



## National Fire Protection Association

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### MEMORANDUM

TO: NFPA Technical Committee on Sprinkler System Installation Criteria  
FROM: Elena Carroll, Administrator, Technical Projects  
DATE: November 10, 2011  
SUBJECT: NFPA 13 ROC TC **FINAL** Ballot Results (A2012)

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The Final Results of the NFPA 13 ROC Letter Ballot are as follows:

**29 Members Eligible to Vote**  
**0 Not Returned**  
**16 Affirmative on All**  
**11 Negatives** (Baker, Dornbos, Gerdes, Laverick, Lake, Marburger, Meehan, Schwab, Slocum, Victor, and Bilbo) (on one or more comments as noted in the attached report)  
**2 Abstentions** (Keeping and McPhee) (on one or more comments as noted in the attached report)

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

- (1) The number of affirmative votes needed for the comment to pass is **18**.  
(29 eligible to vote - 0 not returned - 2 abstentions =  $27 \times 0.66 = 17.82$ )
- (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:  
[29 eligible  $\div$  2 = 14.5 = **(15)**]

Reasons for negative votes, etc. from alternate members are not included unless the ballot from the principal member was not received.

According to the final ballot results, all ballot items received the necessary  $\frac{2}{3}$  required affirmative votes to pass ballot.

**Document # 13**

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**13-1** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**Entire Document** (Log # 297 )

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**13-2** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**Entire Document** (Log # 339 )

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**13-3** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**1.1.2** (Log # 306 )

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**13-4** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**1.1.2** (Log # CC3 )

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**13-5** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0**1.3.1** (Log # 337 )

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**Negative**

**Lake, J.** The committee action only addressed one of the three issues raised in the comment. The committee action does not address the other issues raised and no reason is given as to why.

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**13-6** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**Chapter 2** (Log # CC7 )

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**Affirmative with Comment**

**Laverick, G.** Editorially correct the designation for the UL standards to reflect ANSI accreditation as follows:

ANSI/UL 62 Flexible Cords and Cables (2010)

ANSI/UL 1581 Reference Standard for Electrical Wires, Cables, and Flexible Cords (2011)

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**13-7** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**Chapter 2** (Log # CC8 )

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**13-8** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**2.3.3, 6.4.4.3** (Log # CC1 )

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**13-9** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**2.3.3 and Table 6.3.1.1** (Log # 316 )

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**13-10** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**2.3.7** (Log # 133 )

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**Document # 13**

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13-11 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.x Shadow Area and A.3.3.x (New)** (Log # 78 )

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13-12 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.x Shadow Area and A.3.x (New)** (Log # 70 )

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13-13 Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**3.2.3 Listed** (Log # 225 )

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**Negative**

**Marburger, A.** The TC should take an affirmative position with the Standards Council to address the concerns raised in the proposal. As minimum requirements for design and installation, the standard's mission is fundamentally reliant upon the principle that the products to be incorporated in automatic fire sprinkler systems are fit for purpose. The standard assumes this assurance by requiring the use of "listed" equipment, materials and services. Beyond acceptability to authorities having jurisdiction, the critical reliance on this assurance as a tenant of the standard itself supports a recommendation to the Standards Council for threshold performance criteria for organizations who "list".

**Schwab, P.** I agree with Mr. Marburger.

**Affirmative with Comment**

**Lake, J.** I agree with the concept of revising this definition. However, is clearly not within the scope of the technical committee to take action on NFPA Official Definitions which can only be modified by NFPA Standards Council. That being said, it was discussed during the ROC meeting that the TC, through the chair should write to Standards Council in support of reconsidering the definition given the issues raised in this Comment.

13-14 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.x (New)** (Log # 252 )

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**Affirmative with Comment**

**McPhee, R.** The wording of the proposed new appendix note in A.8.1.1 is unclear and might benefit from a partial rewording; the following is suggested:

A.8.1.1.(3) Notwithstanding the obstruction rules provided in Chapter 8, it is not intended or expected that water will fall on the entire floor space of the occupancy. When obstructions or architectural features, such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations, interfere with the sprinkler's spray pattern such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations they can disrupt the water spray discharging from a sprinkler and shadowed areas can occur. Where small shadowed areas are formed on the floor adjacent to their referenced architectural features, these shadowed areas are purely on paper and do not take into account the dynamic variables of sprinkler discharge.

13-15 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.x Concealed Space 3.3.y Cloud Ceiling and 8.15.2.3** (Log # 150 )

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13-16 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**3.3.x Continuous Obstruction, Non-Continuous Obstruction (New)** (Log # 149 )

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**Negative**

**Document # 13**

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**McPhee, R.** I agree with the comments from Baker and Keeping on the related comment 13-17(Log #304) that the proposed wording under that item can be read such that what can be seen as a 'noncontinuous obstruction' (i.e., one having dimensions of 4 ft x 6 ft) will now, because of its proximate location between two sprinklers, be considered as a 'continuous obstruction'. Further, the comment here from Wiegand, NFSA, which was rejected, suggests a conceptual approach related to the 'S' or 'L' dimensions, which would seem to offer a more amenable (and logical) basis.

