



Blow-Back Testing A Simple Way to Minimize Water Damage

Upon the completion of a sprinkler system in a new high school gymnasium, sprinkler fitters began to conduct a hydrostatic test as prescribed by the acceptance requirements of NFPA 13, Installation of Sprinkler Systems. During the test, the fitters were unaware that the end of a branch line was unconnected, spilling water out of this opening, and onto the gym's wood floor, causing thousands of dollars in damages.

Instead of filling out the Contractor's Material and Test Certificate for Aboveground Piping, signing off and moving on to the next job, the fitters had to frantically control further water damage, and explain this sensitive incident to the building owner's representative. This unnecessary water damage incident could have been prevented by using an old time technique called Blow-Back Testing.

Blow back testing is a quick and simple means of verifying that sprinkler system piping has no *significant* openings (such as those caused by missing end caps, sprinkler heads, etc.). The sprinkler fitter physically blows, with single or multiple blows, into a port opening (e.g., pressure gauge opening, sprinkler head reducing coupling opening, etc.) and receives a corresponding *blow back*.

A blow back of air from the port verifies that there are no significant openings in the system. This test can easily be incorporated into a company's overall training program, and can be added as a standard procedure to verify piping performance and reliability before hydrostatic testing and putting system into service. Blow back is only one tool contractors should use as part of a risk management program.

The information contained in this publication was obtained from sources believed to be reliable. RelMark Program Managers, Integrated Risk Management nor Myers Risk Services makes no representation or guarantee as to the correctness or sufficiency of any information contained herein, nor a guarantee of results based upon the use of this information, and disclaims all warranties whether implied, express or statutory, including without limitation, implied warranties of merchantability, fitness for use and fitness for a particular purpose. This document does not amend, or otherwise affect, the terms, conditions or coverage of your commercial insurance program. No part of this document or any of our other loss control documents is a representation that coverage does or does not exist for any particular claim or type of claim under any such policy.

Benefits of Blow-Back Testing:

- Quick and simple
- Requires no special tools or equipment
- Can be used to test a modification or addition to an existing system, and is equally effective in small or large systems
- Verifies that system piping has no *significant* openings
- Minimizes excessive water damage losses to the buildings contents and structure
- Helps maintain reputation and integrity of the sprinkler company and its employees

Cautions:

- Potential false blow back readings may occur if water is trapped in the system.
- The absence of a blow back does not necessarily mean that significant openings exist. Some piping configurations (e.g., those with many elbows) may not blow back even when the piping system is tight.
- Blow-back testing *cannot* identify and verify the presence of small pin-holes or cracks in the piping system. In other words, this test cannot guarantee complete tightness of the system.

The information contained in this publication was obtained from sources believed to be reliable. RelMark Program Managers, Integrated Risk Management nor Myers Risk Services makes no representation or guarantee as to the correctness or sufficiency of any information contained herein, nor a guarantee of results based upon the use of this information, and disclaims all warranties whether implied, express or statutory, including without limitation, implied warranties of merchantability, fitness for use and fitness for a particular purpose. This document does not amend, or otherwise affect, the terms, conditions or coverage of your commercial insurance program. No part of this document or any of our other loss control documents is a representation that coverage does or does not exist for any particular claim or type of claim under any such policy.