

SECTION 9

FIRE EXTINGUISHING APPLIANCES

SCALE OF ALLOWANCES FOR FIRE EXTINGUISHING APPLIANCES

1. INTERNAL APPLIANCES ALLOWANCES

A.	Approved Portable Extinguishers complying with General requirements I	2½%
B.	Hydraulic Hose Reels or Internal Hydrants with Small Bore Hose attached complying with General requirements II	5%
C.	Internal Hydrants complying with General requirements III and:-	
	(i) with water supply fed by public mains	5%
	(ii) with independent water supply	7½%
D.	Dry Riser complying with General requirements IV	2½%
E.	Wet Riser complying with General requirements V	7½%
F.	Automatic Fire Alarm and Detection Systems complying with General requirements VI	3%
G.	Gas Extinguishing System (e.g. Halon 1301, Halon 1211, carbon dioxide or Nitrogen)	5%
	The allowance is only for the <u>item</u> so protected by the appliance. In the event you wish to apply the allowance on the Total Sum Insured, details of such system must be submitted to the Rating Committee for approval.	

2. EXTERNAL APPLIANCES ALLOWANCES

A.	Mobile Power-Driven Fire Pumps complying with General requirements VII	7½%
B.	Hydrants complying with General requirements VIII and :-	
	(i) with water supply fed by public mains	7½%
	(ii) with independent water supply and manual stationary pumps.....	10%
	(iii) with independent water supply and automatic pumps	12½%

3. TRAINED PRIVATE FIRE BRIGADE

If a trained Private Fire Brigade complying with **General requirements IX** is available and no allowance has been given for either Wet Riser (item 1E), Mobile Pumps (item 2A) or Internal/External (item 1C/2B) Hydrants 2½%

MEMO 1 : The allowances for internal appliances are cumulative and are subject to a maximum of 15 per cent.

MEMO 2 : The allowances for external appliances are cumulative and are subject to a maximum of 15 per cent.

MEMO 3 : No greater accumulated allowances than 25 per cent may be made for any combination of the above mentioned internal and external appliances.

MEMO 4 : No greater accumulated allowances than 75 per cent may be made for any combination of appliances including trained private fire brigade, external drenchers and sprinkler allowance as specified in item 5 on page 9-16.

General requirements I - Portable Fire Extinguishers as in item 1A

- (1) Portable fire extinguishers to be installed complying with UBBL, MS1539 or any other equivalent Standards/Rules approved by the fire authority.
- (2) The combined A rating of all portable fire extinguishers on each storey/floor must not be less than 0.065 x area of floor (square metre) of the storey/floor with an absolute minimum of 26A supplied by 2 portable fire extinguishers.

This minimum may be reduced to 13A from one portable fire extinguisher for upper floors with areas less than or equal to 100 square metres in single-occupancy buildings.
- (3) For area where Carbon Dioxide extinguishers are more suitable, such as in electrical rooms, the equivalent A rating required of the room should be calculated based on (2). As a guide, 2 kg of Carbon Dioxide is equivalent to 1 kg of dry powder.
- (4) Portable fire extinguishers must be maintained in a fully charged and operating condition, and kept at their designated locations at all times when they are not being used.
- (5) Portable fire extinguishers must be located in such a way that they are readily accessible in the event of a fire. They should preferably be located along normal paths of travel including exits from an area.

- (6) Portable fire extinguishers must not be obstructed or obscured from view. Where visual obstruction cannot be completely avoided, means must be provided to indicate the location of the extinguishers.
- (7) Portable fire extinguishers may installed on hangers/brackets, mounted in cabinets, or set on shelves unless the extinguishers are of the wheeled type. Cabinets housing extinguishers must not be locked. Where extinguishers are subjected to malicious use, locked cabinets with emergency access may be used.
- (8) Each portable fire extinguisher must be securely attached with a valid certificate from the fire authority.

Maintenance Requirements for Portable Fire Extinguishers

Portable fire extinguishers must be inspected weekly to ensure that they comply with General Requirements for portable fire extinguishers.

The portable fire extinguishers must be serviced at least once a year.

Records must be kept of all tests and inspections carried out, any faults discovered and details of all replacement fitted.

FEA Warranty for Portable Fire Extinguishers

To be attached to each policy under which an allowance for portable fire extinguishers is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General Requirements and Maintenance Requirements for Portable Fire Extinguishers are complied with; in consideration of which an allowance on the premium is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

N.B. The allowance of 2 ½% for Portable Fire Extinguishers remain unchanged.

