



## Deluge System

### Model E-1 Deluge Valve Pneumatic Release

When the C-1 Thermostatic Release (1) or fixed temperature release (2) is activated by fire, pressure in the release system escapes from the open device, allowing the pneumatic actuator (3) to open. This releases pressure from the priming chamber (4) of the deluge valve, allowing the valve to open. Water flows into the system piping and to the alarm devices, causing the pressure switch (5) to activate an electric alarm and/or operate a mechanical water motor alarm. Water flows from all open sprinklers or nozzles (6). When the deluge valve operates, pressure opens the pressure operated relief valve (PORV) (7) continuously venting the water supply to the priming chamber, ensuring the deluge valve remains in the open position.