



NFPA

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MEMORANDUM

To: NFPA Technical Committee on Sprinkler System Installation Criteria

From: Jeanne Moreau

Date: September 2, 2010

Subject: NFPA 13 Proposed Tentative Interim Amendment (TIA) No. 1003

The attached proposed Tentative Interim Amendment (TIA) is being submitted to you for letter ballot. This proposed TIA was submitted by Phillip Brown and endorsed by Michael Meehan.

This proposed TIA will be published for public comment in the September 3, 2010 issue of *NFPA News* with a Public Comment Closing Date of October 13, 2010. Any public comments received will be circulated to the committee. The Standards Council will consider the issuance of this TIA at their October 20 -21, 2010 meeting.

In addition to being balloted on the technical merits of the proposed TIA, the Committee is also being balloted on whether or not this matter is of an emergency nature. Please see Section 5 (copy enclosed) regarding the processing of TIAs from the *NFPA Regulations Governing Committee Projects*.

Please complete and return your ballot as soon as possible but no later than **Thursday, September 16, 2010**. As noted on the ballot form, please return the ballot to Jeanne Moreau either via e-mail to jmoreau@nfpa.org or via fax to 617-984-7110.

Note: Please remember that the return of ballots and attendance at committee meetings are required in accordance with the NFPA Regulations Governing Committee Projects.

Attachments: Ballot Form
Proposed TIA

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.

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

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

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

1. Add new text and figures as follows:

8.16.4.1.6* Wet Pipe Systems. A wet pipe system shall be permitted to be installed in unheated attic spaces in areas subject to freezing where sprinkler piping is completely covered with insulation. Insulation shall follow the guidelines of the insulation manufacturer.

A.8.16.4.1.6 Wet pipe systems, covered by 8.16.4.1.6, have water-filled pipes up to the sprinklers. Where pendent sprinklers are installed on the top floor of a home, the piping is typically run in the attic where there is a risk that the pipe will be exposed to cold temperatures and freeze up. One way to protect the pipe is to put sufficient insulation over the pipe to trap the heat from the floor below. Figures A.8.16.4.1.6(a) through (e) show a number of ways that batt insulation can be used to trap heat and keep the pipe from freezing. Placing the insulation over the pipe ensures that the area under the insulation becomes a space reliably maintained at 40°F (4°C) (assuming that the heat works in the home) and the pipe insulation is not under the pipe that is open to heat from below.

Blown-in insulation can be used to protect wet pipe sprinkler systems. However, care needs to be taken to ensure that the insulation does not get between the pipe and the warm space below. Where the insulation is permitted to fill around and under the pipe, it can actually insulate the wet pipe system from the heat below, which might allow the water in the pipe to freeze. One way to protect the piping is to cover it with thick plastic sheets before the insulation is blown over the pipe. Tacking the sheets to the joists allows an air pocket to be created around the pipe with blown-in insulation, with the plastic trapping the heat in the pocket. A combination of batt insulation over the sprinkler piping and blown-in insulation in adjacent areas is also another potential method of protecting the pipe from freezing. Whichever method of insulation is chosen, the final arrangement should ensure that the piping is protected and remains protected from freezing. Insulation, especially blown-in insulation, might move over time and expose the pipe. Some method for keeping the insulation in place might be a good consideration.

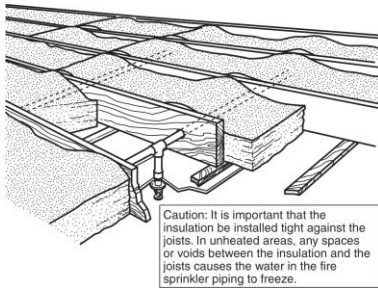


FIGURE A.8.16.4.1.6(a) Insulation Recommendations – Arrangement 1.

