effect for building occupant warning systems required in buildings not sprinkler protected. Therefore, to achieve this all smoke alarms must be interconnected. This has been in place since BCA96.

BCA, E2.2a Extract:

2. Type of system

A required automatic smoke detection and alarm system must comply with the following:

- (a) Class 2 and 3 buildings and Class 4 parts of a building:
 - (i) Subject to (ii), a Class 2 and 3 building and Class 4 part of a building must be provided with -
 - (A) a smoke alarm system complying with Clause 3; or
 - (B) a smoke detection system complying with Clause 4; or
 - (C) a combination of a smoke alarm system complying with Clause 3 within sole-occupancy units and a smoke detection system complying with Clause 4 in areas not within the sole-occupancy units.
 - (ii) A Class 3 building must be provided with a smoke detection system complying with Clause 4 if it -
 - (A) has a Class 3 part located more than 2 storeys above ground level; or
 - (B) accommodates more than 20 residents and is used as a residential part of a school or accommodation for the aged, children or people with a disability.
- (b) Class 5, 6, 7, 8 and 9b buildings: A smoke detection system complying with Clause 4.
- (c) Class 9a health-care building:
 - (i) Where 6 or less bed patients are accommodated-
 - (A) a smoke alarm system complying with Clause 3; or
 - (B) a smoke detection system complying with Clause 4.
 - (ii) Where more than 6 bed patients are accommodated, a smoke detection system complying with Clause 4.
- (d) Class 9c building: A smoke detection system complying with Clause 4

Below are the requirements for Testing Smoke Alarms in accordance with AS1851:2012 & QDC MP6.1 when installed as prescribed in the Building Code of Australia.

6.4.2 Smoke alarms and heat alarms

6.4.2.1 General

For a Class 1a dwelling and the sole occupancy units within a Class 2 building, the inspection, test, routine service and survey required by this section may be carried out by the occupant in accordance with the manufacturer’s recommended procedure and need not be recorded.

Note: Occupants should to be aware that this requirement may be altered by the relevant state or territory regulations.

6.4.2.2 Six-monthly service

Inspection, test, routine service and survey for smoke alarms and heat alarms on a six-monthly basis shall be carried out in accordance with Table 6.4.2.2.

**TABLE 6.4.2.2
SIX-MONTHLY SERVICE SCHEDULE
SMOKE ALARMS AND HEAT ALARMS**

Item No.	Item	Action required and pass/fail requirement	Records		
			Result	Pass/Fail	Comments
1.1	Smoke alarms and heat alarms	INSPECT all alarms for any condition that is likely to adversely affect their operation, such as excessive deposition of dust or coating of paint.			
1.2	Battery missing indication	INSPECT all alarms to ensure that any required 'battery missing indicator' has not operated.			
1.3	Mains power on indicator	INSPECT that the mains power on indicator is illuminated.			
1.4	Alarm test	ACTIVATE the alarm test function and check correct activation of the audible indication.			
1.5	Other warning devices	Where other sensory warning devices are used as alarm-indicating devices, INSPECT all devices to ensure that they are in place.			

NOTE: Items 1.1 to 1.5 may be carried out by the occupant or owner and not be recorded.

6.4.2.3 Yearly service

Inspection, test, routine service and survey for smoke alarms and heat alarms on a yearly basis shall be carried out in accordance with Table 6.4.2.3.

Sole Occupancy Requirements

Sole Occupancy Requirements – Classifications 1 & 2 Areas of a Property

The references used are:

- Fire and Emergency Services Act 1990 (FESA90)
- Building Fire Safety Regulation 2008 (BFSR08)
- Building Regulation 2006 (BR06)
- Building Code of Australia (BCA)

Dwellings (as referred to below) are Classification 1a (Houses, Town Houses etc.) & Classification 2 (Units, Apartments etc.) (FESA90 104RA) as defined by the BCA. No other class of building is covered by this smoke alarm legislation. All other classes of building must comply with the BCA requirements.

The requirements of an existing dwelling are:

- All dwellings built after 1997 are required to have 240-volt hardwired smoke alarms (BCA requirement)
- In 2007 it became mandatory to have a smoke alarm in all domestic dwellings (house built prior to 1997 could have a battery-operated smoke alarm) (FESA90 requirement)
- All dwellings approved for construction after 2014 must have hardwired and interconnected smoke alarms (BCA requirement).

