

1 Batterymarch Park, Quincy, MA 02169-7471 USA
Phone: +1 (617) 770-3000 Fax: +1 (617) 770-0700 www.nfpa.org

MEMORANDUM

TO: NFPA Technical Committee on Sprinkler System Installation Criteria

FROM: Jeanne Moreau

DATE: September 23, 2010

SUBJ: NFPA 13 Proposed TIA No. 1003 **Preliminary - FINAL TC BALLOT RESULTS**

According to 5.4 in the NFPA Regs, the final results show this TIA **HAS NOT** achieved the $\frac{3}{4}$ majority vote needed on both Question 1 (**Technical Merit**) and Question 2 (**Emergency Nature**).

30 Eligible to Vote

5 Not Returned (C. Bilbo Jr., R. Duke, C. Ketner, J. Patel, L. Underwood)

Technical Merit:

0 Abstentions
9 Agree (E. Joyce II, D. Goosman w/comment)
16 Disagree (H. Bahadori, P. Brock, D. Dornbos, D. Fuller, L. Hilton, M. Kirn, G. Laverick, K. Linder, A. Marburger, R. McPhee, T. Miller, T. Noble, P. Schwab, L. Slocum, L. Swantek, T. Victor)

Emergency Nature:

0 Abstentions
15 Agree (R. Caputo w/comment)
10 Disagree (H. Bahadori, P. Brock, D. Dornbos, E. Joyce II, M. Kirn, A. Marburger, R. McPhee, T. Miller, L. Slocum, T. Victor,)

There are two criteria necessary to pass ballot [(1) affirmative $\frac{3}{4}$ vote and (2) simple majority].

- (1) The number of affirmative votes needed for the report to be published is **19**.
(30 eligible to vote - 5 not returned - 0 abstentions = $25 \times 0.75 = 18.75$)
- (2) In all cases, an affirmative vote of at least a simple majority of the total membership eligible to vote is required. This is the calculation for simple majority:
[30 eligible $\div 2 = 15 + 1 =$ **(16)**]

Final ballot comments are attached for your review. Ballots received from alternate members are not included, unless the ballot from the principal member was not received.

Attachments: Ballots

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** x **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Section 8.16.4.1.1 adequately covers this issue. If it can be shown that providing insulation over the pipe would keep the temperature at or above 40 degrees F the intent of the code is met.


Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** x **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

This issue is covered by existing code language.



Signature

Hamid R. Bahadori

Name (Please Print)

9-3-10

Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the TECHNICAL MERITS of the Proposed TIA.

_____ AGREE X DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

No instructions are provided as to "how" the pipe must be insulated, except for the Annex section. The Annex is not a part of the Standard, which permits the installer to insulate the piping as he/she sees fit.

Question 2: I agree that the subject is of an EMERGENCY NATURE.

_____ AGREE X DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The proposed change lacks technical merit.

Pat D. Breck
Signature

Pat D. Breck
Name (Please Print)

Sept. 9, 2010
Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Proposed wording for the body does not adequately specify that the sprinkler pipe, although covered with insulation, must be provided with adequate heat. The proposed wording could be misinterpreted to allow wet systems in unheated spaces because they are covered with insulation regardless of whether or not adequate heat is provided.

The Standard already clearly establishes that the ambient temperature around water filled sprinkler system piping must be maintained above 40 °F (4 °C). It is not necessary or appropriate for the Sprinkler Standard to attempt to provide technical guidance on the various methods that might be employed to adequately maintain ambient temperatures above the 40 °F (4 °C) threshold.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The need to protect water filled sprinkler piping from freezing is not new. The proposal does not provide an alternative to or remedy for restricted use of antifreeze.


Signature

Del Dornbos
Name (Please Print)

Sept. 14, 2010
Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

A/H.

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The proposed wording is not complete and can be misinterpreted.

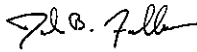
For example, wrapping the exterior of the pipe with insulation
would meet the requirements written.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X **AGREE** _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

 David Fuller
2010.09.16
08:50:27 -04'00'

Signature

Name (Please Print)

Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:
Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
 Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

 SEE ATTACHED

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X **AGREE** _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

 [Signature]

Signature

 LUKE HILTON

Name (Please Print)

 9/15/2010

Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

NFPA 13 SSI
Proposed TIA 1003

Luke Hilton

Technical Merit – Disagree

The proposed language states that the piping can be “covered in insulation,” but it isn’t clear what is intended unless you look at the Annex figures. It is also not clear from the language that the intent is to arrange the insulation such that the piping is somehow included in the heated area below by trapping heat that transfers up through the ceiling.

If it is intended to bring the language from NFPA 13D into NFPA 13, the proposed language differs from NFPA 13D, which says:

8.3.1* A wet pipe system shall be permitted to be used where all piping is installed in areas maintained above 40F, including areas properly insulated to maintain 40F.

The NFPA 13D language allows the pipe to be installed in an insulated area, while that proposed for NFPA 13 allows the pipe to be covered in insulation.

There should be concerns over interpretations of the proposal that it is possible to insulate the pipe in ways other than those detailed in the Annex figures, and the Annex information seems to reinforce that this belongs in NFPA 13D considering the type of construction depicted.