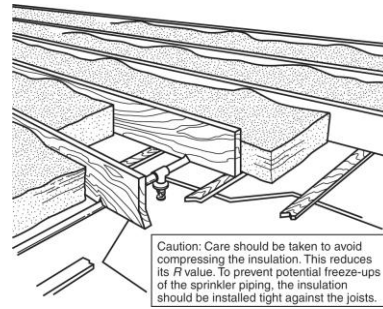


FIGURE A.8.16.4.1.6(d) Insulation Recommendations – Arrangement 4.

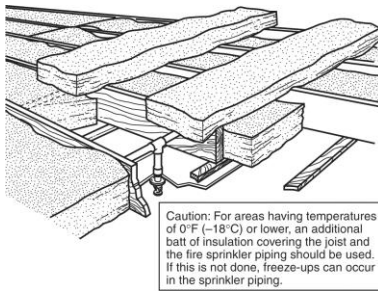


FIGURE A.8.16.4.1.6(b) Insulation Recommendations – Arrangement 2.

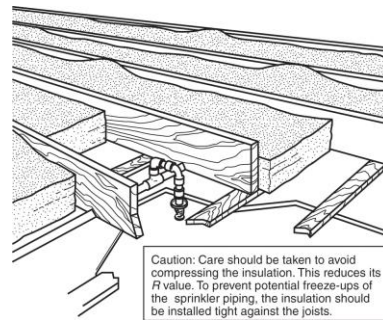


FIGURE A.8.16.4.1.6(e) Insulation Recommendations – Arrangement 5.

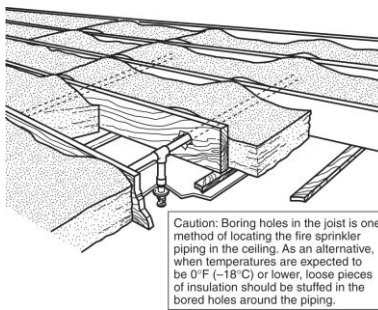


FIGURE A.8.16.4.1.6(c) Insulation Recommendations – Arrangement 3.

Submitter’s Substantiation. The restriction in the usage of antifreeze in wet pipe sprinkler systems protecting residential occupancies drives a need for a method to protect the piping installed in attic spaces from freezing. The allowed method prescribed in NFPA 13D should be brought forward into NFPA 13 to solve this problem.

Emergency Nature:

1. The proposed TIA intends to correct a previously unknown existing hazard.
2. The proposed TIA intends to offer to the public a benefit that would lessen a recognized hazard and offer an acceptable protection method to protect wet pipe sprinkler systems from freezing when installed in residential occupancies.

Section 5 Tentative Interim Amendments.

5.1 Preliminary Determination of Compliance.

A Tentative Interim Amendment (TIA) to any Document may be processed if the Council Secretary determines, after a preliminary review, and consultation with the appropriate Chair, that the Amendment appears to be of an emergency nature requiring prompt action and has the endorsement of at least two Members of the involved TC or TCC. If processed, the question of emergency nature shall be considered by the TC and TCC. The text of a proposed Tentative Interim Amendment may be processed as submitted or may be changed, but only with the approval of the submitter.

5.2 Evaluation of Emergency Nature. Determination of an emergency nature shall include but not be limited to one or more of the following factors:

(a) The document contains an error or an omission that was overlooked during a regular revision process.

(b) The document contains a conflict within the document or with another NFPA document.

(c) The proposed TIA intends to correct a previously unknown existing hazard.

(d) The proposed TIA intends to offer to the public a benefit that would lessen a recognized (known) hazard or ameliorate a continuing dangerous condition or situation.

(e) The proposed TIA intends to accomplish a recognition of an advance in the art of safeguarding property or life where an alternative method is not in current use or is unavailable to the public.

(f) The proposed TIA intends to correct a circumstance in which the revised document has resulted in an adverse impact on a product or method that was inadvertently overlooked in the total revision process, or was without adequate technical (safety) justification for the action.