General requirements II - Hydraulic Hose Reels and Internal Hydrants with small bore hose attached as in item 1B.

- (1) The hydraulic hose reels and/or internal hydrants must be sited in prominent and easily accessible positions at each floor level in such a way that no part of the floor is more than 6 metres (20 feet) from a hose nozzle when the hose is fully extended.
- (2) The flow rate at the most hydraulically remote hose reel or internal hydrant must not be less than 24 litres (5 gallons) of water per minute through a nozzle and capable of achieving a water throw of not less than 6 metres (20 feet).

- (3) The hoses for hydraulic hose reels must be of reinforced rubber and that for internal hydrants must be rubber lined. The hoses must not be less than 19.05 mm (0.75 inch) nor more than 31.75 mm (1.25 inch) internal diameter.
- (4) The hoses must not exceed 45 metres (148 feet) in length.
- (5) The hydraulic hose reels and/or internal hydrants must be permanently connected to a constant water supply.
- (6) Where the hydraulic hose reel and/or internal hydrant system is connected to a suction tank, the tank must be constantly filled with water. The minimum capacity of the tank must be 3,600 litres (800 gallons).
- (7) Where stationary pumps are provided the pumps must be capable of discharging at a rate of not less than 90.92 litres per minute (20 gallons per minute).
- (8) Each pump must be housed in an easily accessible position where it will not be liable to be damaged by fire or otherwise.
- (9) Each pump must be so arranged that it will start automatically in the case of automatic pumps; or can be readily started by one person.
- (10) There must be kept on hand at all times sufficient fuel to run the pumps at full load for not less than four (4) hours and power must always be available for each stationary pump.

Maintenance requirements II

Weekly

The hose reels and/or internal hydrants must be inspected to ensure that they are not obstructed, remain usable and readily accessible at all times.

The pumps must be tested for automatic and manual starting. They must be run for the recommended period to reach maximum operating temperature. In the case of diesel engine driven pumps, they must be run for not less than 5 minutes when tested.

Power supplies, batteries and battery chargers must be inspected to ensure these are in good condition and the battery water level topped up if necessary.

Fuel, oil and coolant levels must be inspected and topped up if necessary.

Every six months

The hose reels and/or internal hydrants must be inspected to ensure that the inlet valves, hoses and shut-off nozzles are free from leaks and in good condition and also to ensure that the outlet of the nozzles are not choked.

The water storage tank must be inspected to ensure that there is no debris inside the tank and that the tank and the water level indicator(s) are in good condition.

The water in the storage tank must be inspected to ensure it is clean.

The pumps and their associated mechanical equipment must be thoroughly checked to ensure that they are in good operating condition.

Annually

The hose must be completely run out and subjected to operational water pressure to ensure that the hose is in good condition. A flow test must be carried out to ensure that a discharge of at least 24 litres per minute (5 gallons per minute) is achieved. If it is not possible to test every hose reel and/or internal hydrant, at least the hose reel and/or internal hydrant at the hydraulically most remote point in the system must be tested.

FEA WARRANTY II

To be attached to each policy under which an allowance for hose reels and/or internal hydrants with small bore hose is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements II and Maintenance requirements II are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

General requirements III- Internal Hydrants as in item 1C.

Internal hydrants as in item 1C constitute hydrants installed inside buildings of not more than 30.5 metres (100 feet) above fire appliance access level (usually ground level).

- (1) The internal hydrants must be positioned in such a way that no portion of the building floor is more than 15 metres (50 feet) from a hose nozzle when the hose is fully extended.
- (2) The internal hydrant system can be fed from an independent water supply having a minimum capacity of 54,552 litres (12,000 gallons) of water with manual or automatic pumps complying with General requirements VIII(9) or permanently connected to an adequate constant supply of water from the public mains.
- (3) The internal hydrant mains and hose for use in connection therewith must have a clear waterway of at least 63.5 mm (2½ inch) diameter.

- (4) Every internal hydrant must be provided with a canvas / rubberised hose of at least 30 metres (100 feet) length and a nozzle permanently connected to the internal hydrant or kept under cover in a convenient place nearby the internal hydrant.
- (5) The internal hydrants must be protected against mechanical impact damage.
- (6) A trained private fire brigade complying with General requirements IX must be available at all times in the premises to operate the system.