Here is a suggested rewording that might be considered as definitions for the two concepts:

**Continuous obstruction** A continuous obstruction is an obstruction located at or below the level of sprinkler deflectors which affect the discharge pattern that has a dimension exceeding either the 'S' or 'L' dimension of two or more adjacent sprinklers.

**Non-continuous obstruction** A non-continuous obstruction is an obstruction at or below the level of the sprinkler deflector which affects the discharge pattern that has a dimension exceeding the 'S' or 'L' dimension of a single adjacent sprinkler.

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**13-17** Eligible To Vote:29 Affirmative: 25 Negative: 4 Abstain: 0 Not Returned: 0

**3.3.x Continuous Obstruction, Non-Continuous Obstruction (New) (Log # 304 )**

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**Negative**

**Baker, Jr., W.** A 4 ft x 6 ft object, such as a large light fixture, if located between two sprinklers would affect the umbrella discharge pattern of both sprinklers, but I do not believe was intended to be treated as a continuous obstruction. If my assumption is correct then the proposed definition would need to be further refined.

**Keeping, L.** These definitions should not be accepted, because they are too simplistic and they do not adequately address common situations such as a relatively short obstruction (ie. less than the S or the L dimensions - such as a light or a unit heater) located between two sprinklers. I believe that something like that should just be considered to be a non-continuous obstruction, but per these definitions, it would have to be classified as a continuous one.

**Marburger, A.** I agree with the substantiation of Mr. Baker and Mr. Keeping; the new definitions need further refinement prior to being recommended for adoption.

**McPhee, R.** I agree with the comments from Baker and Keeping that the proposed wording can be read such that what can be seen as a 'noncontinuous obstruction' (i.e., one having dimensions of 4 ft x 6 ft) will now, because of its proximate location between two sprinklers, be considered as a 'continuous obstruction'. Further, the comment from Wiegand, NFSA, 13-16 (Log #149) suggested an approach related to the 'S' or 'L' dimensions, which would seem to offer a more amenable (and logical) basis.

Here is a suggested rewording that might be considered as definitions for the two concepts:

**Continuous obstruction** A continuous obstruction is an obstruction located at or below the level of sprinkler deflectors which affect the discharge pattern that has a dimension exceeding either the 'S' or 'L' dimension of two or more adjacent sprinklers.

**Non-continuous obstruction** A non-continuous obstruction is an obstruction at or below the level of the sprinkler deflector which affects the discharge pattern that has a dimension exceeding the 'S' or 'L' dimension of a single adjacent sprinkler.

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**13-18** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**3.3.x Readily Accessible (New) (Log # 110 )**

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**Negative**

**Lake, J.** The committees action does not do anything and does not address the TCCs comment. If the word "readily" does not change the nuance of the term, then it is superfluous and should be deleted. Whether or not it changes the nuance, it does introduce a nebulous concept that there is a "raised level of accessibility" associated in cases where the term is used. Clearly this is not the intent of the committee and the standard does not define the term so one or the other must occur...either define the term or delete "readily".

**Affirmative with Comment**

**Keeping, L.** I do not believe that the Committee Action presented here properly describes what the Committee decided to do about this matter. According to my notes, the Action that was supposed to be taken was to delete the word "readily" from the term "readily accessible" wherever it is to be found throughout the Standard.

**Document # 13**

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**McPhee, R.** I agree with the comment from Keeping. In response to this comment, it was discussed and agreed that the word 'readily' would be deleted from each case of where it is used in the standard.

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**13-19** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.x Shadow Area (New)** (Log # 308 )

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**13-20** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.x Shadow Area and A.3.3.x (New)** (Log # 148 )

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**13-21** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**3.3.5.4 Smooth Ceiling** (Log # 4 )

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**Negative**

**McPhee, R.** I agree with the comment from Victor. The Committee already indicated, in their changing the provisions in the 2007 edition, that a ceiling (deck) having 3" indentations (corrugations) was an example of a 'smooth ceiling' when it comes to the positioning (distance) of the deflector below the ceiling. This change should have been accepted in order to provide for consistent 'positioning' rules for any type of ceiling with such indentations (corrugations).

