

3.6 SMOKE ALARMS

BCA 1990:	E1.7 Spec E1.7 Vic- H101.9 Vic- H103
BCA 1996:	EP2. 1, EP2.2 (Part E2, Spec E2.2a)
Reference:	AS 3786 AS 1851.8

3.6.1. PURPOSE:

Smoke alarms are installed either singly or in an interconnected circuit. to detect and provide an early warning of the presence of fire.

This early warning is designed to provide as much time as possible to alert occupants of this threat

3.6.2. REQUIREMENTS OF THE EQUIPMENT:

To carry out its function, a smoke alarm must be:-

- a) A system:-
 - i) designed in compliance with AS 3786, or
 - ii) listed in the SSL Register of accredited Products;
- b) Connected to the consumer mains supply; and
- c) Located in accordance with AS 1670, Specification E 1.7 of BCA 90 and Specification E 2.2(a) of BCA 96 where applicable; and
- d) Must have an external or internal power source, or a combination of both.

3.6.3. METHOD OF OPERATION:

There are two basic types of smoke alarms:-

- a) The ionization type, where smoke entering the chamber causes a change in current flow;
- b) The optical type, which operates by the scattering or absorption of light by smoke particles in a light beam.

This causes the alarm to sound locally or at a remote central location.

An alarm system may be required by the BCA or building surveyor to also transmit an alarm signal to a fire station.

3.6.4. MAINTENANCE CHECKS

It is recommended that the relevant building surveyor should require smoke alarms be checked monthly. The owner may delegate this function to another person or body where necessary or appropriate.

MONTHLY

- i) Perform the operational test of your alarms in accordance with the manufacturers instructions.
- ii) Visibly check each unit for damage.

YEARLY

- i) Battery -if not of the rechargeable type, renew battery with a battery as specified on or in your alarm.

If a rechargeable battery, check its voltage, using a voltmeter. If the voltage is as specified on the battery or the alarm, re-install. If voltage is not satisfactory, renew the battery, and have the charging circuit tested by a qualified service provider.

- ii) Using a vacuum cleaner, carefully clean the inside and cover of the alarm unit. Avoid physical damage.
- iii) Where provided, turn off external power supply to smoke alarm, and test as per manufacturers instructions. Restore power supply when completed.
- iv) Carry out the monthly routine.

3.6.5. MAINTENANCE RECORDS:

A log book must be kept to record:-

- a) Record the completion of the monthly routine; and
- b) Record the completion of the yearly routine; and
- c) Record any maintenance required on the system; and
- d) Record the date and name of the person testing the system.

Log sheets for this purpose are located in Appendix C of this Manual