U.S. Fire Administration / National Fire Academy

Coffee Break Training

Topic: Sprinkler Valve Position Identification

Learning objective: *The student shall be able to identify one method of marking sprinkler valves for "normal" positions.*

Who hasn't gone to inspect a fire sprinkler system and momentarily been taken aback by the confusing array of pipes, valves, gauges, fittings, and other trim?

Depending upon the system configuration, some control valves should be left in the "normally open" position, while others should be left in the "normally closed" position. Sometimes, without tracing out the pipe path by hand, it's hard to tell which is the correct valve in the correct position.

In Coffee Break Training 2008-17 (April 22, 2008) we showed how leaving an alarm control valve in the wrong position could have had disastrous consequences. That was a single incident in a small warehouse.

Where a facility may have dozens or even hundreds of fire sprinkler systems—such as a college campus—the likelihood of an error in valve positioning is multiplied many times over.

These simple plastic ties mark the valves' "normal" position. Photo courtesy James M. Robinson, University of Maryland.

To minimize the chances of a valve being left in the wrong position, the University of Maryland at College Park adopted a simple system to help maintenance personnel, inspectors, and responding fire operations crews identify correct valve positions.

Look at the photograph, and you will see some simple color-coded plastic tie-wraps: a red one on the globe valve and a green one on the quarter turn valve handle. The red indicates the valve should be "normally closed" and the green means the valve should be "normally open."

This simple and creative idea will not solve all of the potential mistakes, but it goes a long way toward making valve position identification easier for everyone.