**Victor, T.** Additional guidance is needed when defining a smooth ceiling and applying sprinkler installation rules, especially the deflector distance rules. It was determined during the revision cycle for the 2007 edition that a 3" variation in a corrugated metal deck was not a problem when measuring the sprinkler deflector position below ceilings (8.5.4.1.2 in the 2010 edition). This same logic is being applied to this proposed revision to the definition of a Smooth Ceiling. If a 3" variation is OK for corrugated metal decks, it should be OK for other irregularities when applying deflector distances and other sprinkler installation rules.

**Affirmative with Comment**

**Baker, Jr., W.** At some point the Committee should provide guidance as to what is meant by the term "significant".

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**13-22** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**3.3.5.4 Smooth Ceiling** (Log # 68 )

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**Negative**

**McPhee, R.** See my Explanation of Negative on Comment 13-21 (Log #4).

**Victor, T.** See my Explanation of Negative on Comment 13-21 (Log #4).

**Affirmative with Comment**

**Baker, Jr., W.** At some point the Committee should provide guidance as to what is meant by the term "significant".

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**13-23** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**3.3.6 Compartment and 4.5** (Log # 240 )

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**Negative**

Document # 13

McPhee, R. This comment should have been accepted or accepted in principle.

I agree in principle with the comment and support the idea of removing 'de-facto' requirements (provisions) from a definition, to follow recommended form and style. Another alternative in this case would have been to revise the definition to be written in a single sentence with the provisions written in a form representing essential characteristics of the concept. In that regard, the following is suggested:

3.3.6 Compartment. A space completely enclosed by walls and a ceiling. Each wall in the compartment is permitted to have openings where any opening in a wall of the compartment to an adjoining space if the openings have has a minimum lintel depth of 8 in. (200 mm) from the ceiling and the total width of the openings in each any wall does not exceed 8 ft (2.4 m). A, or where one wall has a single opening of 36 in. (900 mm) or less in width without a lintel. is permitted when there are no other openings to adjoining spaces.

I would also note the reference in Elvove's comment to the use of the term 'compartment' elsewhere in the standard and specifically in Section 22.4.4.6.2. The original wording (prior to 2010) for that provision only referred to '...small compartments requiring only one sprinkler'. The new text in current 2010 edition (unchanged in this cycle), now refers to 'small rooms' as well as 'small compartments' and has completely removed the limitations to small rooms/compartments 'requiring only one sprinkler'. It seems that neither of these two changes in the 2010 wording were technically substantiated by the proponent at the time (Isman), but now could be interpreted to allow for discharge to multiple sprinklers in rooms up to 800 sq ft in area to be omitted from the hydraulic calculations. I believe that those changes were not intentional or technically justified and thus probably should now be the subject of a TIA to correct this significant and unintended relaxation. This would involve revising 22.4.4.6.2, A.22.4.4.6.2 and Text in Table 22.4.4.6.2 as follows:

22.4.4.6.2\* Where the design area is equal to or greater than the area in Table 22.4.4.6.2 for the hazard being protected by the sprinkler system, the discharge for sprinklers protecting small rooms such as closets, washrooms, and similar small compartments requiring only one sprinkler that are in the design area shall be permitted to be omitted from the hydraulic calculations.

A.22.4.4.6.2 The intent of this section is not to allow the omission of discharge from sprinklers in small compartmentsrooms where the design area has been reduced below the values in Table 22.4.4.6.2 for situations such as quick-response sprinklers. Where quick response sprinklers are used, the discharge from single sprinklers protecting in small compartmentsrooms in the design area can be omitted as long as the design area meets the size required by Table 22.4.4.6.2.

Minimum Design Area to Omit Discharge from Sprinklers in Small CompartmentsRooms in Design Area (ft<sup>2</sup>)

13-24 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

3.3.6 Control Mode Specific Application (CMSA) Sprinkler (Log # 307 )

Affirmative with Comment

Keeping, L. While I agree that the name for this type of sprinkler should not be changed, now that it has been used throughout the industry for some time now, it is a fact that throughout the standard when CMSA sprinklers are referred to, it is "storage" type sprinklers that are being spoken of. Therefore, I think that this fact should be recognized in the definition. When those same devices were defined in the 2002 and 2007 editions of NFPA 13 under the name of "Specific Application Control Mode Sprinklers", the term was followed by the words "(for Storage Use)". Similarly, going forward, I believe 3.6.4.1 should say "Control Mode Specific Application (CMSA) Sprinkler (for Storage Use)".

13-25 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

3.3.6.2 Small Openings, A.3.3.6.2, and 8.15 (Log # 227 )

13-26 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

3.3.7 Draft Curtain and A.3.3.7 (Log # 3 )

13-27 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

3.3.8 Dwelling Unit (for sprinkler system installations) (Log # 228 )

13-28 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

3.3.16 Raw Water Source (Log # 354 )

13-29 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.3.17 Small Room, 8.6.2.1.2, and 8.6.3.2.4 (Log # 151 )**

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**Affirmative with Comment**

**McPhee, R.** I agree in principle with the rejection of this proposal, since it would have affected more than just the small room provisions of 8.6. (See also my comments on 13-23 regarding the definition of 'compartment'.)