The figures show pipe that is heated from below, at least indirectly, but how do you protect the pipe that should be in place to supply the sprinklers that would be installed to protect the combustible concealed space? If this were used in a commercial installation, the figures show what would have to be plastic piping in that steel piping could not be put through holes bored in joists, and there are limits in NFPA 13 as to the use of plastic piping, so it’s not clear that this actually solves a problem.

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Please see the attached explanation.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

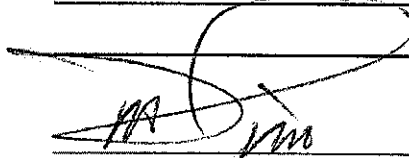
_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The Engineer of Record is responsible for compliance with

paragraph 8.16.4.1.



Signature

Michael D. Kirn, PE

Name (Please Print)

September 22, 2010

Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

Explanation of Vote statement:

The design of sprinkler systems is the practice of engineering (see the NCEES Position Statement 25 embedded in the attached Joint Position Statement of the SFPE, NSPE, and NICET). The Engineer of Record (Responsible Engineer) for the sprinkler system is responsible for code compliance including Paragraph 8.16.4.1.1. There are too many variables to consider for the design standard to prescribe such specific direction. The fire protection and HVAC design professionals should collaborate to determine the best solution for projects that fall within the scope of NFPA 13.

**SOCIETY OF FIRE PROTECTION ENGINEERS (SFPE)
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS (NSPE)
NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING
TECHNOLOGIES (NICET)**

POSITION STATEMENT

**THE ENGINEER AND THE ENGINEERING TECHNICIAN
DESIGNING FIRE PROTECTION SYSTEMS**

July 28, 2008

**Approved By:
NICET Board of Governors
NSPE Board of Directors
SFPE Board of Directors**

Table of Contents

1.0 EXECUTIVE SUMMARY	3
2.0 EVOLUTION OF LICENSING AND CERTIFICATION	4
3.0 DESCRIBING THE PROJECT TEAM MEMBERS & THEIR TASKS	5
3.1 PROJECT TEAM MEMBERS	5
3.1.1 <i>The Licensed Professional Engineer</i>	5
3.1.2 <i>The Certified Engineering Technician</i>	6
3.1.3 <i>The Authority Having Jurisdiction (AHJ)</i>	7
3.2 TASKS	7
3.2.1 <i>Design Documents</i>	7
3.2.2 <i>Shop Drawing Development</i>	9
3.2.3 <i>Installation</i>	9
3.2.4 <i>Record (As-Built) Drawings</i>	10
4.0 FUNDAMENTAL OBJECTIVE OF FIRE PROTECTION ENGINEERING	10
4.1 ROLES FOR ASSURING PUBLIC SAFETY	10
APPENDIX A: CODE OF ETHICS/PROFESSIONAL RESPONSIBILITY	11
A.1 CODE OF THE ENGINEER	11
A.1.1 <i>Stamps and Seals</i>	11
A.1.2 <i>Engineer of Record (Responsible Engineer)</i>	12
A.1.3 <i>The Role of NFPA Standards in Fire Protection System Design</i>	12
A.2 PROFESSIONAL CODE OF CERTIFIED ENGINEERING TECHNICIANS	13
A.2.1 <i>Stamps and Seals</i>	13
A.2.2 <i>Working with Codes and Standards</i>	14
APPENDIX B: NCEES POSITION STATEMENT 25	14
REFERENCES	16

1.0 Executive Summary

The Society of Fire Protection Engineers (SFPE) is credited with the original development of this document. The SFPE has agreed to team with the National Society of Professional Engineers (NSPE) and the National Institute for Certification of Engineering Technologies (NICET) to develop a unified position statement regarding the reasonable and prudent roles and responsibilities of Licensed Professional Engineers and Certified Engineering Technicians when designing fire protection systems for installation in the United States.

SFPE, NSPE and NICET recognize that defining fire protection system design and layout in terms of the roles and responsibilities of engineers and engineering technicians is a sensitive undertaking. Each has capabilities and responsibilities that contribute to the relationships in a design project. Moreover, SFPE, NSPE and NICET recognize that fire protection systems – including fire detection, alarm and suppression systems play an important role in protecting the health, safety, and welfare of the public.

Legally, the practice of engineering is a responsibility that cannot be delegated to non-licensed engineers (individuals). The role of the engineering technician is to understand the engineer's design intent and help implement that design. This position statement describes the critical relationships from the perspective of the engineering community. Engineers or engineering technicians overstep their respective roles if they participate in aspects of design for which they are not qualified by education and/or experience. This position statement explains the relative roles of those in the field of fire protection who contribute to public safety, including Licensed Professional Engineers and Certified Engineering Technicians.

The purpose of this Position Statement is to establish basic rules for the relationships between design, code compliance and construction entities to safeguard the public health, safety and general welfare through safety to life and property from fire and related hazards attributed to the constructed environment and to provide safety to fire fighters and emergency responders during emergency operations.

It is intended that this position paper will be supplemented with more detailed information to develop the fire protection design documents.

2.0 Evolution of Licensing and Certification

In the interest of public safety, state and local governments adopt and enforce building codes and fire codes that mandate fire protection systems. There is a need for personnel qualified in the design and layout of these systems.

At that time, the principal, nationally recognized, qualification criteria for engineers in this profession were found in the membership requirements of SFPE. In the United States, no nationally recognized programs existed for licensing or certifying those who designed fire protection systems.

