

## **1.4. Automatic Sprinkler Systems**

### **1.4.1. Automatic Sprinkler**

A fire suppression or control device that operates (bursts) automatically when its heat-activated element is heated to its thermal rating or above, allowing water to discharge over a specified area.

### **1.4.2. Automatic Sprinkler System**

For fire protection purposes, the sprinkler system installation includes one or more automatic water supplies. The portion of the sprinkler system is a network of specially sized or hydraulically designed piping installed in a building, structure, or area, generally overhead, and to which sprinklers are attached in a systematic pattern. The valve controlling each system riser is located in the system riser or its supply piping. Each sprinkler system riser includes a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area.

### **1.4.3. High-Piles storage**

Solid-piled, palletized, rack storage, bin box, and shelf storage in excess of 3.7 m in height.

### **1.4.4. Hydraulically Designed System**

A calculated sprinkler system in which pipe sizes are selected on a pressure loss basis to provide a prescribed water density, in gallons per minute per square foot (mm/min), or a prescribed minimum discharge pressure or flow per sprinkler, distributed with a reasonable degree of uniformity over a specified area.

### **1.4.5. Pipe Schedule System**

A sprinkler system in which the pipe sizing is selected from a schedule that is determined by the occupancy classification and in which a given number of sprinklers are allowed to be supplied from specific sizes of pipe.

### **1.4.6. System Working Pressure**

The maximum anticipated static (non flowing) or flowing pressure applied to sprinkler system components exclusive of surge pressures.

### **1.4.7. Closed loop Sprinkler System**

A wet pipe sprinkler system having non-fire protection connections to automatic sprinkler systems in a closed-loop piping arrangement for the purpose of utilizing sprinkler piping to conduct water for heating or cooling, where water is not removed or used from the system but only circulated through the piping system.