However, I would also note the reference in Wiegand's comment to the use of the term 'small room' elsewhere and specifically in Section 22.4.4.6.2. The original wording (prior to 2010) for that provision only referred to '...small compartments requiring only one sprinkler'. The new text in current 2010 edition (unchanged in this cycle), now refers to 'small rooms' as well as 'small compartments' and has completely removed the limitations to small rooms/compartments 'requiring only one sprinkler'. It seems that neither of these two changes in the 2010 wording were technically substantiated by the proponent at the time (Isman), but now could be interpreted to allow for discharge to multiple sprinklers in rooms up to 800 sq ft in area to be omitted from the hydraulic calculations. I believe that those changes were not intentional or technically justified and thus probably should be the subject of a TIA to correct this significant and unintended relaxation. This would involve revising 22.4.4.6.2, A.22.4.4.6.2 and Text in Table 22.4.4.6.2 as follows:

**22.4.4.6.2\*** Where the design area is equal to or greater than the area in Table 22.4.4.6.2 for the hazard being protected by the sprinkler system, the discharge for sprinklers protecting ~~small rooms such as~~ closets, washrooms, and similar small compartments requiring only one sprinkler that are in the design area shall be permitted to be omitted from the hydraulic calculations.

**A.22.4.4.6.2** The intent of this section is not to allow the omission of discharge from sprinklers in small ~~compartments~~rooms where the design area has been reduced below the values in Table 22.4.4.6.2 for situations such as quick-response sprinklers. Where quick response sprinklers are used, the discharge from single sprinklers protecting ~~in small compartments~~rooms in the design area can be omitted as long as the design area meets the size required by Table 22.4.4.6.2.

**Minimum Design Area to Omit Discharge from Sprinklers in Small ~~Compartments~~Rooms in Design Area (ft<sup>2</sup>)**

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13-30 Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0

**3.3.18 Sprinkler System (Log # 152 )**

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**Abstain**

**McPhee, R.** This is a significant change to the standard and it seems that a more thorough review of the document would identify cases where other changes are needed to be consistent with this change.

One aspect in this regard is the concept of 'system riser', which, for instance, would now seem to apply to all horizontal supply mains on an individual floor. Yet, the document currently refers to mains at floor controls as 'feed mains'. (See Figure A.8.17.4.2.(b)). Similarly, and in conjunction with the changes adding new provisions in 8.16.1.5 regarding floor control assemblies in multi-storey buildings, such arrangements now result in the sprinkler network on each floor being considered a separate sprinkler system, yet this same figure does not show any 'check valve', which would now seem to be required.

Another is in regard to the provisions for 'working plans' in 22.1.3, which [in item (36)] requires the flow and pressure for 'each system', as well as the provisions 22.3.2 for summarizing 'system design requirements', which [in item (a)] can be read to require a design area for each system.

**Affirmative with Comment**

**Caputo, R.** We should retain the word, "should" in lieu of the word "network" in the committee's AIP statement for clarity. The term "network" refers to a type of piping system in NFPA 13D and could be misleading, in my opinion.

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13-31 Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0

**3.3.18 Sprinkler System (Log # 213 )**

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**Abstain**

**McPhee, R.** See my Explanation of Abstention on Comment 13-30 (Log #152).

Document # 13

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13-32 Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0

**3.3.18 Sprinkler System** (Log # 338 )

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**Abstain**

**McPhee, R.** See my Explanation of Abstention on Comment 13-30 (Log #152).

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13-33 Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**3.3.54 Smooth Ceiling** (Log # 296 )

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**Negative**

**McPhee, R.** I agree with the comment from Dias. The Committee already indicated, in their changing the provisions in the 2007 edition, that a ceiling (deck) having 3" indentations (corrugations) was an example of a 'smooth ceiling' when it comes to the positioning (distance) of the deflector below the ceiling. This change should have been accepted in order to provide for consistent 'positioning' rules for any type of ceiling with such indentations (corrugations).