Beginning in the 1980's, several professional organizations contributed significantly to the process of establishing roles and responsibilities of engineers and engineering technicians in fire safety, including the development of the NICET certification programs for engineering technicians in the field of fire protection engineering technology.

SFPE, NSPE and the National Council of Examiners for Engineering and Surveying (NCEES) have worked together to support fire protection engineering as a recognized professional engineering discipline.

- SFPE has defined and established qualifications for Licensed Professional Engineers in terms of the minimum education, training, and experience necessary to competently practice fire protection engineering.
- NCEES, an independent federation of state engineering licensing officials (boards), works closely with SFPE to maintain a national, professional engineer licensure program for fire protection engineers and recognizes that fire protection systems play an important role in protecting the health, safety and welfare of the public. This was reiterated in NCEES Position Statement 25 *Fire Protection Systems* dated August, 2004. Position Statement 25 is provided in Appendix B of this document.

The National Society of Professional Engineers (NSPE) through its National Institute for Certification in Engineering Technologies (NICET) offers a program for certifying Fire Protection Engineering Technicians in fire alarm and water-based and special hazard fire suppression systems.

Licensure and certification alone are insufficient to assure quality; thus professional organizations have developed codes of ethics and professional responsibility. See Appendix A: Code of Ethics/Professional Responsibility.

3.0 Describing the Project Team Members & Their Tasks

3.1 Project Team Members

Throughout this document, references to the Licensed Professional Engineer and the Certified Engineering Technician are intended to convey the following:

3.1.1 The Licensed Professional Engineer

As defined by the NCEES, the Fire Protection Engineer is a Licensed Professional Engineer (hereinafter referred to as an "Engineer") who demonstrates sound knowledge and judgment in the application of science and engineering to protect the health, safety and welfare of the public from the impacts of fire. This includes the ability to apply and incorporate a thorough understanding of fundamental systems and practices as they pertain to life safety and to fire protection, detection, alarm, control and extinguishment. This could include:

- Fire Protection Analysis: A basic understanding of hazard analysis, risk analysis and economic analysis techniques. A working knowledge of codes and standards, occupancy and hazard classifications, fire test methods, and the interpretation of fire test data.
- Fire Protection Management: A basic understanding of the capabilities and limitations of design, facility impairment procedures, and inspection frequencies.
- Fire Science & Human Behavior: An ability to apply principles of fire dynamics as related to fire and smoke behavior, fire growth, combustion, materials properties and heat transfer. A basic knowledge of human response principles as related to evacuation movement, human response to fire cues and timed egress analysis.
- Fire Protection Systems: An ability to assess and design water-based fire suppression systems, special hazard systems, fire alarm systems, smoke management systems, and explosion protection systems.
- Passive Building Systems: A working knowledge of the principles of building construction as they relate to fire protection, such as construction types, construction materials, interior finish, structural fire resistance, compartmentalization, vertical openings and the protection of openings. The ability to assess adequacy of means of egress taking into account exits, occupancy, occupant loads, emergency lighting, and the marking of the means of egress.

The Engineer's responsibilities for the design include but are not limited to:

A. Evaluate the broad range of hazards and protection schemes required to develop a workable, integrated solution to a fire safety problem.

B. Prepare design documents for fire protection systems. This includes:

- Conceptual and detailed engineering documents
- Hazard and risk analyses
- Performance-based design analyses
- Integrated building systems analyses
- Layout fire protection systems
- Perform necessary calculations for all fire protection systems
- Affix a professional stamp or seal with signature and date to documents prepared under the Engineer's direct supervision and control.

C. Review all work by engineering technicians to ensure conformance with the Engineer's design

D. Review fire protection installation shop drawings and submittals for compliance with the Engineer's design

E. Develop commissioning and acceptance requirements

F. Monitor the installation of fire protection systems.

The Engineer must maintain competency through continued education.

3.1.2 The Certified Engineering Technician

The fire protection engineering technician (hereinafter referred to as a "Technician") is an individual who has achieved NICET Level III or IV certification [1] in the appropriate subfield and who has the knowledge, experience and skills necessary to layout fire protection systems.

Based on engineering design documents, which include the system(s) design

drawings, specifications and nationally recognized codes and standards¹, the Technician is qualified to:

- A. Perform the system layout in accordance with the Engineer's design.
- B. Prepare shop drawings and material submittals in accordance with the Engineer's design for review and approval by the Engineer.
- C. Perform supplemental calculations and other functions based on the Engineer's design for review and approval by the Engineer.
- D. Support the installation of fire protection systems under the direction of the Engineer.

Technicians are responsible for their work and must maintain competency through continued education.

3.1.3 The Authority Having Jurisdiction (AHJ)

The Authority Having Jurisdiction, also commonly referred to in the fire protection community as the AHJ, is the individual or agency that has legal responsibility for reviewing the design for conformance with local codes and regulations. Other organizations that may review the design may include an insurance company and the local fire prevention officer.

The AHJ is qualified to:

- Review Design Documents for conformance with the local codes and regulations.
- Review Layout/Shop Drawings and submittals for conformance with the local codes and regulations.

