Emergency Communication System

VICTORIAN BUILDING AUTHORITY
BUILDING CONFIDENCE

PRACTICE NOTE 08-2018

This updates the previous Practice Note-2014-08 issued May 2014

Reference to the Building Code of Australia (BCA) in this Practice Note means Volume One of the National Construction Code Series.

Purpose

To describe requirements for emergency communication systems which may be used in Class 3 residential care buildings instead of a sound system and intercom system for emergency purposes (SSIS) complying with E4.9 of the Building Code of Australia (BCA). The requirements of Vic H103.1 of the BCA must still be met. The system must also be designed to operate in conjunction with an alarm panel installed.

Emergency communication systems help to ensure the safety of people in buildings during emergencies. Class 3 residential aged-care buildings require different levels of protection depending on the number of residents occupying the building.

In addition to the SSIS, residential aged-care buildings with more than 32 residents may require a more complex emergency system.

Background

An SSIS complying with E4.9 of the BCA is not well suited to the emergency evacuation procedures typically necessary in a supervised residential care environment. In an emergency situation, the priority is occupant safety.

Staff should quickly investigate the cause of the alarm and respond to the needs of residents. In these circumstances, there may be insufficient staff to use an SSIS.

Levels of Protection Required

Emergency communication systems must be suitably configured for staffing arrangements in the building.

Compliance with the Deemed-to-Satisfy provisions of the BCA would require an SSIS complying with E4.9 of the BCA in certain Class 3 buildings over 2 storeys high and in all Class 3 buildings used for residential aged care. In this type of environment, a coordinated approach is required to fight the fire and evacuate the residents at the same time.

The complexity of the equipment required to assist with this coordination will depend on the number of residents to be evacuated.

There are two levels of protection requirements for the emergency communication system. The level applicable depends on the number of residents:

- Level 1: Up to 32 residents; and
- Level 2: More than 32 residents.

Level 1 system requirements

The warning features of this type of system, combined with the level of fire control provided by a residential sprinkler system, are considered to achieve an acceptable level of safety in these types of buildings.

Level 2 system requirements

A Level 2 emergency communication system must incorporate the following measures:

Interconnection with electronic communications system

An electronic communications system in compliance with Vic H101.6 of the BCA forms the basis of the emergency communication system.

The indication (annunciator) panel or panels of the electronic communications system must initiate a message on the panel when the fire alarm is activated. The message must:

- indicate the zone where the fire alarm has been activated; and
- be replicated to electronic pagers carried by supervising staff.

Public address system

A public-address system must be installed in the manager's office, or staff area, adjacent to the electronic communications system indication panel. The public-address system must be able to relay a clearly audible message throughout the building.

Staff communication

A facility must be provided that enables staff to communicate during an emergency, from the central area that contains the indication panel, and from the emergency control centre, if installed, to all other areas.

This system is required to allow staff in the central area to coordinate and liaise with staff and firefighters implementing the emergency evacuation procedures. Use of two-way radios is considered satisfactory.

Training of Building Occupants

It is recommended that the following training measures be implemented.

Staff training

The owner should put into place and maintain a staff training scheme that will:

- prepare staff for their role during an emergency;
- enable staff to efficiently utilise the emergency communication system technology;
- require refresher courses every 6 months; and
- ensure that every new staff member is trained in the use of the emergency communication system and the necessary evacuation procedures.

Guidance on procedures for the safety of people in buildings during emergencies can be obtained from AS 3745—2010 Planning for emergencies in facilities. A suitable training package and expert advice can be obtained from the Metropolitan Fire and Emergency Services Board or the Country Fire Authority.

Resident training

Residents should be informed of what to do in an emergency, including the necessary action to take when they hear an alarm or are given verbal directions from a staff member. Where appropriate, refresher courses should be held on a regular basis, to ensure that residents are aware of their responsibilities during an emergency.

Further information

Want to know more?

If you have a technical enquiry, please email technicalenquiry@vba.vic.gov.au or call 1300 815 127.

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