**Victor, T.** See my Explanation of Negative on Comment 13-21 (Log #4).

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**Affirmative with Comment**

**Baker, Jr., W.** At some point the Committee should provide guidance as to what is meant by the term "significant".

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13-34 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.4.1 Antifreeze Sprinkler System and A.3.4.1** (Log # 229 )

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13-35 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.4.1.1 Premixed Antifreeze Solution** (Log # 230 )

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13-36 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.4.1.1 Premixed Antifreeze Solution, 7.6** (Log # 107 )

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13-39 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.6.1 Sprinkler and A.3.6.1 (New)** (Log # 231 )

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13-40 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**3.8.1.4** (Log # 287 )

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13-47 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**4.3(4)** (Log # 153 )

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13-49 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**Chapter 6** (Log # 226 )

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**Negative**

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**Document # 13**

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**Laverick, G.** The term *listing* and *special listing* should not be used relative to the term listing for the following reasons: 1) There is no definition in NFPA 13, 13D or 13 R for the term special or specially listed; 2) manufacturers do not reference or advertise their products using the term special or specially listed and 3) the certification laboratories, including UL and FM, do not refer to products as being special or specially listed.

Despite an indication in the comments submitted by committee members that they believe the process for “specially listing” a product is more intense, the listing for these products simply indicates compliance with the requirements included in the applicable standard. The word special or specially does not add or change the meaning of any current requirement in the standard.

The product listings published by the certification laboratories have not and do not designate products that comply as special listed or specially listed when published in the certification list. Removing this reference will clarify the requirements and eliminate the implication that there is some difference between listed and special listed.

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**13-50** Eligible To Vote:29 Affirmative: 24 Negative: 5 Abstain: 0 Not Returned: 0

**Chapter 6** (Log # 333 )

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**Negative**

**Bilbo, Jr., C.** We need to recognize the installation instructions are part of a listed product. But the installation instructions are a larger legal document that can have implications for liability and warranty that are not part of a product's installation or listing requirements. Manufacturers liability and disclaimer language should not be recognized by NFPA 13.

**Lake, J.** This action appears to be incongruous with the committee action on Comment 13-57 which eliminated the reference to installation instructions using the very point. The Technical Correlating Committee should review the committee actions on these two comments.

**Marburger, A.** Installation instructions contain much more than listing limitations which are critical for design and utilization. As correctly stated by the submitter "Much of this material is written by manufacturers and is not vetted by Listing/Approval agencies and includes" information that should not be made part of the standard. The TC agreed with this principle in 13-57, Log #214, AIP where "including installation instructions" was removed in favor of "listing limitations". In 13-57 the submitter's substantiation makes the same point, "The new 6.3.6.1.1 changes the requirement that listed CPVC shall be installed in accordance with manufacturer's instructions. As written in the ROP, this text would have allowed any manufacturer to put any installation requirement in their instructions, and the installer was bound to that requirement as if it were printed in NFPA 13." The committee agreed.

**McPhee, R.** I agree with the comments from Bilbo, Marburger and Meehan.

**Meehan, M.** Recognition of the installation instructions is critical to the listing of products and the use of this standard. However, the adopted installation instructions contain far more than just installation instructions. These documents contain liability and warranty disclaimers that are not reviewed as part of the listing protocol. Manufacturers liability and disclaimer language should not be recognized by the standard.

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**13-51** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**Chapter 6, 9.3.5, 10.2.2, and A.7.6.2** (Log # 211 )

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**Negative**

**Laverick, G.** See my Explanation of Negative on Comment 13-49 (Log #226).

**Document # 13**

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**13-52** Eligible To Vote:29 Affirmative: 24 Negative: 5 Abstain: 0 Not Returned: 0**6.1.1** (Log # 224 )

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**Negative**

**Bilbo, Jr., C.** Compatibility issues have been involved in system failures and impairments. Mr. Marburger is correct in wanting to address this issue with the listing laboratories and the product manufacturer.

**Lake, J.** This action does not address materials or devices that are used in combination with existing system components be evaluated for compatibility.

The standard would do better to require that the requirements for Listing be similar to those that deal with Equivalency in Section 1.5 and New Technology in Section 1.6.

**Marburger, A.** I disagree with the committee action and statement.

"The original language satisfactorily addresses the issue": original language does not address a requirement that materials or devices to be used in combination with existed system components be evaluated for compatibility. System impairment lost history demonstrates that it is necessary to establish compatibility as a part of evaluations for listing of new products or product additions outside of a designated standard.

"Can't measure the intended safety clause": It is a tenant of professional practice that evaluations can be made on the basis of equivalency.

Specifying acceptable criteria by selecting from comparable applications with known performance is common engineering practice, judgement, "or equal".

The TC should require that 6.6.1 Listing be consistent with 1.5 Equivalency and 1.6 New Technology.

**McPhee, R.** See my Explanation of Negative on Comment 13-50 (Log #333).

**Meehan, M.** System failures and impairments due to compatibility issues have been brought to the committees attention. I agree with the submitters proposal and intent to address this shortcoming through the listing laboratories and the product manufacturer.

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**13-53** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**6.1.1.1** (Log # 31 )

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**13-54** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0**6.1.1.2.1 (New)** (Log # 294 )

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**Negative**

**Dornbos, D.** While I believe I understand the intent of the submitter of this Comment, the wording of the proposed new section is not clear.

