



It is recognised that both life safety and property protection are of importance in shopping centre buildings. A large fire in these buildings may not only present a major threat to life and may result in significant direct property losses, but more importantly, an ongoing loss of sales revenue through interruptions and delays to the provision of goods and services.

Fire risk is considered the major catastrophic risk for shopping centres and malls. They have large numbers of people passing through, especially at weekends and other times such as during festive seasons. There are the people who work for the tenants that could be in the hundreds depending on the size of the centre. There are also the service providers such as cleaning and security contractors who are also part of the centre workforce. Centre management has the responsibility of fire risk management and to make sure this risk is minimised.

The majority of retail fires are started by electrical faults or arson. In the case of electrical faults, these were often associated with PVC covered wiring and electrical devices within the ceiling space, display case areas or shop facades and faults from appliances. Several fires were caused by welding work during renovation.

The Australian Building Codes Board has issued a report on life safety and property protection in shopping centres. The report's recommendations are;

Fire resistance and compartmentation - The building structure when should have sufficient fire resistance to allow the movement of the occupants to a safe place. The fire resistance required should therefore relate directly to the time it takes for the occupants to move to a safe place. The areas within a shopping centre capable of having a significant fire are the specialty and major stores.

Evacuation - The presence of an Evacuation Management Plan and associated training is of fundamental importance. The training of wardens and evacuation drills should be sufficient to allow them to have a positive impact on any evacuation.

Emergency vehicle access - It is important that the fire brigade has access to major entrances of the building and unobstructed use of the fire hydrants.

Firefighting provisions - The intervention of the occupants is important. Fire extinguishers are best provided in specialty shops and major stores. For a very large building, it may be appropriate to have some staff trained in firefighting beyond the use of hose reels and to provide in-house booster pumps and specialist hose lines that could be fitted to hydrants.

Smoke control - As far as smoke management of major stores is concerned it is recommended that the exits comply with the current deemed to satisfy requirements of the BCA with the exception that the entrance to the mall also be considered as an exit. Major stores should be designed to allow evacuation in the event of a fire.

Sprinklers - Sprinklers associated with major stores should be separately valved to those associated with specialty shop areas and each valve should relate to only one level in the building. Any reduction in sprinkler zone size for specialty shop areas is to be encouraged provided that any subsidiary valves are monitored and positioned in appropriate locations.

Fires create panic amongst retailers and the general public. They can cause damage to property, equipment and stock, and can result in lengthy and expensive downtime while repairs and rebuilding take place.

It is important that fire safety systems are installed and properly maintained and that emergency plans are in place and practiced.

High levels of fire safety will only be achieved in retail buildings if all fire-safety systems are properly commissioned and managed throughout the life of the building.