

Fire and Evacuation Guideline



Queensland Government
Department of Emergency Services

GENERAL

Purpose

Fires in buildings have the potential to cause significant loss of life. Therefore, it is important that plans are made for the safe evacuation of all occupants should a fire occur.

If procedures are implemented, proven to work, and occupants are aware of what to do, then loss of life or personal injury can be avoided.

The safety of building occupants is the responsibility of the owner/occupier. Owner/occupier refers to the owner, or the person accountable to the owner, for the management of the property – sometimes referred to as “the responsible person”. The owner/occupier must ensure there is an effective procedure adopted to allow occupants and staff to leave the building promptly and safely in an emergency.

It is a legal requirement of the *Fire and Rescue Service Act 1990* that the owner/occupier of a building must at all times maintain adequate means of escape from the building, a fire and evacuation plan, and to provide instructions to all persons working or residing in the building, for safe evacuation in the event of fire.

The instructions given to persons residing or working in the building must include the procedure to be followed in the event of fire or alarm of fire, the means of escape from the building in the event of evacuation, and the location and method of operation of fire fighting equipment and fire alarms.

This guideline is designed to assist with the development of fire and evacuation plans. More detailed information pertaining to particular building types can be found in specific guidelines in this series.

The principles detailed in this guideline will apply to all buildings, however the number and type of occupants, building characteristics and complexity, and level of fire safety installations may require some modifications to suit individual buildings and occupancies.

Evacuation may involve the complete relocation of people from the whole building to a safe outside area, or if the building has fire-rated compartments, a staged evacuation into the safe compartmented areas in preparation for total evacuation, if necessary.

Legislation for fire and evacuation plans does not apply to single dwelling houses however, it is still good practice to have well planned evacuation procedures if fire occurs to ensure the safety of all occupants.

Planning Committee

It is recommended that the owner/occupier's establish an emergency planning committee, which will need to be representative of all occupant groups within the building.

The size of the planning committee will vary from each building. Smaller buildings with low



occupancy rates could have a simple planning committee as long as the number of members on the planning committee is sufficient to achieve all objectives.

The planning committee should meet at least annually, with a role to: -

- (a) create an emergency team;
- (b) establish and implement fire and evacuation plans and procedures;
- (c) arrange for the training of emergency team personnel;
- (d) arrange practice evacuation exercises; and
- (e) review the effectiveness of the plans, procedures and practice evacuation exercises and, if necessary, arrange for improvements.

Emergency Team

The emergency team is responsible for initiating the fire and evacuation plans in an emergency situation, such as a fire or alarm of fire.

As with the planning committee, the size of the emergency team will depend upon the size and complexity of the building together with the number and type of occupants. Smaller buildings could have simple emergency team structures, as long as there are sufficient people available to implement the fire and evacuation procedures. The same person could perform one or more of the positions on the emergency team.

Emergency team members need to be easily identified when an emergency situation arises. They can do this by wearing an appropriately coloured helmet, hat, vest or armband. These positions, with their colour identification, can include:-

- a Chief Warden (white)
- a Deputy Chief Warden (white)
- Floor or Area Wardens (yellow)
- Wardens (red)
- a Communications Officer, if necessary (white).

Emergency Team Roles And Responsibilities

- (i) The Chief Warden is responsible for the co-ordination of the overall evacuation, and on becoming aware of a fire incident shall:-
 - (a) ascertain the nature of the fire, or potential fire;
 - (b) telephone the Fire Service on '000';
 - (c) ensure that Floor or Area Wardens are advised of the situation;
 - (d) initiate the fire and evacuation procedure;
 - (e) brief the arriving Fire Officer on the type, size and location of the fire and then act upon the Fire Officer's instructions.
- (ii) The Deputy Chief Warden will assume the responsibilities normally carried out by the Chief Warden, if the Chief Warden is unavailable, or generally assist the Chief Warden. The Deputy Chief Warden could undertake the role of the Communications Officer if this position is not filled.
- (iii) Floor or Area Wardens are responsible for a particular floor or area of the building. On becoming aware of a fire incident they would:-
 - (a) implement the fire and evacuation procedure for their floor or area;
 - (b) ensure the Fire Service has been phoned;
 - (c) communicate with the Chief Warden and act on his instructions; and
 - (d) advise the Chief Warden as soon as possible of the circumstances and of the action taken.
- (iv) Wardens assist the Floor or Area Wardens. The number required will depend upon the size and number of occupants of the building. Generally there should be one Warden for each twenty persons on the floor or in the area.



Wardens may be required to carry out a number of activities, including:-

- (a) ensuring the Fire Service as been notified by telephone;
- (b) checking to ensure fire doors and smoke doors are closed properly;
- (c) searching the floor or area to ensure all persons are accounted for;
- (d) assisting disabled or mobility-impaired persons;
- (e) operating firefighting equipment if trained and safe to do so.