3.2 Tasks

Throughout this document, references to Design Documents and to Layout and Shop Drawing development are intended to convey the following:

3.2.1 Design Documents

The Engineer is responsible for the preparation of Design Documents which

¹ Such as those published by the National Fire Protection Association, or the ICC - International Code Council

establish the objectives and design criteria of the system. The Design Documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show that they conform to the provisions of relevant laws, codes, ordinances, rules and regulations. To establish minimum design quality in the Design Documents, the documents shall include, as a minimum, the following information when applicable:

- Identification of the scope of work
- Identification of applicable codes and standards
- Ensure conformance with the applicable building code(s)
 - Have construction trade offs been allowed based on the installation of a suppression system, etc.?
- Identification of occupancy type and hazard classification
- Water-based suppression systems: a) Selection of type of system and components, b) classification of the hazard and commodities to be protected, c) establish the density/flow and design area size, d) determine and confirm the available water supply, e) preliminary system layout and hydraulic calculations to verify adequacy of proposed water supply arrangements, f) analysis to identify concerns regarding systems structural support (as appropriate) and g) analysis to identify any concerns with water quality that would affect the proposed systems (as appropriate).
- Fire alarm system: a) Selection of type of system and components, b) identification of fire alarm panel location, c) creation of system concept riser diagram(s), d) identification of interface(s) required with fire safety functions, other fire alarm systems and other building systems. e) determine average ambient sound level, f) determine minimum candela ratings and placement of strobes, and g) identification of all initiating device and notification appliance locations.
- Special hazard suppression systems: a) selection of type of system and components, b) classification of the hazard area and hazards to be protected, including fire barrier wall requirements and fire dampers, c) determination of the minimum design concentration, normal cylinder storage temperature, cylinder location, and control panel location, d) identification of system interfaces and customer requirements and e) creation of a system input/output matrix.

Based on this design criterion, the Engineer prepares and/or supervises the preparation of Design Documents.

3.2.2 Shop Drawing Development

The Engineer or the Technician develops working plans/Shop Drawings based upon the Design Documents, specified standards and manufacturer listings. For example:

- Water-based suppression systems: a) The detailed layout of risers, cross mains, branch lines, sprinklers, and hangers; b) size of pipe c) furnishing of supplemental hydraulic calculations in accordance with the Design Documents, technical data sheets and details for the specific equipment being furnished for installation.
- Fire alarm system: a) The layout, the circuiting and placement of initiating devices, notification appliances, and other system components, b) preparation of riser diagram(s), c) inclusion of notification appliance circuit voltage drop calculations d) battery calculations for secondary power and e) technical data sheets and details for the specific equipment being furnished for installation.
- Special hazard suppression systems: a) the layout, the circuiting and placement of initiating devices, notification devices, release stations, cylinders, and other system components, b) detailed isometric and plan layout of piping, hangers and nozzles, including calculation nodes, c) hazard volume, agent concentration and flow calculations, d) detailed wiring and control diagrams, indicating all system interfaces and point of interconnection and e) technical data sheets and details for specific equipment being furnished for installation.
- Layout/Shop Drawings shall not be stamped or sealed by an Engineer unless the work is performed under their direct supervision and control.

3.2.3 Installation

The Engineer must review and approve the fire protection system installation Shop Drawings and submittals for compliance with the Design Documents. The Engineer and/or the Technician must monitor the installation, and acceptance testing of all fire protection systems.

3.2.4 Record (As-Built) Drawings

After the system installation is complete and tested as per the Engineer's protocol the Engineer or Technician prepares the record (as-built) drawings to incorporate any field changes to accurately reflect the system as installed.

4.0 Fundamental Objective of Fire Protection Engineering

The application of recent and rapidly evolving fire protection technology to the design of buildings or facilities continues with the advent of performance-based design and a growing use of design-build construction.

The fire protection engineering profession must accommodate a changing environment while maintaining our fundamental objective: *applying scientific and engineering principles to protect people and the environment from destructive fire.*

4.1 Roles for Assuring Public Safety

For fire protection system design, the roles and responsibilities of the Engineer and the Technician are considered reasonable and prudent in the following relationships.

- The Engineer prepares the Design Documents for fire protection systems.
- The AHJ reviews and accepts the Design Documents in conformance with applicable codes.
- The Technician and/or the Engineer prepare Shop Drawings and appropriate supplemental calculations and perform other layout functions in accordance with the Engineer's design.
- The Engineer is responsible for the original design reviews and approves the Shop Drawings and all of the Technician's work for compliance with the Engineer's design and specifications. Note – this review does not necessitate sealing or stamping of the Shop Drawings with a P.E. stamp/seal if the work was not done under the Engineer's direct control or authority. This may instead take the form of a review letter or stamp (See Appendix C).
- The AHJ accepts the Shop Drawings and the acceptance test results approved by the Engineer —The owner should note that the role of government authorities acting as the AHJ is generally limited to

minimum code compliance, and they will not assume the Engineer's responsibilities for Design Documents.

- The Engineer or the Engineer's Technician provide construction period services, which include monitoring the installation, tracking all revisions and witnessing final acceptance tests in accordance with the Engineer's design that establishes the testing procedures, protocols, test acceptance criteria.
- It is recognized that some states have enacted regulations that allow the Technician to layout the system and prepare Shop Drawings without the involvement of a Licensed Professional Engineer for pre-engineered projects, self-installed projects, small projects or minor modifications to existing facilities. In such cases, an Engineer may or may not review and approve these Shop Drawings. The technician must ensure that the layout and shop drawings are in accordance with all applicable codes, and not assume the role of the Engineer. As previously discussed, however, it is recommended that an Engineer be responsible for the design of all fire protection system projects to ensure proper protection of the public's health and safety.

