

# PIPELINE

pipng systems inc.

COMMERCIAL/INDUSTRIAL/INSTITUTIONAL MECHANICAL CONTRACTORS

FALL 2007

## First Time...Every Time!

**T**he supervision of fire protection systems (NFPA Codes: NFPA101®, Life Safety Code®) is an important feature of the system to help assure that the system will operate properly when required. It is important to remember that a fire protection system must work the first time...every time!

If you walked into your office this morning and the lights did not come on when you turned on the wall light switch....that would not have been a disaster. You would have called the building maintenance person or the electrician and they would have replaced the switch or otherwise fixed the problem. While this was being done you would have worked in an office lit by daylight through the windows, or heaven forbid you work in an inside office, you would have considered this a reasonable excuse to go to the snack bar for a needed cup of coffee while the repairs were being made.

However, if you discovered a fire and went to the fire alarm manual pull station to activate the alarm and it didn't work, there is no time to call the building engineer to fix the problem. Or, if after business hours, a fire started in an unoccupied space and the valve to the sprinkler system was closed, one could not wait until Monday morning to call the sprinkler repair person to turn on the valve to charge the sprinkler system with water.

NFPA 101®, Life Safety Code® often uses the term "supervised sprinkler system" when it requires sprinklers in a building. Supervision is addressed in Section 9.7.2. This section requires that the system be monitored for integrity in accordance with NFPA 72®, National Fire Alarm Code®. It also requires a distinctive supervisory signal be provided to indi-

cate a condition of system impairment. The Code requires an electronic supervisory device on all system valves, not just a chain and padlock. Of course, a chain and a padlock on the valve in addition to the supervisory switch (tamper switch) is permitted.

The Code does not just address valve supervision. It addresses all system components and parameters including:

- Electric fire pump power supplies, running condition, and phase reversal;
- Engine drive fire pumps failure to start, controller "of normal," and trouble on the controller;
- Water tank levels and temperatures;
- Tank pressures;
- Air pressure on a dry pipe system;
- Building temperature where dry pipe valves or fire pumps are housed;
- Features of other extinguishing systems as appropriate.

The idea is that any feature of the system that can be monitored so that any impairment will be identified immediately and correct action can be taken to restore the system to full operating condition.

The supervisory signal must be displayed at a constantly attended location on the site at an approved remove location. Remember,

approved means acceptable to the authority having jurisdiction (AHJ). NFPA 72 addresses supervision in Chapter 6. Section 6.8.5.7 addresses

general supervision issues; 6.8.5.8 addresses fire pump supervision; and 6.8.5.9 Automatic Fire Suppression System Panel Supervision.

Supervision is not a substitute for the required inspection, testing and maintenance of the fire protection system. However, supervision is a critical part of assuring the system will operate as intended. Remember, fire protection systems

must work the first time...every time!

Confused about all these codes? Let our qualified and experienced team members lend you a hand with the maintenance of your fire protection system. We here at Piping Systems, Inc. are available 7-days a week, 24 hours a day. We invite you to call us today at (508) 644-2221 and join our many satisfied customers.

—by Chip Carson, P.E.,  
reprinted with permission from  
NFPA Journal, July/August 2006



**pipng systems inc.**

32 Mill Street (Rt. 79)  
P.O. Box 409  
Assonet, MA 02702

TEL: 508/644-2221 • FAX: 508/644-2447  
E-MAIL: [psi@pipng-systems-inc.com](mailto:psi@pipng-systems-inc.com)  
WEBSITE: [www.pipng-systems-inc.com](http://www.pipng-systems-inc.com)

# Americans Underestimate Their Risk Of Fire

A 2004 survey from NFPA has found that Americans underestimate their risk of fire. Choosing from a list of disasters, 31 percent of those surveyed said they felt most at risk of experiencing a tornado, while only 27 percent named fire as their highest risk. Hurricanes followed at 14 percent, earthquakes and floods at 9 percent each, and terrorist attacks at 5 percent.

Among all those disasters, fires are actually more common and many times more deadly. In 2003, for example, U.S. fire departments responded to 1.6 million fires that killed 3,925 people, most of them in the home. Tornadoes kill an average of 70 people a year.

Fires also cause significant property damage, especially when compared with other disasters. In recent years, property damage from tornadoes averaged just over

\$1 billion, while damage caused by hurricanes averaged just under \$3 billion. The cost of fire damage? More than \$12 billion in 2003, up 19 percent from the previous year, due primarily to the \$2 billion in

losses in the southern California wildfires.

NFPA commissioned the survey on the eve of Fire Prevention Week, the theme of which emphasizes testing smoke alarms. Most people do not test their

alarms as often as they should, and one out of five home smoke alarms do not work as a result.

To conduct the survey, Harris Interactive questioned a representative sampling of 1,014 adults by telephone from September 9 to September 12 and asked what type of disaster they felt best prepared for. The highest percentage of respondents—31 percent—said they felt best prepared for fire.

Their answers to other survey questions suggest they are prepared, but not prepared enough. Ninety-six percent said they had smoke alarms, a new high for the nation. But only a quarter said they had developed and rehearsed a plan to escape from their homes during a fire, one of the primary goals of public fire-safety education efforts such as Fire Prevention Week.

The survey also points to other challenges. Small communities, poorer households, and less-educated households had lower rates of smoke alarm ownership. Only 8 percent of those whose smoke alarms sounded responded by leaving the house immediately as recommended. If people do not practice their escape plans and do not react to their fire alarm by escaping immediately, many will not escape at all.

"Fire remains a major cause of death, injury, and property damage in this country," said NFPA President James M. Shannon. "We can prevent many of these losses. It's not enough to have a smoke alarm. You should make sure it's working, and you should be prepared to get outside fast if it sounds."

—reprinted with permission from NFPA Journal, November/December 2004

U.S. fire departments responded to 1.5 million fires that killed 3,925 people.



Visit us online today at  
[www.piping-systems-inc.com](http://www.piping-systems-inc.com)



**piping systems inc.**

32 Mill Street (Rt. 79)  
P.O. Box 409  
Assonet, MA 02702

ADDRESS SERVICE REQUESTED

