



**Tuesday e-Tech Alert**  
**June 14, 2005**

**NFPA 13 Errors – 2002 Edition**

When new editions of NFPA 13 are issued, an errata sheet often follows. This tends to happen due to the fact that there are hundreds of proposed changes to each edition, and these changes often overlap and often take place late in the cycle. The 2002 edition even included amendments from the floor. The clear errors are not only remedied through the errata sheets, but are often corrected in time for publication of the Sprinkler Handbook and later printings of the standard.

One error not acknowledged as an error by NFPA was discussed in the August 10, 2004 edition of *Tuesday e-Tech Alert*, in which Section 12.3.2.3.2 appears to require an approved standby power source for ESFR sprinkler systems. The section was misplaced from the requirements for high-expansion foam systems, where it appeared in the 1999 edition, but NFPA has acknowledged that NFPA 13 was balloted in its present form, and has refused to officially declare it an error.

The NFPA Committee on Sprinkler System Discharge Criteria has addressed the situation by accepting a proposal to delete Section 12.3.2.3.2 and making the following committee statement:

**“This was an editorial oversight in the development of the 2002 edition and is not appropriate for ESFR systems. It was intended to be applicable to the requirements for foam systems and should not be applied to ESFR systems.”**

Aside from simple typographical and section reference errors, the following represents a list of uncorrected errors in the 2002 edition that were confirmed by committee action and ballot in preparation for the next edition of NFPA 13:

**Section 6.3.6.1** – Reference to Table 6.3.6.1 should be to “Table 6.3.1.1 or Table 6.3.6.1.”

**Table 12.1.10.1.1** – Hose stream allowances are in error in many places (This is the basis of TIA 02-2 issued 7/17/03 and available at [www.nfpa.org](http://www.nfpa.org)).

**Section 12.1.13.4** – Add “Unless the requirements of 12.1.13.5 are met” to the beginning of this section, and add new 12.1.13.5 to read: “Where applying the requirements of Figure 12.3.3.1.5(b) and Figure 12.3.3.1.5(c) utilizing the design criteria of 0.6 gpm/sq.ft. per 2000 sq. ft. to existing storage applications, the requirements of 12.13.3 shall apply.” (This is the basis of TIA 02-3 issued 7/17/03 and available at [www.nfpa.org](http://www.nfpa.org)).

**Table 12.2.2.3.1** – The minimum operating pressure for the K-25.2 ESFR pendent sprinkler for maximum 30 ft storage under a maximum 35 ft ceiling/roof height should be 20 psi, not 25 psi.

**Table 12.2.3.3.1** – For 25 ft storage under a 40 ft ceiling using K-14.0 ESFR sprinklers, the reference to “upright or pendent” should be changed to “pendent”.

**Table 12.3.1.6** – Second from last line of Note 2 should read “E (1) Expanded, cartoned, stable”

**Figure 12.3.2.1.2(d)** – A note will be restored from the 1991 and prior editions of NFPA 231C clarifying that curves C and D can be applied for multiple-row rack storage up to 15 ft in height without the use of in-rack sprinklers in accordance with Table 12.3.2.1.4.

**Section 12.3.2.3.2** – Misplaced as discussed above and not applicable to ESFR sprinkler systems.

**Figure 12.3.3.1.5(b)** – Revise Note 2 by adding “a minimum clearance of 5 ft and the storage height does not exceed 15 ft” in place of “a minimum clearance of 7 ft” for the reduction of density to 0.45 gpm/sq. ft. per 2000 sq. ft. It was not the intent to eliminate the possibility that ceiling height could be less than 22 ft.

**Section 12.3.3.4.2.2** – Reference should be to Figure 12.3.3.1.5(a) through Figure 12.3.3.1.5(f).

**Figure 12.3.5.4.1.4** – Figure should have less specific dimensions.

In an attempt to correct an additional error, the committee also acted to revise the reference to the curves for Class I commodity in Table 12.3.2.1.2, but in doing so the NFSA believes the committee simply made the existing error worse. The next to last column in that table refers to Curves F & H and E & G for Class I, while the paired curves for other commodity classes are the set of G & H and E & F. Rather than make this uniform, the committee needs to go back to the 1995 edition of NFPA 231, in which the curves for Class I commodity in Figure 6-12(a) were deliberately out of order from left to right based on the fact that the criteria for 4-ft aisles with 286-degree sprinklers fell slightly below the criteria for 8-ft aisles with 165-degree sprinklers. NFPA graphics staff later relabeled the curves sequentially, creating the confusion. The only error in the 2002 edition is that the legend information for curves F and G in Figure 12.3.2.1.2(a) should be reversed. This will be addressed during the public comment period.

### **Upcoming NFSA Technical Tuesday Online Seminar:**

**NFPA 13 Chapters 14, 15, 16 and 18 - Plans, Calculations, and Commissioning**

**Instructor: Cecil Bilbo, NFSA Director of Technical Services**

**Date: June 21, 2005**

Sprinkler system plan approvals and acceptance depend on provision of all of the required information on working plans, compliance with all rules relating to hydraulic calculations, and proper system acceptance testing. The seminar also addresses the brief requirements within NFPA 13 for water supplies and system inspection, testing and maintenance, since both subject areas are mainly dealt with in other NFPA standards.

Information and registration for this seminar can be found at [www.nfsa.org](http://www.nfsa.org).

### **2<sup>nd</sup> Half 2005 Online Seminar Series Announced**

The NFSA is announcing a new series of ten online seminars scheduled for the second half of 2005. The series begins with a virtual attendance at the 2005 NFPA World Safety Conference, including the historic vote on sprinklers in dwellings. The other nine seminars will delve more deeply into specific NFPA 13 issues introduced as part of the ongoing overview of the 2002 edition. As in the first half of 2005, a 30 percent savings will result from registration for all ten

seminars. Go to [www.nfsa.org](http://www.nfsa.org) for full descriptions and registration for the online seminars. Checking all ten boxes for the seminar series will result in the discount.

July 12, 2005 – **Fire Sprinkler Update from the 2005 NFPA World Safety Conference** – Russell P. Fleming, P.E., NFSA Executive Vice President

August 2, 2005 – **Vertical Shafts** – Victoria B. Valentine, P.E., NFSA Manager of Product Standards

August 23, 2005 – **Atria and High Ceilings** – Kevin J. Kelly, P.E., NFSA Manager of Codes

September 13, 2005 – **Sprinkler Temperature Ratings** – Kenneth E. Isman, P.E., NFSA Assistant Vice President of Engineering

September 27, 2005 – **Meters, Backflow Preventers, and Pressure Reducing Valves** – Russell P. Fleming, P.E., NFSA Executive Vice President

October 11, 2005 – **Pitching and Draining of Sprinkler Systems** – Cecil Bilbo, NFSA Director of Technical Services

October 25, 2005 – **Hose Stream and Hose Stations** – Kevin J. Kelly, P.E., NFSA Manager of Codes

November 8, 2005 – **Sloped Ceilings** – Victoria B. Valentine, P.E., NFSA Manager of Product Standards

November 22, 2005 – **Obstructions** – Kenneth E. Isman, P.E., NFSA Assistant Vice President of Engineering

December 6, 2005 – **Fire Department Connections** – Cecil Bilbo, NFSA Director of Technical Services