Appendix A: Code of Ethics/Professional Responsibility

Typically, codes of ethics and professional responsibility are developed within professional organizations to serve as guideposts for professional performance and conduct.

A.1 Code of the Engineer

The Engineer subscribes to a code of ethics required from a regulatory viewpoint and designated by a state board of registration.

The NSPE publishes a model code of professional ethics, commonly followed by state boards of registration, which can be read on their website: www.nspe.org [2].

The SFPE *Canon of Ethics for Fire Protection Engineers* can be found on their website: www.sfpe.org

A.1.1 Stamps and Seals

State licensing boards do authorize, and may require, the use of stamps and seals. According to these regulations, the Engineer should sign or seal only those documents for fire protection systems which were actually prepared under their direct supervision and control.

A.1.2 Engineer of Record (Responsible Engineer)

There can only be one Engineer of Record for fire protection system design. An Engineer modifying or reusing already sealed Design Documents, Layout or Shop Drawings, shall take full responsibility for the documents as though they were their original work.

A.1.3 The Role of NFPA Standards in Fire Protection System Design

Standards published by the National Fire Protection Association such as NFPA 13 – *Standard for the Installation of Sprinkler Systems* and NFPA 72 – *National Fire Alarm Code*, are widely adopted by building and fire codes. NFPA standards are recognized as providing minimum requirements for a reasonable degree of protection for life and property through standardized design requirements, which define much of the engineering criteria used to design fire protection systems. In many cases, these standardized design requirements are sufficient for projects, but there are also many buildings and hazards for which no standardized design criteria are available. A qualified fire protection engineer is the only legally enabled entity to evaluate fire protection needs and make the determination as to whether the design is appropriately based on a standardized or special approach. Even where a special design approach is utilized, the Engineer will largely reference and rely upon standardized criteria from NFPA standards in establishing the engineering design. The standardized criteria include many of the detailed requirements carried into the development of working plans and Shop Drawings.

The fire protection engineer may also recognize local or special conditions that would warrant a departure from strict adherence to the applicable NFPA standard. The NFPA standards themselves recognize such possibilities and contain language as follows to allow variances:

NFPA 13 [3]

“1.5 Equivalency. Nothing in this standard shall be intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this standard. Technical documentation shall be submitted to the authority having jurisdiction to demonstrate equivalency. The system, method, or device shall be approved for the intended purpose by the authority having jurisdiction.

“1.6.1. Nothing in this standard shall be intended to restrict new technologies or alternate arrangements, provided the level of safety prescribed by this standard is not lowered.”

NFPA 72 [4]

"1.2.3 This Code establishes minimum required levels of performance, extent of redundancy, and quality of installation but does not establish the only methods by which these requirements are to be achieved.

"1.5 Equivalency

"1.5.1 Nothing in this Code shall prevent the use of systems, methods, devices, or appliances of equivalent or superior quality, strength, fire resistance, effectiveness, durability and safety over those prescribed by this Code.

"1.5.2 Technical documentation shall be submitted to the authority having jurisdiction to demonstrate equivalency.

"1.5.3 The systems, methods, devices or appliances that are found equivalent shall be approved."

Although the role of the Authority Having Jurisdiction is recognized in the above references, the Engineer is ultimately responsible for the adequacy of the design.

The Engineer has the responsibility to review of the working plans/Shop Drawings and to require correction of features or details that are inconsistent with the Design Documents and/or which contain unauthorized departures from the requirements of applicable NFPA standards.

A.2 Professional Code of Certified Engineering Technicians

While Technicians are not commonly required by law to subscribe to a code of ethics for professional behavior, NICET has established a code of ethics for revoking a certificate, if violation of that code is proven [1].

The *NICET Code of Ethics* [1] closely parallels the *NSPE Code of Ethics for Engineers*. The *NICET Code of Ethics* can be found on the NICET website: www.nicet.org.

A.2.1 Stamps and Seals

NICET does not authorize seals or stamps for Technicians. Documents prepared in accordance with approved design standards may bear the signature, date, NICET certification title and number of the Technician taking responsibility for the work. The use of any seal or stamp conveying the NICET name or mark on engineering documents or drawings prepared or checked by a NICET certificant is not authorized.

A.2.2 Working with Codes and Standards

The system layout and detail within working plans or Shop Drawings must be consistent with the Engineer's design regardless of whether the design is fully addressed within the applicable NFPA standards. Technicians preparing working plans or Shop Drawings have an obligation to adhere to the standards referenced in the engineer's design.

Appendix B: NCEES Position Statement 25

SFPE, NSPE, and NICET support the National Council of Examiners for Engineering and Surveying (NCEES) Position Statement (PS) 25 *Fire Protection* issued in August 2004, and have issued this position paper as a more detailed examination of the issue. The NCEES Position Statement is as follows:

PS 25 Fire Protection

NCEES recognizes that fire protection systems—including fire detection, alarm, and suppression systems—play an important role in protecting the health, safety, and welfare of the public. NCEES also recognizes the design and calculation of fire protection systems to be the practice of engineering.

NCEES recommends that Member Boards actively pursue enforcement of state statutes and rules with local permitting authorities having jurisdiction (AHJ) regarding the engineering supervision over the specification, design, and calculation of fire protection systems.