Currently, there are requirements that certain, more critical trim components such as accelerators, retarding chambers, actuators, etc be Listed.

Other non-critical components such as globe valves, nipples, fittings, etc are not typically individually Listed but are part of the Listed trim assembly. The wording of this new language does not differentiate between the two.

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**13-55** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**6.1.1.3** (Log # 154 )

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**13-56** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**6.1.1.3 (New)** (Log # 76 )

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**13-57** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0**6.1.1.3, 6.3.6, 6.3.6.1, and 6.3.6.2** (Log # 214 )

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**Negative**

**Document # 13**

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**Dornbos, D.** I don't believe that compatibility issues are limited to one material and it is inequitable to single one material out. Compatibility is a concern for all potential system components and the Standard should address the issue for all materials.

**McPhee, R.** I agree with the comment from Dornbos.

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**13-58** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**6.1.1.6 and 6.1.1.6.1** (Log # 75 )

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**Negative**

**Dornbos, D.** 13-58 (Log #75) should be accepted. The requirements of 6.1.1.6 and 6.1.1.6.1 will lead to limitless costly testing without providing certainty of compatibility with yet unidentified or unknown products or substances. The most likely means of complying with those provisions will be to require installers and other product users to comply with extensive and detailed product limitations which appears to me to be contrary to the intent of the original proposal.

The Committee's action and substantiation for this Comment is inconsistent with its action and substantiation for Comment 13-47, (Log #153) regarding reclaimed water. The issues of impracticality, vagueness and unenforceability are comparable. The Standard should be consistent on such topics.

**McPhee, R.** See my Explanation of Negative on Comment 13-57 (Log #214).

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**13-59** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.1.2.1.1** (Log # 292 )

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**13-60** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 6 )

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**13-61** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 7 )

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**13-62** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 13 )

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**13-63** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 80 )

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**13-64** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 98 )

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**13-65** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 329 )

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**13-66** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**6.2.1** (Log # 330 )

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**13-67** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.1** (Log # 340 )

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**13-68** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.1** (Log # CC10 )

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**13-69** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.1.1** (Log # 298 )

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**13-70** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.1.1 and A.6.2.1.1 (New)** (Log # 81 )

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**13-71** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.6.2.3** (Log # 341 )

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**13-72** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.6.4.3** (Log # 32 )

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**13-72a** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.6.4.3** (Log # 222 )

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**13-73** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.6.4.3** (Log # 342 )

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**13-74** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.7.4** (Log # 33 )

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**13-75** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.7.4 (New)** (Log # 343 )

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**13-76** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.8** (Log # 344 )

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**13-77** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**6.2.8 and A.6.2.8** (Log # 241 )

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Document # 13

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13-78 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.2.9 (Log # 111 )

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13-80 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.3.6.4 (Log # 345 )

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13-81 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.3.6.4 and 6.3.7.3 (Log # 82 )

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13-82 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

Table 6.4.1 (Log # 155 )

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13-83 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.8.1.2 (Log # 156 )

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13-84 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.8.1.2.1 (Log # 310 )

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13-85 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

6.8.4 (Log # 205 )

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Negative

**Gerdes, R.** This proposal is common sense. What connection does a fire department use when there are multiple systems with different fire department connections?

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13-86 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

6.10 and A.6.10 (New) (Log # 157 )

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13-87 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

7.1.1, 7.2.1, 7.3.1.3, and 8.17.3.3 (Log # 271 )

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13-88 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

7.1.1, 7.2.1, 7.3.1.3, and 8.17.3.3 (Log # 311 )

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Negative

Document # 13

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**Laverick, G.** Permitting gauges to be approved rather than Listed without providing additional information as to the acceptable size, calibration, ability to withstand vibrations, or pressure cycles, again places the AHJ in an uninformed position to judge acceptability of a product. Requiring the gauge to be Listed, provides specifications for minimum sizes and ranges, third party verification and follow-up testing. In addition, pressure gauges are used to determine the operable standby condition, for example, when placed above and below a dry or deluge valve. An inaccurate indication of pressure in this application may not indicate a system that could malfunction. Introducing this revision at this time will be in conflict with Section 6.1.1.

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**13-89** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**7.2.2 and 7.3.2.5 (Log # 35)**

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**13-90** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0  
**7.2.3.1.1 (Log # 83)**

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**Negative**

**Dornbos, D.** The proposed wording is confusing. The system size requirement for 15 second delivery time is tied to a calculation program or a system trip test connection/test manifold described in 7.2.3.7. Based on traditional use of the terms, the reference to "system test connection" and "inspection test connection" does not appear to be the same as the reference to "system trip test connection or manifold outlets" included in 7.2.3.7. I don't believe that it is the Committee's intent to tie the 15 second delivery time requirement to the opening of a standard Inspection Test Connection.