(v) A Communications Office should:-

- (a) notify appropriate emergency team personnel and confirm the Fire Service has been notified;
- (b) transmit instructions between the Chief Warden and Floor Wardens.

Deputies should be appointed to each of the positions on the emergency team to allow for absenteeism.

Emergency team members must be properly trained in their roles and responsibilities.

Planning Principles

Fire and evacuation plans should be maintained in an appropriate format, such as a ringed binder, for ease of amendment, and be kept in an easily accessible location, like the front reception area. As well, the procedures should be posted in observable locations throughout the building.

In brief the plan should be: -

- Simple and easily understood;
- Flexible to allow for amendments and changing scenarios;
- Written to avoid misunderstandings;
- Circulated to all personnel so they are familiar with the plans and procedures;
- Tested by practice;
- Kept in an easily accessible location;

- Regularly reviewed to ensure they work; and
- Be based on a practical assessment of fire threats.

Planning Considerations

To develop effective plans, consideration needs to be given to:

- (a) After hours use of the building which could influence the availability of emergency team members. Users of the building after hours, such as cleaners, need to be made aware of fire and evacuation procedures and have the knowledge to react appropriately in an emergency.
- (b) Installed fire safety facilities, like sprinkler systems, which could affect the avenues of escape and the containment of fire to particular areas of the building.
- (c) Ensuring procedures are of a sufficient magnitude to suit the number of occupants of the building.
- (d) Using effective communication systems, which are a valuable tool when evacuations occur. No matter how simplistic a communications system is, it could be vital for the safe evacuation of occupants. Consideration should also be given to using whistles, torches or any other means suitable for communicating with others.
- (e) Escape routes, which must be assessed in detail for the likely effect an evacuation could have on them. All escape routes and exit paths must be kept clear to allow unimpeded access when required. Consideration should be given to any items that could be knocked over or displaced during an evacuation, and which could hinder the evacuation process.
- (f) Lifts and escalators, which should not generally be used as part of the evacuation process. Lifts should only be used under the control of the Fire Service, or by nominated members of the emergency team as a last resort, in the absence of the Fire Service.



- (g) Disabled or mobility-impaired persons who are at an increased risk during an evacuation. An up to date register of the names, workplaces or locations of disabled or mobility-impaired persons should be kept with the fire and evacuation procedures. The procedures for helping disabled or mobility-impaired persons should be discussed with the individuals concerned.
- (h) Accounting for all occupants during the evacuation. It is essential that all persons be cleared from the floor or area being evacuated. This function is more important than a later physical count of those evacuated.
- (i) Registering visitors, contractors and trades people who enter the building for short-term duration to account for them in an evacuation.
- (j) Assembly areas to ensure that people who have been evacuated from the building gather in an area safe from the fire, smoke, embers, broken glass, emergency vehicles, general traffic and potential building collapse. At least two safe assembly areas should be available depending on the location of any fire.
- (i) Include the times of occupancy of the building, and any possible after-hours occupants.
- (j) Have a schedule of future training for emergency team members and a register of completed training.
- (k) Have a schedule of practice evacuations to be undertaken.
- (l) Record locations of safe assembly areas.
- (m) Include the evacuation procedures.
- (n) Include maintenance records of installed fire equipment, a schedule of future servicing dates and a record of the locations of installed fire equipment.
- (o) Have after hours contact numbers of the Chief Warden and the Deputy Chief Warden.
- (p) Include a record of the location of posted evacuation procedures.
- (q) Include any other information, as trivial as it may seem, that can contribute to an efficient fire and evacuation plan.

A floor plan of the building is an efficient method of displaying the evacuation plan. The floor plan does not need to be a sophisticated, professionally designed map, as long as it clearly indicates:

- (a) exit doors,
- (b) fire fighting equipment
- (c) manual call points (such as break glass alarms),
- (d) fire alarm indicator panels,
- (e) medical first aid points,
- (f) assembly areas and alternative safe locations, and
- (g) any other information that will assist with the evacuation.

In motels, hotels, hostels and boarding houses, a floor plan is a mandatory requirement.

Developing A Plan

The fire and evacuation plan needs to:-

- (a) Include a statement clearly identifying its purpose and scope.
- (b) Indicate the buildings to which it applies.
- (c) Identify exit doors and escape routes. If not installed, exit signs and directional arrows may be required to direct occupants to exits.
- (d) Define overall control and co-ordination arrangements.
- (e) List members of the emergency team, with their positions and locations.
- (f) List the duties and responsibilities of emergency team members.
- (g) Record any deputies to positions if members of the emergency team are absent.
- (h) Include a register of disabled or mobility-impaired occupants.



