



Tuesday e-Tech Alert

March 18, 2008

Number 110

Russell P. Fleming, P.E. - Editor

Movable vs. Portable Racks

A member's recent question on the use of the special NFPA 13 criteria for protection of plastic automotive parts in portable racks using ESFR sprinklers (Section 20.2 and Table 20.2 in the 2007 edition) has led the NFSA to request a formal interpretation to clarify whether portable rack storage can be treated the same as movable rack storage. At present, protection options are similar for Class I-IV commodities but the standard provides no guidance for protection of plastics in portable racks.

Understandably, the member's question was whether Section 20.2 provides the only means to protect plastics storage in portable racks. Since the NFSA was involved in the deliberations that led to this section, we were able to clarify the history somewhat. The criteria were based on tests conducted by the Ford Motor Company. The controversial aspect of the proposal was less the portable racks and more the fact of protecting exposed expanded plastics. The Sprinkler Committee was reluctant to allow limited test data to justify widespread protection of exposed expanded plastics and therefore agreed to write the criteria specifically for automotive parts. The committee added a definition (Section 3.9.3.2 in the 2007 edition) that defines "automotive components on portable racks" as items with or without (exposed expanded) plastic tonnage.

On the question of "movable" vs. "portable" racks, however, there are two separate definitions within the standard:

3.9.3.7.2 Movable racks. Racks on fixed rails or guides. They can be moved back and forth only in a horizontal, two-dimensional plane. A moving aisle is created as abutting racks are either loaded or unloaded, then moved across the aisle to abut other racks.

3.9.3.7.4 Portable racks. Racks that are not fixed in place. They can be arranged in any number of configurations.

Using these definitions, it can be seen that portable racks are obviously more movable than movable racks. But that doesn't explain why they should be subject to different levels of consideration based on the commodity stored.

With regard to movable racks, Section 16.1.3 for Class I-IV and Section 17.1.3 for Plastics are parallel and allow all movable rack storage to be protected in the same manner as multiple-row racks.

For portable racks, Sections 16.2.1.3.2, 16.2.1.3.3.1 and 16.2.1.3.3.2 all allow portable racks to be treated like single, double or multiple row racks for Class I-IV storage provided they are arranged

in the same manner with appropriate flue spaces maintained. There are no corresponding sections in Chapter 17 for protection of stored plastics.

As a result, NFSA has requested a formal interpretation from the Committee on this issue.

Situation:

Movable Racks and Portable Racks are defined differently by NFPA 13 (sections 3.9.3.7.2 and 3.9.3.7.4).

Sections 16.1.3 and 17.1.3 allow movable racks to be protected like multiple row racks for all commodities. But these sections can't be used for portable racks because they are defined differently in Chapter 3.

Sections 16.2.1.3.2, 16.2.1.3.3.1 and 16.2.1.3.3.2 all state that portable racks can be treated as single, double or multiple row racks if the required flue and aisle spacing is maintained. But these sections only apply to Class I – IV Commodities.A

Question:

Can portable racks be treated as single, double and multiple row racks using the ceiling only protection criteria of Chapter 17 (no in-rack sprinklers required) as long as the appropriate aisle and flue spacing is maintained?

NFSA will advise its membership when a response is received from the Committee.

Upcoming NFSA “Business Thursday” Seminar – March 20th

Topic: Strategic Planning for Contractors

Instructor: Don Pamplin, NFSA Pacific Northwest Regional Manager

Date: March 20, 2008

The majority of public and private sector organizations do not perform effective strategic planning. They think they do and in some situations, they even call it “strategic planning” but the planning model that they use is really not strategic. In the business world, the absolute bottom line is to make a profit and the more profit you consistently make, the better insulated you are from the disastrous effects of economic and social change. By practicing effective and efficient strategic planning, you can be better prepared to change direction to meet new markets demands and technology shifts. All business organizations within the Fire Sprinkler Industry need to use effective strategic planning to create a realistic and achievable road map to lead them to where they want to be in five or ten years.

Upcoming NFSA “Technical Tuesday” Seminar – April 1st

Topic: Foam Systems Update

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

Date: April 1, 2008

This seminar will focus on recent changes to the NFPA standards on foam and foam-water systems (NFPA 11 and 16). The presentation will include a discussion of the use of the Darcy formula for hydraulic calculations for piping carrying foam concentrate. Special attention will be given to the growing acceptance of fixed piping systems employing compressed air foam (CAF) technology.

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

<i>April 7-18, 2008 (waiting list only)</i>	<i>Orlando, FL</i>
<i>August 4-15, 2008</i>	<i>Providence, RI</i>
<i>October 13-24, 2008</i>	<i>Chicago, IL</i>
<i>November 10-21, 2008</i>	<i>Houston, TX</i>

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 seminars scheduled for 2008:

Mar 25	Jacksonville, FL	Pumps for Fire Protection
Mar 26	Jacksonville, FL	Hydraulics for Fire Protection
Mar 27	Jacksonville, FL	Sprinkler Protection for General Storage
Mar 28	Jacksonville, FL	Sprinklers for Dwellings
Apr 22	Richmond, CA	Pumps for Fire Protection
Apr 23	Richmond, CA	Fire Pump Layout & Sizing (a.m.)
Apr 23	Richmond, CA	Commissioning & Acceptance Testing (p.m.)
Apr 24	Richmond, CA	Inspection, Testing & Maintenance (CA Edition)
Apr 29	McFarland, WI	Plan Review Policies & Procedures
Apr 30	McFarland, WI	Pumps for Fire Protection
May 1	McFarland, WI	Commissioning & Acceptance Testing (a.m.)
May 1	McFarland, WI	Fire Pump Layout & Sizing (p.m.)
May 6-7	Colorado Springs, CO	NFPA 13 Overview & Intro to Plan Review
May 7	Mundelein, IL	Introduction to Sprinklers
May 7	Mundelein, IL	NFPA 13 Update 2002
May 8-9	Mundelein, IL	NFPA 13 Overview & Intro to Plan Review
May 8	Colorado Springs, CO	Sprinklers for Dwellings
May 13	Quincy, MA	Sprinklers for Dwellings
May 14	Quincy, MA	Basic Seismic (a.m.)
May 14	Quincy, MA	Standpipe Systems (p.m.)

May 15 Quincy, MA

Pumps for Fire Protection

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.