Existing dwelling Smoke Alarm locations (BCA)

- In hallways which connect bedrooms and the rest of the dwelling; or
- If there is no hallway, between the bedrooms and other parts of the storey; and
- If there are no bedrooms on a storey at least one smoke alarm must be installed in the most likely path of travel to exit the dwelling.

New Construction and substantial renovation (BR06 13AC)

Any dwelling under construction or undergoing substantial renovation will have a development application. The Building Certifier is responsible for ensuring all building works in that development application meet the requirements of any legislation or code. If there are any compliance issues with a new construction or substantial renovation, the Building Certifier engaged as the assessor should be consulted.

From 1 January 2017 for all existing dwellings (FESA90 104RC)

- If the smoke alarms are older than 10 years or if they fail to operate when tested they must be replaced.
- If they are replaced, they must be replaced with photoelectric smoke alarms and.
- If they are powered by 240 volts, they must be replaced with 240-volt smoke alarms, otherwise battery-operated photoelectric smoke alarms are fine,
- 9-volt removable batteries are legal until 2022 or 2027 as long as the smoke alarm is AS3786-2014 compliant (see below)
- All replaced smoke alarms that are required by legislation must be replaced with AS3786-2014 compliant smoke alarms.

From 1 January 2022 for dwellings being leased, released, or sold (FESA90 104RBA (2)) or 1 January 2027 for all other dwellings (FESA90 104RBA (7)).

Smoke alarms must be installed on each storey (FESA90 104RBA (4) & BFSR08 55C).

- In each bedroom; and
- In hallways which connect bedrooms and the rest of the dwelling; or
- If there is no hallway, between the bedrooms and other parts of the storey; and
- If there are no bedrooms on a storey at least one smoke alarm must be installed in the most likely path of travel to exit the dwelling.

The smoke alarms installed after these dates will be required to be powered by either hard wired 240 volt or 10-year tamper proof battery and be interconnected by either wired or wirelessly to all other required smoke alarms in the dwelling. All smoke alarms that are required by legislation at these dates must be AS3786-2014 compliant smoke alarms. (FESA90 104RBA (5) (a) and BFSR08 55D).

Additional Smoke Alarms (FESA90 104RI)

The legislation does not prevent the installation of, or the removal of, extra smoke alarms that are not required by the legislation. However, any extra smoke alarm installed in the dwelling must be maintained as required by the legislation. That is, they must be replaced when older than 10 years or if they fail to operate, they must be cleaned and tested and must not be left inoperable. As they are extra to the legislation they can be removed if the owner does not wish to maintain them.

The legislative requirements for a rental dwelling are (FESA90 104RD & 104RG)

- Within 30 days before the start of a tenancy in a domestic dwelling, the lessor must test (FESA90 104RD) and clean (FESA90 104RG) each smoke alarm in the dwelling.
- During a tenancy in a domestic dwelling, the tenant must test and clean each smoke alarm in the dwelling, at least once every 12 months.
- For example, if the tenant stayed for 6 months and another tenant moved in the lessor would need to test and clean the smoke alarms 30 days prior to the new lease starting. Even if the tenant only stayed for 2 months the lessor would still need to test and clean prior to the new lease taking affect.
- Test has a definition in the legislation, and it is for an alarm that can be tested by pressing a button—by pressing the button, otherwise by being tested in the way stated in the manufacturer's instructions.
- Clean also has a definition in the legislation and that is "in the way stated in the manufacturer's instructions", which is normally vacuuming.

Smoke Alarm Placements (BFSR08 55C (3))

Must be on:

- The ceiling (if it is practicable); or
- If it is not, the underside of an exposed joist or beam which has a depth of no more than 300mm when measured from the ceiling; or
- Otherwise, a wall in an area that is between 100mm and 300mm from the ceiling and more than 300mm from the corner of 2 walls and
- If smoke alarm is installed on a ceiling that slopes, it must be in an area of the ceiling that is between 500mm and 1500mm from the apex of the ceiling.

Must NOT be:

- Within 300mm of a light fitting; and
- If installed on a ceiling, within 300mm of a corner of the ceiling and a wall; and
- If installed in a stairwell, where smoke rising in the stairwell will not reach the smoke alarm because of an obstruction; and
- Within 400mm of an opening from which air is supplied from air conditioner or forced air ventilation; and
- Within 400mm of the blades of a ceiling fan.