5.3 Publication of Proposed Tentative Interim Amendment.

A proposed Tentative Interim Amendment that meets the provisions of 5.1 shall be published by the Association in appropriate media with a notice that the proposed Tentative Interim Amendment has been forwarded to the responsible TC and TCC for processing and that anyone interested may comment on the proposed Tentative Interim Amendment within the time period established and published.

5.4 Technical Committee and Technical Correlating Committee Action.

(a) The proposed Tentative Interim Amendment shall be submitted for ballot and comment of the TC in accordance with 3.3.4. The TC shall be separately balloted on both the technical merits of the amendment and whether the amendment involves an issue of an emergency nature. Such balloting shall be completed concurrently with the public review period. Any public comments inconsistent with the vote of any TC Member shall be circulated to the TC to allow votes to be changed. A recommendation for approval shall be established if three-fourths of the voting Members calculated in accordance with 3.3.4.5 have voted in favor of the Tentative Interim Amendment.

(b) The proposed Tentative Interim Amendment shall be submitted for ballot and comment of the TCC, if any, which shall make a recommendation to the Council with respect to the disposition of the Tentative Interim Amendment. The TCC shall be separately balloted on both the merits of the amendment (as it relates to the TCC

authority and responsibilities in accordance with 3.4.2 and 3.4.3) and whether the amendment involves an issue of an emergency nature. Any public comments inconsistent with the vote of any TC or TCC Member shall be circulated to the 28 TCC to allow votes to be changed. A recommendation for approval shall be established if three-fourths of the voting Members calculated in accordance with 3.3.4.5 have voted in favor of the Tentative Interim Amendment.

(c) All public comments, ballots, and comments on ballot on the proposed Tentative Interim Amendment shall be summarized in a staff report and forwarded to the Council for action in accordance with 5.5.

5.5 Action of the Council. The Council shall review the material submitted in accordance with 5.4(c), together with the record on any Appeals (see 1.6, 1.6.1), and shall take one of the following actions:

(a) Issue the proposed Tentative Interim Amendment

(b) Issue the proposed Tentative Interim Amendment as amended by the Council

(c) Where acted on concurrently with the issuance of a new edition of the Document to which it relates, issue the Tentative Interim Amendment as part of the new edition;

(d) Reject the proposed Tentative Interim Amendment

(e) Return the proposed Tentative Interim Amendment to the TC with appropriate instruction

(f) Direct a different action

5.6 Effective Date of Amendment. Tentative Interim Amendments shall become effective 20 days after Council issuance unless the President determines, within his or her discretion, that the effective date shall be delayed pending the consideration of a Petition to the Board of Directors (see 1.7). The President may also, within his or her discretion, refer the matter of a delay in the effective date of the TIA to the Executive Committee of the Board of Directors or to the Board of Directors.

5.7 Publication of Amendment. The Association shall publish in one of its publications sent or accessible to all Members notice of the issuance of each Tentative Interim Amendment and may, as appropriate, issue a news release to applicable and interested technical journals. The notice and any news release shall indicate the tentative character of the Tentative Interim Amendment. In any subsequent distribution of the Document to which the Tentative Interim Amendment applies, the text of the Tentative Interim Amendment shall be included in a manner judged most feasible to accomplish the desired objectives.

5.8 Applicability. Tentative Interim Amendments shall apply to the document existing at the time of issuance. Tentative Interim Amendments issued after the proposal closing date shall also apply, where the text of the existing document remains unchanged, to the next edition of the Document. Tentative Interim Amendments issued concurrently with the issuance of a new edition shall apply to both the existing and new edition.

5.9 Subsequent Processing. TC responsible for the Document or part of the Document affected shall process the subject matter of any Tentative Interim Amendment as a proposal for the next edition of the Document (see 3.3).

5.10 Exception. When the Council authorizes other procedures for the processing and/or issuance of Tentative Interim Amendments, the provisions of this Section shall not apply.