

1.6. Water Spray Systems

1.6.1. Water Spray

Water in a form having a predetermined pattern, particle size, velocity, and density discharge from specially designed nozzles or devices.

1.6.2. Automatic Water Spray Nozzle

A nozzle intended to open automatically by the operation of a heat responsive element that maintains the discharge orifice closed by means such as the exertion of force on a cap (button or disc), that when discharging water under pressure, will distribute the water in a specific and, directional pattern.

1.6.3. Open Water Spray Nozzle

An open water discharge device that, when discharging water under pressure, will distribute the water in a specific, directional pattern.

1.6.4. Deluge Valve

A type of system actuation valve that is opened by the operation of a discharging device installed in the same areas as the spray nozzles or by remote manual operation supplying water to all spray nozzles.

1.6.5. System Actuation Valve

The main valve that controls the flow of water into the water spray system.

1.6.6. Density

The unit rate of water application to an area or surface expressed in gpm/ft^2 or $\text{L}/\text{min}/\text{m}^2$.

1.6.7. Exposure Protection

Absorption of heat through application of water spray to structures or equipment exposed to a fire, to limit surface temperature to a level that will minimize damage and prevent failure.

1.6.8. Electrical Clearance

The air distance between the water spray equipment, including piping and nozzles, and unenclosed or uninsulated live electrical components at other than ground potential.

1.6.9. Pilot Sprinkler

An automatic sprinkler or thermostatic fixed temperature release device used as a detector to pneumatically or hydraulically release the system actuation valve.

1.6.10. Area Application

The application of ultra high-speed water spray over a specific floor area or over the surface area of a specific object.

1.6.11. Local Application

The application of ultra high-speed water spray on a specific point or points of ignition, such as cutting, mixing or grinding operations.