Maintenance requirements III

Weekly

The internal hydrants must be inspected to ensure that they are not obstructed, remain usable and readily accessible at all times.

All pumps must be tested for manual starting. In case of automatic pumps, these must be tested for automatic starting. They must be run for the recommended period to reach maximum operating temperature. In the case of diesel engine driven pumps, they must be run for not less than 5 minutes when tested.

Power supplies, batteries and battery chargers must be inspected to ensure these are in good condition and the battery water level topped up if necessary.

Fuel, oil and coolant levels must be inspected and topped up if necessary.

Every six months

The hydrant valves, isolation valves and fire boxes must be inspected to ensure that these are in good condition.

The water storage tank must be inspected to ensure that there is no debris inside the tank and that the tank and the water level indicator(s) are in good condition.

The water in the storage tank must be inspected to ensure that it is clean.

Annually

Flow and pressure tests at the most remote internal hydrant must be carried out and test results recorded. Any significant deterioration in the flow and pressure of the internal hydrant system must be promptly rectified. The hydrant valve handwheels, glands, washers and indicator plates must be checked to ensure that these are in good condition.

FEA WARRANTY III

To be attached to each policy under which an allowance for internal hydrants is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements III and Maintenance requirements III are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

General requirements IV - Dry Riser as in item 1D.

- (1) The dry riser must not be less than 100 mm (4 inch) in diameter in buildings in which the highest outlet is 23 metres (75 feet) or less above the fire brigade pumping inlet and not less than 150 mm (6 inch) diameter where the highest outlet is higher than 23 metres (75 feet) above the pumping inlet.
- (2) 100 mm (4 inch) diameter dry risers shall be equipped with a two way pumping inlet and 150 mm (6 inch) dry risers shall be equipped with a four way pumping inlet.
- (3) The dry riser landing valves must be provided inside the building at each level above the ground level.
- (4) The dry riser landing valves outlets must be at least 63.5 mm (2½ inch) diameter.
- (5) Each dry riser landing valve shall comprise at least 30 metres (100 feet) of canvas hose, 1 nozzle and 1 coupling kept under cover in a convenient place.

Maintenance requirements IV**Weekly**

The dry riser landing valves and breeching inlets must be inspected to ensure that they are not obstructed and remain accessible at all times.

Every six months

The dry riser breeching inlets, landing valves, canvas hoses, nozzles, couplings and drain valves including the glands and washers, landing valve boxes, locking arrangement to the inlet must be inspected to ensure that they are in good condition.

Annually

A wet test must be carried out using the top most landing valve of the dry riser. Any leak in the dry riser system must be promptly rectified.

FEA WARRANTY IV

To be attached to each policy under which an allowance for dry risers is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements IV and Maintenance requirements IV are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

General requirements V - Wet Riser as in item 1E.

- (1) The wet riser landing valves must be provided inside the building at each level above the ground level.
- (2) The number and disposition of the wet riser landing valves must be such that one is provided for every 900 square metre (9,700 square feet), or any part thereof, of the floor area at each level other than the ground floor.
- (3) Wet risers must have a clear waterway of at least 150 mm (6 inch) diameter and the outlet must be at least 63.5 mm (2½ inch) in diameter.
- (4) Each wet riser landing valve shall comprise at least 30 metres (100 feet) of canvas hose, 1 nozzle and 1 coupling kept under cover in a convenient place.
- (5) The wet riser system must be provided with supply of water from tank having a minimum capacity of 54,552 litres (12,000 gallons).
- (6) A trained private fire brigade complying with General requirements IX must be available at all times in the premises to operate the system.
- (7) Each pump connected to the wet riser system must be capable of discharging at a rate of not less than 1,500 litres per minute (330 gallons per minute) of water.
- (8) Each pump must be housed in an easily accessible position where it will not be liable to be damaged by fire or otherwise.
- (9) Each pump must be so arranged that it will start automatically in the case of automatic pumps; or can be readily started by one person.
- (10) There must be kept on hand at all times sufficient fuel to run all the pumps at full load for not less than 4 hours and power must always be available for each pump.

Maintenance requirements V**Weekly**

The wet riser landing valves, drain valves and breeching inlets must be inspected to ensure that they are not obstructed and remain accessible at all times.

The wet riser pumps must be tested for automatic and manual starting. They must be run for the recommended period to reach maximum operating temperature. In the case of diesel engine driven pumps, they must be run for not less than 5 minutes when tested.

