Relief Valve

Unless an auxiliary air reservoir (Exhibit 1) is installed, all wet pipe systems shall be provided with a listed relief valve (Exhibit 2). In addition to being listed, the relief valve shall be a minimum of ½-inch in size. The relief valve shall be set to operate at 175 psi or 10 psi in excess of the maximum system pressure, whichever is greater.

The relief valve is installed to prevent excessive pressure buildup within wet systems. For example, increased temperatures due to weather conditions can warm up system components causing the water within the pipe to expand. If most of the air was evacuated from the sprinkler system, there would be no pockets of trapped air into which water could expand. Since wet systems are closed systems, these increased pressures act on system components and can cause system failure if pressures exceed pressure ratings of the components.

The relief valve is permitted to be located anywhere on the system. There is no requirement to pipe the relief valve to a suitable drain.