

# Fact Sheets for Fire Protection Equipment

## FIRE HYDRANTS, FIRE MAINS AND ASSOCIATED BOOSTER PUMPS

### **Objective of the Essential Safety Measure:**

To provide fire fighting personnel with a supply of water for fire fighting purposes.

### **Legislative Requirements:**

A Hydrant system must:

- Be installed to meet the requirements of AS 2419.1
- Be located to provide coverage to every part of the building or site requiring coverage.
- Provide a minimum flow of water at all times as required by relevant Australian Standards.
- Be readily accessible to fire fighting personnel.

## FIRE HOSE REELS

### **Objective of the Essential Safety Measure:**

Hose reels are provided to enable occupants to undertake initial attempts at fire extinguishment.

### **Legislative Requirements:**

Hose Reel Systems must:

- Be installed in accordance with AS 2441.
- Provide sufficient hose reel length to enable every part of the floor or storey on which it is installed to be reached by laying the hose along normal lines of access throughout that floor. Normally between 30-36 metres.
- Be provided with a water supply rate, in accordance with AS2441, or at least 0.33 l/s.
- Have the location of each hose reel clearly indicated.
- Have 'how to use' instructions attached.

## FIRE EXTINGUISHERS (PORTABLE)

### **Objective of the Essential Safety Measure:**

Portable fire extinguishers provide occupants with a quick means of fire fighting in an emergency situation.

### **Legislative Requirements:**

Portable Fire Extinguishers must:

- Be installed to meet the requirements as outlined in AS 2444.
- Be easily identifiable and labelled for the use in which it is intended.
- Have easy 'how to use instructions'
- Extinguisher type should be selected to extinguish the specific class of fire.



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## **FIRE DOORS**

### **Objective of the Essential Safety Measure:**

A fire door is installed in a fire wall to maintain the fire resistance rating of that fire wall, allowing occupants to pass between areas of a building which are separated by a fire wall without compromising on the ability of the wall to provide fire separation in the event of a fire.

Fire walls are installed to slow down the progress of a fire. This helps in the isolation and fighting of a fire. They also allow more time for occupants to escape from other parts of the building.

### **Legislative Requirements:**

The door must be capable of achieving the fire rating of the attached wall and be installed and maintained in accordance with the relevant Australian Standard.

An approved fire-resistant door set is one that is identical in assembly, construction and installation to a prototype of this door that has been submitted to the standard fire resistance test, and has fulfilled all the relevant test requirements.

A fire door must be self closing or close automatically on the operation of a smoke detector or the loss of power supply.

Each fire door and frame must have a compliance tag attached as required by AS 1905.1 and latch sets and closers should also be marked as required.

## **FIRE DETECTION AND ALARM SYSTEM**

### **Objective of the Essential Safety Measure:**

Fire detection and alarm systems are installed to detect and provide warning of a fire in its initial development stage. Proper operation of this system gives building occupants the maximum time available to escape.

### **Legislative Requirements:**

Fire Detection Systems must:

- Be designed in compliance with AS 1670.1 & E2.2a BCA.
- Detectors must be located as defined by AS 1670.1.
- Alert building occupants in the event of a fire alarm.



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## **EWIS / OCCUPANT WARNING SYSTEM**

### **Objective of the Essential Safety Measure:**

An EWIS alerts occupants of a building in the event of an emergency and is used to facilitate an orderly evacuation of the building. Use of the system is an important part of the emergency procedures of a building. Use should be restricted to designated fire wardens who have received appropriate training.

### **Legislative Requirements:**

To fulfil its function, the emergency evacuation system should have the following facilities:

- A master emergency control panel. (MECP)
- Any necessary additional emergency control panels. (ECP)
- The necessary distribution system to transmit a warning signal to each evacuation zone in the building.
- A warden intercommunication point (WIP) located on each floor or in each evacuation zone.
- A notice at each ECP giving clear instructions on how to operate this equipment correctly.
- An inter-connection with the building fire alarm system.
- Be installed to meet the requirements as outlined in the applicable Australian Standard.
- To ensure the system fulfils its purpose, it is essential that all staff/personnel are given training in the identification of the 'alert' and 'evacuation' signals, both audible and visible and take part in an evacuation exercise.

## **EMERGENCY LIGHTING AND EXIT SIGNS**

### **Objective of the Essential Safety Measure:**

To assist occupants in identifying exits and paths of travel from a building in the case of a power failure or an emergency.

### **Legislative Requirements:**

The Building Code of Australia requires that an Emergency Evacuation Lighting system must:

- Be installed to meet the requirements as outlined in the applicable AS 2293.1.
- Be clearly visible to persons approaching an exit.
- Be located in positions where exits are not readily apparent i.e. corridors, hallways and lobbies; and have arrows directing occupants to an exit.
- Be located on, above or adjacent to each door providing egress.
- Be identified with clear and legible writing using letters and symbols of adequate size.
- Be automatic in operation in the event of a failure of power supply to the main lighting system.