To implement the above, the following is recommended:

- Contract drawings should include a set of fire protection drawings that are sealed by a licensed professional engineer.*
- Supervision by a licensed professional engineer is required in the review of fire protection installation Shop Drawings for compliance with the engineer's design and specifications.*
- Oversight by a licensed professional engineer is required in the installation of an original permitted design.*

The Task Force that developed the NCEES statement found that there is confusion among code enforcement officials and building owners on the appropriate role of the Engineer in the design of fire protection systems. In the opinion of the Task Force, the confusion is being intensified by the development of position papers and guidelines for the design of fire protection systems that are contrary to state professional engineering statutes. As a result, the enforcement of professional engineering laws is being compromised.

Appendix C: Sample Review Stamp

SUBMITTAL REVIEW

- A **NO EXCEPTIONS TAKEN**
No further review of Submittal is required

 - B **MAKE CORRECTIONS AS NOTED**
Incorporate corrections in work; resubmittal is not required. If Contractor cannot comply with corrections as noted, revise to respond to exceptions and resubmit. Record Drawings shall reflect corrections.

 - C **REVISE AND RESUBMIT**
Revise as noted, and resubmit for further review.

 - D **NOT REVIEWED: STATE REASON _____**
-

This submittal has been reviewed only for the limited purpose of checking for general conformance with the design concept as expressed in the Contract Documents, subject to the requirements of the Contract Documents. Nothing in this review is intended to authorize any aspect of work that is not in accordance with state and local code requirements.

XYZ FIRE PROTECTION ENGINEERING INC.

By _____ Date _____

Project No. _____ References _____

References

1. *Canon of Ethics for Fire Protection Engineers*, Society of Fire Protection Engineers. Obtained at <http://www.sfpe.org/Profession/Canon.aspx>
2. *Code of Ethics for Engineers*. Publication #1102, National Society of Professional Engineers. Revised January, 2003.
3. *NICET Code of Ethics* . National Institute for Certification in Engineering Technologies. Obtained at: <http://www.nicet.org/about/code.cfm>. December, 2004.
4. *Standard for the Installation of Sprinkler Systems*. NFPA 13. (2002). National Fire Protection Association.
5. *National Fire Alarm Code*. NFPA 72. (2007). National Fire Protection Association.

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ AGREE X DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.


While agreeing with the concept to add guidance on installation of systems without antifreeze, this proposal can be confusing. For example, the proposed wording would allow insulation to be installed around piping running through an attic not necessarily at the ceiling level.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X AGREE _____ DISAGREE* _____ ABSTAIN*

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.


Signature

George E Laverick _____
Name (Please Print)

9/20/10 _____
Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

Moreau-Correia, Jeanne

From: Kenneth_Linder@swissre.com
Sent: Tuesday, September 21, 2010 11:01 AM
To: Moreau-Correia, Jeanne
Cc: Bielen, Rich; ebudnick@haifire.com
Subject: Re: Circulation of Votes - NFPA 13 TIA 1003 - Wednesday, September 22, 2010
Attachments: ATT00001..jpg; ATT00002..jpg; ATT00003..jpg; ATT00004..jpg; ATT00005..jpg

Jeanne,

Please record me as voting as follows for NFPA 13 TIA 1003:

Technical Merit: Disagree.

Emergency Nature: Agree

Comments: The recent TIA's banning antifreeze in dwelling units, has created the need for further guidance on the protection of piping for these areas. However, the proposed wording does not go far enough as there is no reference to maintaining the temperature at 40 deg F as there is in 8.16.4.1.3. I believe that the standard allows this today, through section 8.16.4.1.3, and that rather than add a new 8.16.4.1.6 as suggested in the TIA it would be better to revise 8.16.4.1.3. I also agree that it may not be clear that you can insulate branch lines per 8.16.4.1.6 as it refers to "water-filled supply pipes, risers, systems risers, or feed mains" and does not mention branch lines and as a result I agree with the emergency nature as this needs to be cleaned up.

Let me know if you need anything else.

Regards,
Ken

Kenneth Linder | Vice President | Property & Specialty
Swiss Re/Industrial Risk Insurers | 2 Waterside Crossing, Suite 200, Windsor, CT 06095, USA
Direct: +1 860 902 7237 Mobile: +1 860 573 7722 E-mail: Kenneth_Linder@swissre.com

<http://www.swissre.com>

From: "Moreau-Correia, Jeanne" <jmoreau@NFPA.org>
To: "Walker, Nancy" <nwalker@NFPA.org>, "Moreau-Correia, Jeanne" <jmoreau@NFPA.org>
Date: 09/17/2010 04:01 PM
Subject: Circulation of Votes - NFPA 13 TIA 1003 - Wednesday, September 22, 2010

TO: The Technical Committee on Sprinkler System Installation Criteria

Dear Committee Members:

Attached is the Circulation of Votes for the NFPA 13 TIA 1003 Ballot. If you wish to change your vote, changes are due back at NFPA by **Wednesday, September 22, 2010**. If you haven't yet returned a ballot, you may return your vote during the circulation period.

Please return your ballot by fax to **617-984-7110** or e-mail jmoreau@nfpa.org

Please remember that the return of ballots and attendance at Committee Meetings are required in accordance with the Regulations Governing Committee Projects.