Power supplies, batteries and battery chargers must be inspected to ensure these are in good condition and the battery water level topped up if necessary.

Fuel, oil and coolant levels must be inspected and topped up if necessary.

Every six months

The wet riser landing valves, drain valves, canvas hoses, nozzles, couplings and isolation valves including the glands and washers, breeching inlets, locking arrangements to the inlet and landing valve boxes must be inspected to ensure that they are in good condition.

The water storage tank must be inspected to ensure that there is no debris inside the tank and that the tank and the water level indicator(s) are in good condition.

The water in the storage tank must be inspected to ensure that it is clean.

The booster pumps and their associated mechanical and electrical equipment must be thoroughly checked to ensure that they are in good operating condition.

Annually

A wet test to determine the static and running pressure of the top most landing valve of the wet riser must be carried out and test result recorded. Any significant deterioration in the pressure of the wet riser system must be promptly rectified. During the test, the system must be inspected for leaks.

FEA WARRANTY V

To be attached to each policy under which an allowance for wet risers is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements V and Maintenance requirements V are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

General requirements VI - Automatic Fire Alarm and Detection Systems as in item 1F.

- (1) The spacing of the detectors shall be as follows:
 - a. For open areas, the horizontal distance from any point in the area to the detector nearest to that point should not exceed 5.3 metres (17 feet) for heat detectors or 7.5 metres (25 feet) for smoke detectors. For line or beam detectors, the distance should be taken as the distance to the nearest point on the line or beam.
 - b. In corridors less than 5 metres (16 feet) wide, the horizontal distance given in (1)a above may be increased by half the difference between 5 metres (16 feet) and the width of the corridor, e.g. in a corridor of 3 metres (10 feet) wide the distance may be increased by 1 metre (3 feet). A corridor wider than 5 metres (16 feet) should be treated as an open area as in (1)a above.
- (2) The detectors must be connected to a central fire control panel which in turn, must be linked directly to a Fire Services Department (BOMBA) station or alternatively the central fire control panel may be connected to a remote central monitoring station which must be directly linked to a BOMBA station. Under both circumstances the Insured must obtain a certification from the BOMBA or the remote central monitoring station certifying that their automatic fire alarm system is so connected.
- (3) The central fire control panel must be manned 24 hours a day. If the central fire control panel is connected to the BOMBA station via a remote central monitoring station, the remote central monitoring station must also be manned 24 hours a day and the Insured must obtain a certification to this effect.
- (4) The detectors and central fire control panel must be maintained in proper working order.
- (5) The detector head must be of the types approved by the Standard & Industrial Research Institute of Malaysia (SIRIM).

Maintenance requirements VI

Inspections must be carried out by a competent person weekly to ensure that :

- a. the detectors are not obstructed or painted over so as to prevent normal operation ;
- b. no obstruction is placed within 0.3 metre (1 foot) horizontally or 0.6 metre (2 feet) below a detector head; and
- c. the detectors are protected against mechanical impact damage.

The central fire control panel must be inspected to ensure maintenance in good condition and all bulbs tested weekly to be in proper working order.

Selected heat and smoke detectors must be tested monthly to ensure they are in proper working order.

Records must be kept of all tests and inspections carried out, any faults discovered and details of all replacement fitted.

FEA WARRANTY VI

The insured hereby warrants that there is an automatic fire alarm installation for the detection of fires in the premises and that during the currency of this policy such installation shall comply with all the general and maintenance requirements VI; in consideration of which an allowance on the premium of per cent is made to the insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with fully.

General requirements VII- Mobile Power-Driven Fire Pumps as in item 2A.

- (1) The mobile pumps and associated equipment must always be available on the premises.
- (2) Mobile pumps must be capable of discharging water at a rate of not less than 900 litres per minute (200 gallons per minute) in aggregate.
- (3) Each mobile pump must be capable of discharging water at a rate of not less than 450 litres per minute (100 gallons per minute) to the highest point of the protected premises and must be provided with a full complement of hoses and nozzles, and adequate constant supply of water.
- (4) A trained private fire brigade complying with General requirements IX must be available at all times in the premises to operate the appliances.
- (5) Each pump must be housed in an easily accessible position where it will not be liable to be damaged by fire or otherwise.
- (6) There must be kept on hand at all times sufficient fuel to run the pumps at full load for not less than 4 hours.
- (7) The use of the mobile pumps must be restricted to fire extinguishment and fire fighting training only.

