



Tuesday e-Tech Alert

May 27, 2008

Number 116

Russell P. Fleming, P.E. – Editor

NFSA E&S Committee Disagrees with Large Bay Line Spacing

The NFSA Engineering and Standards Committee has expressed concern over an informal interpretation offered through NFSA's EOD program and published in the November 13, 2007 issue of NFSA *Tuesday eTechAlert* (No. 99). Here is the original question and answer as published in November:

Question 4 – Using 25-ft Bay Line Spacing in 50-ft Bays

Can the 12'6" spacing exception of Table 8.6.2.2.1(c) of NFPA 13 (2007 edition) be applied to bays wider than 25'0" as long as they are in increments of 12'6"? In other words, if a bay was 50'0" wide, and the 12'6" exception was applied, only 4 lines would be required in lieu of 5 lines.

Answer: The 12'-6" spacing should be permitted for the building with the 50 ft bays. The 12'-6" spacing would clearly be permitted if the structural members were spaced with 25 ft between them, and the spacing of the structural members has very little to do with the performance of the sprinkler system. Therefore, the placement of an additional structural member halfway between members spaced 50 ft apart does not make the sprinkler system any better, so any spacing permitted with the members 25 ft apart should also be permitted when the members are 50 ft apart.

An Authority Having Jurisdiction can accept the 12'-6" spacing for situations where structural members are 50 ft apart under sections 1.5 and 1.6 of NFPA 13. This is an alternate arrangement that is the same level of safety as would be provided with the 25 ft bay rule.

While the Committee acknowledges that the interpretation is correct in the sense that the AHJ can permit this spacing under the allowances for alternate arrangements, it simply disagrees that the practice would be sound. A primary reason is that since NFPA 13 does not define the term "bay," the increased spacing could be applied to non-solid structural members that would not ordinarily present an obstruction to sprinkler response and discharge so as to require additional branch lines. The 12 ft 6 in. spacing was not intended to become the norm for spacing of spray sprinklers in extra hazard occupancies per Table 8.6.2.2.1(c) or for high-piled storage per Table 8.6.2.2.1(d).

The Committee notes that the original allowance has its basis in the situation of bays defined by solid structural beams. In such a case, strict adherence to the maximum dimension of 12 ft between sprinklers would require three branch lines in each 25-ft bay at a spacing of just over 8 ft. In the case of a 50-ft bay, however, the requirement to use five branch lines at a spacing of 10 ft is clearly not as onerous. Plus, there are additional options available today such as the use of

extended coverage sprinklers listed for extra hazard applications, which could also result in four branch lines per bay.

Upcoming NFSA “Technical Tuesday” Seminar – June 10th

Topic: Exposure Protection Systems

Instructor: Russell P. Fleming, P.E., NFSA Executive Vice President

Date: June 10, 2008

Changes to the 2007 edition of NFPA 13 restored long-lost criteria to the standard that is necessary for proper installation of an exposure protection system. This seminar will not only review how that criteria is applied, but review the use of exposure protection systems in the context of the entire need for exposure protection based on the principles of NFPA 80A exposure protection recommended practice and corresponding provisions of model building codes in the United States and Canada.

NOTE: This seminar was originally scheduled for May 6, 2008, but the date was switched with the “Standpipes, Pressures and Pumps” online seminar due to instructor scheduling conflicts.

Upcoming NFSA “Business Thursday” Seminar – June 19th

Topic: Safety for Contractors

Instructor: Ray Lonabaugh, NFSA Mid-Atlantic Regional Manager

Date: June 19, 2008

As virtually every employer in the country is aware, the health, safety and welfare of a company’s workforce are major concerns. An effective and comprehensive safety program can reduce risk to the company and help bring workers compensation costs down. This presentation will review some of the important aspects of an effective safety program and examine why it should be a high priority for every fire sprinkler contractor.

Information and registration for the above “Technical Tuesday” and “Business Thursday” seminars are available at www.nfsa.org or by calling Dawn Fitzmaurice at 845-878-4200 ext. 133.

Additional NFSA training opportunities include...

NFSA Two-Week Technician Training Classes

August 4-15, 2008

Providence, RI

October 13-24, 2008

Chicago, IL

November 10-21, 2008

Houston, TX

For more information, contact Nicole Sprague using Sprague@nfsa.org or by calling 845-878-4200 ext. 149.

In-Class Training Seminars

The NFSA training department also offers in-class training on a variety of subjects at locations across the country. Here are some upcoming seminars:

May 28-29 Reading, PA	NFPA 13 Overview & Intro to Plan Review
May 30 Reading, PA	Hydraulics for Fire Protection
June 3 Albany, NY	Inspection, Testing & Maintenance
June 4 Albany, NY	Standpipe Systems (a.m.)
June 4 Albany, NY	Fire Pump Layout & Sizing (p.m.)
June 5 Albany, NY	Plan Review Policies & Procedures
June 10 Oak Creek, WI	Introduction to Sprinklers (a.m.)
June 11 Oak Creek, WI	Plan Review Policies & Procedures
June 12 Oak Creek, WI	Commissioning & Acceptance Testing (a.m.)
June 12 Oak Creek, WI	Underground Piping (p.m.)
June 17 Centennial, CO	Sprinkler Protection for General Storage
June 17 Seattle, WA	Plan Review Policies & Procedures
June 18 Centennial, CO	Sprinkler Protection for Rack Storage
June 18 Seattle, WA	Commissioning & Acceptance Testing (a.m.)
June 18 Seattle, WA	Fire Pump Layout & Sizing (p.m.)
June 19 Centennial, CO	Sprinkler Protection for Special Storage
June 19 Seattle, WA	Sprinkler Protection for Special Storage

For more information on these seminars, or to register, please visit www.nfsa.org or call Dawn Fitzmaurice at 845-878-4207 or email seminars@nfsa.org.

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About the National Fire Sprinkler Association

Established in 1905, the National Fire Sprinkler Association (NFSA) is the voice of the fire sprinkler industry. NFSA leads the drive to get life-saving and property protecting fire sprinklers into all buildings; provides support and resources for its members – fire sprinkler contractors, manufacturers and suppliers; and educates authorities having jurisdiction on fire protection issues. Headquartered in Patterson, N.Y., NFSA has regional operations offices throughout the country. www.nfsa.org.