Thank you,

Moreau-Correia, Jeanne

From: Rodney McPhee [RMcPhee@cw.ca]
Sent: Monday, September 20, 2010 8:00 PM
To: Moreau-Correia, Jeanne
Subject: Re: Circulation of Votes - NFPA 13 TIA 1003 - Wednesday, September 22, 2010
Attachments: image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg

Jeanne:

Currently in Geneva, Switzerland this week, no access to print and send ballot.

Here are my answers to questions:

Question 1: Disagree. As noted by other negative voters, current provisions already apply.

Question 2: Disagree. Current standard already allows this.

Let me know if you need anything else.

Rodney

From: Moreau-Correia, Jeanne [mailto:jmoreau@NFPA.org]
Sent: Friday, September 17, 2010 04:03 PM
To: Walker, Nancy <nwalker@NFPA.org>; Moreau-Correia, Jeanne <jmoreau@NFPA.org>
Subject: Circulation of Votes - NFPA 13 TIA 1003 - Wednesday, September 22, 2010

TO: The Technical Committee on Sprinkler System Installation Criteria

Dear Committee Members:

Attached is the Circulation of Votes for the NFPA 13 TIA 1003 Ballot. If you wish to change your vote, changes are due back at NFPA by **Wednesday, September 22, 2010**. If you haven't yet returned a ballot, you may return your vote during the circulation period.

Please return your ballot by fax to **617-984-7110** or e-mail jmoreau@nfpa.org

Please remember that the return of ballots and attendance at Committee Meetings are required in accordance with the Regulations Governing Committee Projects.

Thank you,

Jeanne Moreau
Technical Projects Supervisor
National Fire Protection Association
1 Batterymarch Park
Quincy, MA 02169
Ph: 617-984-7586
Ex: 617-984-7110

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

See attached

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Not of an emergency nature, other sections of
code can be used to provide insulation option to
maintain piping above 40°F.

Thomas H Miller

Signature

Thomas H. Miller, PE

Name (Please Print)

9/19/2010

Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau

NFPA

1 Batterymarch Park

Quincy, MA 02169

FAX: (617) 984-7110

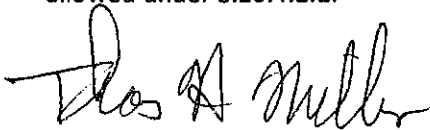
E-mail: jmoreau@nfpa.org

Tentative Interim Amendment Log No. 942

The proposed wording in the TIA for unheated attic spaces is not complete from an engineering and technical standpoint for providing guidance to the user and installer. The last sentence provides no meaningful assistance as I am not aware of any insulation manufacturer who provides guidelines for installation around water filled piping in unheated spaces.

The suggestion for the use of blown-in insulation should be removed from appendix material, as it is not a reliable solution for the protection of the piping. Not only is the problem related to installation, but this type of insulation moves and settles with time. There is too high a chance that the insulation would move or settle and prevent the heat from below reaching the piping under all conditions during the life of the system.

As NFPA 13 applies to all occupancies and sizes of buildings, only reliable means of protecting piping from freezing should be permitted. Section 8.16.4 provides sufficient reliable means of protecting piping from freezing. This new paragraph is not needed as the use of insulation to protect the piping is allowed under 8.16.4.1.1.

A handwritten signature in black ink, appearing to read "Thomas H. Miller". The signature is fluid and cursive, with the first name "Thomas" and last name "Miller" clearly distinguishable.

Thomas H. Miller, PE
September 19, 2010

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X **AGREE** _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Thomas A. Noble
Signature

THOMAS A. NOBLE
Name (Please Print)

9-21-10
Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

NFPA 13, 2010 Edition
Standard for the Installation of Sprinkler Systems
TIA Log No: 1003
Reference: 8.16.4.1.6 & A.8.16.4.1.6
Comment closing date: October 13, 2010

Technical Merit – Disagree

The proposed language states that the piping can be covered with insulation but does not state on the thickness of the insulation to maintain the sprinkler piping at 40 degrees. The reference to "Guidelines of the Insulation Manufacturer" are too vague and does not give any real direction. There needs to be more technical guidance in the body of the standard text.

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

AGREE _____ **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Signature

Peter Schwab
Name (Please Print)

9/16/10
Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

I agree that this concept is needed in NFPA 13, especially in light of all the issues with antifreeze. As submitted I cannot vote in favor of the TIA for several reasons. Section 8.16.4.1.6 does not clarify that there shall not be insulation between the piping and the heated area below. Also, the reference to guidelines of the insulation manufacturer is too vague. AHJ's could say that unless the manufacturer specifically gives instructions on how to insulate sprinkler pipe, that insulation cannot be used.

I also disagree with the mention of blown in insulation as an option in the Annex note as our experience with using this method has proven it to be unreliable.

More guidance is needed in the body of the standard vs. the proposed annex language.

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Section 8.16.4.1.3 already permits protection against freezing through the use of insulating coverings. The additional proposed information is not required.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** X **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

The standard already satisfactorily addresses this issue.