Maintenance requirements VII**Weekly**

All pumps must be tested for manual starting. They must be run for the recommended period to reach maximum operating temperatures, in any case, not less than 5 minutes when tested.

Power supplies, batteries and battery charges must be inspected to ensure these are in good condition and the battery water level topped up if necessary.

Fuel, oil and coolant must be inspected and topped up if necessary.

Every six months

Where water is obtained from a water storage tank, the tank must be inspected to ensure that there is no debris inside the tank and that the tank and the water level indicator(s) are in good condition.

The water in the storage tank must be inspected to ensure that it is clean.

FEA WARRANTY VII

To be attached to each policy under which an allowance for mobile power driven fire pump is made:-

The insured hereby warrants that during the currency of this policy the provision laid out under General requirements VII and Maintenance requirements VII are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this Policy unless the terms of this warranty are complied with.

General requirements VIII - External Hydrants as in item 2B.

- (1) External hydrants must be positioned not more than 23 metres (75 feet) away from the external wall of the building.
- (2) There must be at least one hydrant for every 76 metres (250 feet) of external wall measurement of the building.
- (3) There must be at least one opening for every 76 metres (250 feet) of external wall measurement of the building for purpose of fire fighting.
- (4) The external hydrant system can be fed from an independent water supply having a minimum capacity of 54,552 litres (12,000 gallons) of water with manual or automatic pumps complying with General requirements VIII(9) or permanently connected to an adequate constant supply of water from the public mains.

- (5) The hydrant mains and hose for use in connection therewith must have a clear waterway of at least 63.5 mm (2½ inch) diameter.
- (6) Every hydrant must be provided with at least 1 canvas/rubberized hose of at least 30 metres (100 feet) length, 1 nozzle and 1 coupling kept under cover in a convenient place. However, there must be a minimum of 4 hoses of 30 metres (100 feet) length each, 2 nozzles and 2 couplings for each protected premises.
- (7) The hydrants must be protected against mechanical impact damage.
- (8) A trained private fire brigade complying with General requirements IX must be available at all times in the premises to operate the system.
- (9) Requirements for hydrant pumps
 - a. Each pump connected to the hydrant system must be capable of discharging at a rate of not less than 900 litres per minute (200 gallons per minute) of water.
 - b. Each pump must be housed in an easily accessible position where it will not be liable to be damaged by fire or otherwise.
 - c. Each pump must be so arranged that it will start automatically in the case of automatic pumps; or can be readily started by one person.
 - d. There must be kept on hand at all times sufficient fuel to run all the pumps at full load for not less than 4 hours and power must always be available for each pump.

Maintenance requirements VIII

Weekly

The hydrants must be inspected to ensure that they are not obstructed by parking of vehicles, loading, unloading or storage of goods and remain accessible at all times.

All pumps must be tested for manual starting. In the case of automatic pumps, these must be tested for automatic starting. They must be run for the recommended period to reach maximum operating temperature. In the case of diesel engine driven pumps, they must be run for not less than 5 minutes when tested.

Power supplies, batteries and battery chargers must be inspected to ensure these are in good condition and the battery water level topped up if necessary.

Fuel, oil and coolant levels must be inspected and topped up if necessary.

Every six months

The hydrant valves, isolation valves, fire boxes and associated equipment must be inspected to ensure that these are in good condition.

The water storage tank must be inspected to ensure that there is no debris inside the tank and that the tank and the water level indicator(s) are in good condition.

The water in the storage tank must be inspected to ensure that it is clean.

Annually

Flow and pressure tests of all the external hydrants must be carried out and test results recorded. Any significant deterioration in the flow and pressure of the hydrant system must be promptly rectified. The hydrant valve handwheels, glands, washers, pits, frames, covers and indicator plates must be checked to ensure that these are in good condition. On completion pits must be left empty and clean.

FEA WARRANTY VIII

To be attached to each policy under which an allowance for external hydrant is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements VIII and Maintenance requirements VIII are complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

General requirements IX - Trained Private Fire Brigade as in item 3 .

- (1) A trained Private Fire Brigade must comprise not less than six (6) persons available in every shift.
- (2) "Trained" is defined as having undergone a fire fighting course which provides training in the usage of the fire fighting facilities provided in the premises.
- (3) The Private Fire Brigade must carry out fire fighting drills at least once in 6 months utilising the fire fighting facilities provided in the premises.