Implementing Plans

Once fire and evacuation procedures have been written, they must be communicated to all building occupants.

Information sessions should be conducted with all occupants to ensure that everyone is familiar with the plans and procedures.

The actions to be followed can be refined through conducting practice evacuation exercises.

Before the first practice evacuation takes place, occupants should be briefed on:-

- (a) The identity of Wardens and emergency team members;
- (b) The method of reporting fires;
- (c) The alarm system used and what each sound represents;
- (d) Action to take in response to alarm signals;
- (e) All evacuation routes available;
- (f) Assembly or designated alternative areas which provide safe refuge internally or externally; and
- (g) What is required at the completion of the practice evacuation exercise.

This briefing is best performed through the warden system, thus enabling the occupants to identify their wardens and become aware of their duties.

Practice Evacuations

At least one practice in conjunction with the Fire Service is required to ensure that procedures are satisfactory. Once it is established that they are satisfactory and workable, a program of future evacuation exercises is to be established.

Prior to the conducting of practice evacuation exercises, the Fire Service will be notified if direct Fire Service Alarms are being activated. This will prevent unnecessary call outs of the service.

If the premises are large or a multi-storey building is involved, a partial evacuation could be undertaken to provide the least disruption to work while still testing the effectiveness of the procedures. If performing a partial evacuation, each occupant of the building has to be involved in a practice evacuation at least once every year.

When the emergency team and the fire and evacuation procedures have been proven to be satisfactory, ongoing practice evacuations are to be conducted.

All practice evacuation exercises should be planned and communicated to all personnel prior to the practice occurring. This will help to avoid injuries and to enable the planning of work requirements for occupants of the building. Practice evacuations without giving notice should be avoided.

Management within the building have an obligation to ensure that the fire and evacuation plans and procedures must be properly tested, and all emergency team members receive sufficient training to ensure their effectiveness when required. Practice exercises and training must be ongoing.

A debriefing after each evacuation, whether it be a practice or an actual situation, is essential to identify any shortcomings in the plan and procedures, and to amend them where necessary.

Fire And Evacuation Procedures

The procedures embrace four essential requirements. In most instances they would need to be initiated concurrently.

1. **REMOVE** anyone in danger. Ensure the immediate safety of anyone within the vicinity of the fire. Advise a Warden if anyone is trapped, injured or in danger from the fire. Do not further endanger any lives by taking unnecessary risks.



2. **ALERT** the Fire Service on 000. This may be done from the nearest telephone, if safe to do so, or by using a telephone in neighbouring premises. Where the Fire Service has been called by automatic means or from a manual call point, a telephone call should follow to confirm receipt of alarm and provide further information.

The Fire Service is to be called in all incidents of fire, suspicion of fire or potential fire situations. There should be no criticism of any person who uses initiative in this respect nor should such action need another person's permission.

3. **CONFINE** the fire. Most buildings have fire hose reels or portable fire extinguishers. Where these are installed, selected occupants should be trained in their operation. However, immediately it becomes obvious that there are unnecessary risks associated with attempts to control a fire, those attempting to fight the fire should withdraw from the area, closing doors behind them, and follow the evacuation procedures.
4. **EVACUATE** the building or area.
 - Obey all instructions given by Wardens or Fire Officers.
 - Leave immediately by the nearest safe exit. Move quickly but do not run. If possible, close doors behind you.
 - Do not use lifts.
 - Report to a designated assembly point.
 - If evacuation is outside, stay outside until the Chief Warden gives the "all-clear".
 - If evacuation is to a safe inside area, remain there until the Chief Warden gives the "all-clear". Do not re-enter a building

or area that has been evacuated until you are advised that it is safe.

- If any injuries are sustained, notify a warden of the extent of the injury.
- If you know of people trapped in the building, advise a Warden immediately of their possible location.

To be effective, an evacuation procedure has to be based on the following:

- (i) A suitable arrangement to alarm occupants of an emergency should be available. The building may be fitted with a fire alarm system that will give varying signals to indicate various stages of an incident. All occupants need to know what each signal indicates.
- (ii) The selection of emergency team personnel should be consistent with the level of their supervisory responsibilities. During emergencies, instructions given by emergency team members should overrule normal management structure.
- (iii) A detailed assessment should be made of escape paths, and normal building exits and the effect that any emergency condition may have on these, and appropriate allowances made in any planning.

Further Information

Further information about establishing fire and evacuation plans and procedures can be obtained from the following publications:-

- Australian Standard 3745 – 2002 (Emergency control organization and procedures for buildings, structures and workplaces);
- Queensland Fire and Rescue Service - Fire Safety Guidelines for specific buildings;
- Or contact a Fire Safety Consultant in the yellow pages, or the Queensland Fire and Rescue Service.