Signature

LeJay Slocum

Name (Please Print)

9/16/10

Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 1003
Adding new text and figures — 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

AGREE **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE .Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

While very-well intentioned, the proposed wording for this new section **8.16.4.1.6** does not fully emphasize the need for an air space between the pipe and the heated space below. The Annex **A.8.16.4.1.6** does provide good supporting information that may be better served if it were to be included in the actual text of **8.16.4.1.6** itself. Also, other scenarios should be mentioned or referenced with illustrations such as, pipe that is run directly on top of the joists or above the joists where significant air circulation can diminish the insulating performance.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

AGREE **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE .Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.



Signature

Len R. Swantek – Victaulic Company

Name (Please Print)

September 16, 2010

Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:

Jeanne Moreau

NFPA

1 Batterymarch Park

Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
 Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED FOR EXPLANATION.

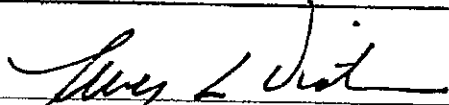
Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

_____ **AGREE** **DISAGREE*** _____ **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

SEE ATTACHED FOR EXPLANATION


 Signature

 TERRY L. VICTOR
 Name (Please Print)

 SEPT 16, 2010
 Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:
 Jeanne Moreau
 NFPA
 1 Batterymarch Park
 Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

SimplexGrinnell

A business unit of Tyco Fire & Security

BE SAFE**Terry Victor**
National Manager
Sprinkler Business
ProcessesSimplexGrinnell LP
9585 Snowden River Parkway
Columbia, MD 21046
Tele: (443) 896-1053
FAX: (410) 381-1450
tvictor@tycoint.comJeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169
FAX: (617) 984-7110

Reference: NFPA 13-2010
Standard for the Installation of Sprinkler Systems
TIA Log No.: 1003
Reference: 8.16.4.1.6 and A.8.16.4.1.6
Comment Closing Date: October 13, 2010
Submitter: Phillip Brown, American Fire Sprinkler Association

I disagree with the TECHNICAL MERITS of the proposed TIA because:

1. The proposed text doesn't say anything about maintaining a temperature for the system piping above 40°F (4°C), but would inadvertently allow sprinkler pipe to be installed in attics as long as it's "completely covered with insulation" no matter what temperature it could be exposed to.
2. The language in 8.16.4.1.3 already permits the use of tenting of insulation to protect the pipe. NFPA 13 has been interpreted as allowing this practice for years. To pass a TIA now that suddenly says that you can do it implies that it was prohibited all these years, which it has not been.
3. The annex statement uses the wording "top floor of a home" and since this is being proposed to NFPA 13 this wording could be misleading and infer a limitation to homes only. The scope of this section of NFPA 13 goes beyond homes and could be applied to nursing facilities, dorms, restaurants, and any other occupancy with unheated attics.

I disagree with the EMERGENCY NATURE of the proposed TIA because:

1. The language in 8.16.4.1.3 already permits the use of tenting of insulation to protect the pipe and therefore the TIA will not be correcting a previously unknown existing hazard, nor offer to the public the benefit described.

Terry Victor
National Manager - Sprinkler Business Processes

SimplexGrinnell LP

TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942
 Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

 X **AGREE** **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 X **AGREE** **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

** IN PARAGRAPH A.8.16.4.1.6, IN ALL PLACES WHERE THE WORD "HOME" IS USED, IT SHOULD BE REPLACED WITH "DWELLING UNIT"*


Signature

ROBERT G. CAPUTO
Name (Please Print)

2 SEP 10
Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

 x **AGREE** **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

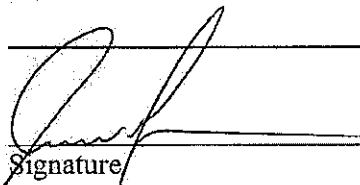
*An explanation must accompany a disagreement or abstaining position.
There remains a risk of damaged or frozen pipe if insulation is
not properly installed and/or maintained. This is not the preferred
method of protecting sprinkler piping from freezing conditions.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 x **AGREE** **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.



Signature

Donald Goosman

Name (Please Print)

9/15/10

Date

Please return the ballot on or before **Thursday, September 16, 2010**.

PLEASE RETURN TO:
Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169 **FAX: (617) 984-7110** **E-mail: jmoreau@nfpa.org**

**TECHNICAL COMMITTEE LETTER BALLOT
PROPOSED TENTATIVE INTERIM AMENDMENT LOG NO. 942**

Adding new text and figures – 8.16.4.1.6 and A.8.16.4.1.6 to the 2010 Edition of NFPA 13,
Standard for the Installation for Sprinkler Systems

Question 1: I agree with the **TECHNICAL MERITS** of the Proposed TIA.

 X **AGREE** **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

While I agree to the intent of the submitter I think
this should be appendix material to 8.16.4.1.3 as a
general method regardless of the occupancy.

Question 2: I agree that the subject is of an **EMERGENCY NATURE**.

 AGREE X **DISAGREE*** **ABSTAIN***

EXPLANATION OF VOTE - Please type or print your comments:

*An explanation must accompany a disagreement or abstaining position.

I think the intent is already generally covered by
8.16.4.1.3 and can be dealt with in committee as we are
going in to cycle in a few months

Elwin G. Joyce
Signature

Elwin G. Joyce
Name (Please Print)

2 Sept, 2010
Date

Please return the ballot on or before **Thursday, September 16, 2010.**

PLEASE RETURN TO:

Jeanne Moreau
NFPA
1 Batterymarch Park
Quincy, MA 02169

FAX: (617) 984-7110

E-mail: jmoreau@nfpa.org