Also, as I understand it, the 15 second water delivery time requirement was established based on an assumed acceptable delay from sprinkler operation to delivery of water in a UL 1626 fire test (including densities of .05 gpm/sq ft) that still allowed for passing test results for residential sprinklers. It seems that if the 15 second water delivery time is important for dwelling unit portions of an occupancy, a mandate for the use of residential sprinklers would also be important. The impact of the higher required density of .1 gpm/sq ft, once water is delivered to the sprinkler may also be a factor.

While putting water on a fire quicker will always have a positive effect, arbitrarily applying the 15 second requirement may adversely affect system cost and does not seem appropriate without supporting data.

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**13-91** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**7.2.3.1.2 (New) (Log # 158)**

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**13-93** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**7.2.3.9.1 and 7.2.3.9.2 (New) (Log # 9)**

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**Affirmative with Comment**

**Keeping, L.** I agree that the drilling of a hole in a check valve clapper is a long time industry practice that should be allowed to continue. However, I also believe that installing a bypass c/w a restricted orifice would provide a very good alternative to the older time honoured practice and should not be discouraged.

---

**13-94** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**7.2.3.9.1 and 7.2.3.9.2 (New) (Log # 15)**

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**Affirmative with Comment**

**Keeping, L.** I agree that the drilling of a hole in a check valve clapper is a long time industry practice that should be allowed to continue. However, I also believe that installing a bypass c/w a restricted orifice would provide a very good alternative to the older time honoured practice and should not be discouraged.

**Document # 13**


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**13-95** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.2.3.9.2** (Log # 16 )

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**13-96** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.2.3.9.2** (Log # 286 )

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**13-97** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.2.4.8.2** (Log # 293 )

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**13-98** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.2.5.4.2** (Log # 251 )

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**13-99** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.2.6.5.2** (Log # 99 )

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**13-100** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.3.1.7, 8.16.1.1.7, 8.16.1.4.2.1, 8.16.2.5.3.1, 8.16.2.5.3.2, 8.17.4.2.2, 8.17.4.3.2, 8.17.4.4.4, 25.2.7.3, 25.4.10.3, A.8.16.4.2.1,**

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**Affirmative with Comment**

**Keeping, L.** I do not believe that the Committee Action presented here properly describes what the Committee decided to do about this matter. According to my notes, the Action that was supposed to be taken was to delete the word "readily" from the term "readily accessible" wherever it is to be found throughout the Standard.

**McPhee, R.** I agree with the comment from Keeping. In response to this comment, it was discussed and agreed by the Committee that the word 'readily' would be deleted from each case of where it is used in the standard.

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**13-101** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**7.6.1.2(3)** (Log # 119 )

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**Negative**

**Dornbos, D.** I agree that fire test data should be required to support the use of propylene glycol concentrations with specific ESFR sprinklers. Observation of fire tests indicate that the percent of fluid that is made up of propylene glycol does not have the same impact as water essentially temporarily reducing the applied water density until 100% water is flowing. A system that has demonstrated an ability to provide successful results under such conditions is necessary.

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**13-102** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.6.2.1.5** (Log # 159 )

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**13-103** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**7.6.2.4 (New)** (Log # 317 )

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**Document # 13**

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**13-104** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.2.1** (Log # 215 )

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**13-105** Eligible To Vote:29 Affirmative: 26 Negative: 3 Abstain: 0 Not Returned: 0**8.2.1.1 and 8.2.3** (Log # 272 )

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**Negative**

**Baker, Jr., W.** The submitter has addressed the original concerns of the Committee at the ROC, however now the Committee simply states that it is uncomfortable with this proposal even though, as it was pointed out at the ROC, that the rest of the world is basically doing what the Committee is uncomfortable with. Test data has demonstrated that a single obstructed ESFR sprinkler, with the system in service, will result in an uncontrolled fire so how would the Committee recommend we size the sprinkler systems so that impairments don't burn down facilities? The answer is we can't. If you look at the main reason why there are large losses from fire in facilities located outside of North America, it is not because of impaired sprinkler systems, but rather because they don't have sprinkler systems at all. Also, if the Committee is concerned with impairments to occupancies where there may be frequent sprinkler shutdowns due to modifications, such as multi-tenanted facilities, let's address that in the standard by reducing its sprinkler system area size as opposed to simply suggesting that the Committee is uncomfortable with looking at what has been working for the rest of the world. Perhaps at the next cycle we can review what has worked well for the rest of the world and see if we can improve upon it so that we also address some of the concerns that have been raised by the Committee, such as large water usage by having any drained water be returned to a holding tank where it can be reused in the sprinkler system (i.e. it doesn't get wasted).