FEA WARRANTY IX

To be attached to each policy under which an allowance for private fire brigade is made :-

The insured hereby warrants that during the currency of this policy the provisions laid out under General requirements IX are fully complied with; in consideration of which an allowance on the premium of per cent is made to the Insured. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

4. EXTERNAL DRENCHERS

An allowance of 5 per cent may be made for External Drenchers (independently of sprinklers) if fitted up in accordance with the rules of the Fire Insurance companies.

5. SPRINKLER INSTALLATIONS

Applicable only to Approved Sprinkler Installations which comply with any one of the following design rules:

- A. the 29th Edition of the Rules of the Fire Offices' Committee for Automatic Sprinkler Installations adopted by the Fire Offices' Committee (Foreign) supplemented by the Brochure for use overseas as from the 1st January 1970,
- B. the Rules of the Loss Prevention Council for Automatic Sprinkler Installations,
- C. other Rules for Automatic Sprinkler Installations which are of equivalent or superior standard.

Risks provided with approved Sprinkler Installations must have in addition Internal Appliances according to General requirements I (Portable Extinguishers and/or Buckets) and are subject to the following percentage allowances which are inclusive of allowances for the internal appliances mentioned above :-

Classification of Occupancies	Sprinkler System		
	Grade I	Grade II	Grade III
Extra Light Hazard (ELH)	35%	30%	25%
Ordinary Hazard (OH) Extra High Hazard (EHH)	50%	42½%	35%

Any sprinkler installations other than the Approved Sprinkler Installations as defined in DEFINITIONS 1 must be referred to the Rating Committee for an approved allowance.

DEFINITIONS

1. An Approved Sprinkler Installation is one erected in conformity with any one of the following :
 - a. the 29th edition of the Rules for Automatic Sprinkler Installations of the Fire Offices' Committee as adopted by the Fire Offices' Committee (Foreign),
 - b. the Rules of the Loss Prevention Council for Automatic Sprinkler Installations,
 - c. other Rules for Automatic Sprinkler Installations which are of equivalent or superior standard.

2. Sprinkler Rules are any one of the following :
 - a. the 29th Edition of the Rules for Automatic Sprinkler Installations of the Fire Offices' Committee as adopted by the Fire Offices' Committee (Foreign),
 - b. the Rules of the Loss Prevention Council for Automatic Sprinkler Installations,
 - c. other Rules for Automatic Sprinkler Installations which are of equivalent or superior standard.

3. Classification of Occupancies referred to in the above rules is that appearing in :
 - a. paragraphs 1200 to 1232 of the 29th Edition of the Rules for Automatic Sprinkler Installations of the Fire Offices' Committee and in the Fire Offices' Committee (Foreign) Brochure, II - Modifications of the Rules when applied Outside the United Kingdom,
 - b. paragraphs 5 to 5.5 of the Rules of the Loss Prevention Council for Automatic Sprinkler Installations, or
 - c. the relevant paragraphs of the other Rules for Automatic Sprinkler Installations which are of equivalent or superior standard.

The occupancies listed in the Sprinkler Rules are for the purpose of illustration and are not intended to be comprehensive.

4. The Grading of Sprinkler Systems is that appearing in :
 - a. paragraphs 2200 to 2231 of the 29th Edition of the Rules for Automatic Sprinkler Installations of the Fire Offices' Committee,
 - b. Technical Bulletin TB 4:1990:1 of the Rules of the Loss Prevention Council for Automatic Sprinkler Installations, or
 - c. the relevant paragraphs of the other Rules for Automatic Sprinkler Installations which are of equivalent or superior standard.

REGULATIONS

1. No allowance may be made unless the installation is fitted up in strict accordance with the Sprinkler Rules in force at the date of installation.
2. Before any allowance is made, the following documents must be submitted to and approved by the Association or an organisation nominated by it :
 - a. particulars of the sprinkler installation in accordance with the automatic sprinkler system section of the PIAM Special Rating Application Form,
 - b. schematic plans of the sprinkler installation,
 - c. sprinkler floor plans of the entire building,
 - d. the original or certified true copy of Sprinkler Completion Certificate (Appendix 4 of the 29th Edition of the Rules for Automatic Sprinkler Installations of the Fire Offices' Committee, paragraph 10.3 and Figure 6 of the Rules of the Loss Prevention Council for Automatic Sprinkler Installations)
3. Periodic reports in the prescribed forms as to the efficiency of the installation must be supplied by the Insured in an authorised form approved by the Association or an organisation nominated by it.
4. The decision in respect of any allowance approved shall be immediately announced by official notice in which the percentage of the allowance and the date from which the same is to take effect and the form of warranty be inserted in the policies shall be specified.
5. In respect of automatic sprinkler installation for risks with sums insured between RM10 million and RM30 million and subject to the Rules for Self-Rating under Section 17 of the Tariff, member companies may allow a maximum discount depending on whether the insured does or does not have full control of the system i.e. at 12.5% or 6.25% respectively and subject to the sprinkler system being set on automatic mode, in working condition and applicable to fully sprinklered risks only. Any discount in excess of this maximum levels stated herein can only be determined by the Rating Committee upon submission of full documentation by the applicant company.
6. The following rules are applied in respect of FEA discounts to be given to the Insured:-
 - a) in respect of tenants/owners who have full control and responsibility to maintain the FEA installation and/or responsibility to install and maintain the system i.e. tenants/owners with full control over the FEA system including conducting the required regular tests of the equipment, a full FEA discount as provided in the Fire Tariff may be allowed.
 - b) in respect of those tenants/owners who do not have control and maintenance responsibility for the FEA system installed in the insured premises, a discount of half the tariffed discount for sprinkler systems may be allowed for such tenants/owners. (Note: This discount is not allowable for other than sprinkler systems).

In addition, it must be warranted that the insured premises must be sprinklered and the insured must obtain yearly inspection reports of the Fire Authorities from the owners of the building. The inspection reports are to be lodged with the insurer annually.

Maintenance requirements IX

The sprinkler system must be maintained and tested weekly in accordance with the PIAM Automatic Sprinkler Installation Weekly Test Card as outlined below :-

1. Inspection must be carried out by a designated personnel to ensure that :
 - the sprinkler heads are free from paint, white wash or other coating.
 - the sprinkler heads are not obstructed by storage of goods etc. and sufficient clearance must be maintained below sprinkler heads.
 - the sprinkler water storage tank is clean without debris inside, the water level indicators and ball valve are in good condition and the water level is adequate.
 - all the control valves in the sprinkler system are secured in their appropriate position.
 - power supplies, batteries and battery chargers are in good condition and the battery water level topped up if necessary.
 - fuel, oil and coolant levels topped up if necessary.
2. The pumps must be tested for manual starting and automatic starting. The pumps must be run for the recommended period to reach maximum operating temperature.
3. The turbine alarm (alarm gong) and electric alarm (transmitted direct to Fire Station) must be tested to ensure that these are in good working condition.

In addition to the above weekly maintenance procedures, a flow test must be carried out on a monthly basis to ensure that the sprinkler system is capable of providing sufficient flow and pressure at the highest and most remote parts of the protected premises.

Note: Immediate notice must be given to the Company should the water supply(ies) be turned off or the sprinkler installation(s) be rendered inoperative from any cause.

7. The following are the forms of Warranty prescribed :-

- (i) **For insertion in policies in the case of sprinkler allowances where the whole of the appliances are under the control of the Insured :**

FEA WARRANTY X

The Insured hereby warrants that there is in the aforesaid an approved automatic sprinkler installation complying with Maintenance requirements IX and internal appliances according to General requirements I (Portable Extinguishers and/or Buckets) for the extinction of fires and that during the currency of this policy such installation shall be kept in proper working order and the pumpsets are put on automatic mode at all times. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

In consideration of the above warranty and subject to periodic reports as prescribed in the duly authorised form as to the efficiency of the installation an allowance on the premium of per cent is made to the Insured.

- (ii) **For insertion in policies in the case of sprinkler allowances where the appliances are not wholly under the control of the Insured :-**

FEA WARRANTY XI

The Insured hereby warrants that there is in the aforesaid an approved automatic sprinkler installation complying with Maintenance requirements IX and internal appliances according to General requirements I (Portable Extinguishers and/or Buckets) for the extinction of fires and that during the currency of this policy such installation under his/their control shall be kept in proper working order. No liability shall attach to the Company under this policy unless the terms of this warranty are complied with.

In consideration of the above warranty and subject to periodic reports as prescribed by the Association in the duly authorised form as to the efficiency of the installation being supplied by the Insured for approval by the Company an allowance on the premium of per cent is made to the Insured.