**Gerdes, R.** In general, I agree with the proponent's substantiation. I agree with the concept of larger systems, but prefer Proposal 13-165.

**McPhee, R.** I agree with the comments from Baker and Gerdes. The area limits are not technically justified and need to be re-rationalized based on more modern thinking.

**13-106** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.3.3** (Log # 103 )

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**13-107** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.4.3(4)** (Log # 161 )

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**13-108** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.4.5.3** (Log # 36 )

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**13-109** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.4.5.3** (Log # 160 )

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**13-110** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.4.6.1** (Log # 363 )

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13-112 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**Table 8.4.9.1(b)** (Log # 84 )

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13-113 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.4.9.1.1 (New)** (Log # 74 )

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13-114 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.5.1.4 (New)** (Log # 162 )

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13-115 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.5.5.3.1.1** (Log # 163 )

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**Affirmative with Comment**

**Baker, Jr., W.** I understand the concern with open gratings is that items inevitably end up on top of them and cause obstruction to sprinkler discharge, however how should I size the sprinkler piping located under the open grating and how should I incorporate it into the ceiling-level sprinkler system design?

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13-116 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.5.6 and 8.5.6.1.1** (Log # 44 )

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13-117 Eligible To Vote:29 Affirmative: 27 Negative: 1 Abstain: 1 Not Returned: 0  
**8.5.7** (Log # 85 )

---

**Negative**

**McPhee, R.** I agree with the comments from Keeping.

**Abstain**

**Keeping, L.** I believe that this matter should have been given further consideration by the Committee. The definition of a Ceiling Pocket" is: "An architectural ceiling feature that consists of a bounded area of ceiling located at a higher elevation than the attached lower ceiling." This definition is very general and skylights fit it, just as any other recesses in a ceiling would. Therefore, if a skylight meets all of the conditions of 8.6.7.2, 8.8.7.2 or 8.10.8.2 there is no reason why it should be treated in a different manner.

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13-118 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**Table 8.6.2.2.1(a)** (Log # 164 )

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13-119 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**Table 8.6.2.2.1(a)** (Log # 254 )

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13-120 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**Table 8.6.2.2.1(a)** (Log # 255 )

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13-121 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**Table 8.6.2.2.1(a), 8.6.4.1.4, and Figure 8.6.4.1.4** (Log # 253 )

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13-122 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.2.2.1.1** (Log # 299 )

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13-123 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.3.4.2** (Log # 178 )

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13-124 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.4.1.4 and 8.6.2.2.1.1** (Log # 257 )

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13-125 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.4.1.4 and 8.6.2.2.1.1** (Log # 258 )

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13-126 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.4.1.4.4** (Log # 259 )

---

13-127 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.4.1.4.5.1 through 8.6.4.1.4.5.4, and Figure 8.6.4.1.4.5 (New)** (Log # 256 )

---

**Affirmative with Comment**

**Baker, Jr., W.** I agree with the Committee Statement and would highly recommend a test program set up through the FPRF.

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13-128 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.4.3** (Log # 165 )

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13-129 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.1.2(4) and Figure 8.6.5.1.2(c)** (Log # 166 )

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13-130 Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0  
**Figure 8.6.5.1.2(c)** (Log # 289 )

---

**Negative**

Document # 13

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**Keeping, L.** I believe that this matter should have been given further consideration by the Committee. The proponent is correct, the "18 in. minimum" serves no purpose, because as illustrated the obstruction begins above the elevation of the sprinkler deflector.

**McPhee, R.** I agree with the original comment and the ROC ballot comment by Keeping.

---

**13-131** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.2.1.2** (Log # 169 )

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**13-132** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.2.2, 8.7.5.2.2, 8.8.5.2.2, 8.9.5.2.2, 8.10.6.2.2, and 8.10.7.2.2** (Log # 242 )

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**13-133** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.3.3** (Log # 206 )

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**13-134** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.3.3.1** (Log # 171 )

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**13-135** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.4** (Log # 172 )

---

**Affirmative with Comment**

**McPhee, R.** The wording of the new Appendix Note on this subject is unclear and might benefit from a partial rewording; the following is suggested:

A.8.1.1.(3) Notwithstanding the obstruction rules provided in Chapter 8, it is not intended or expected that water will fall on the entire floor space of the occupancy. When obstructions or architectural features, such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations, interfere with the sprinkler's spray pattern such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations they can disrupt the water spray discharging from a sprinkler and shadowed areas can occur. Where small shadowed areas are formed on the floor adjacent to their referenced architectural features, these shadowed areas are purely on paper and do not take into account the dynamic variables of sprinkler discharge.

---

**13-136** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.4** (Log # 232 )

---

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-137** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.6.5.4 and A.8.6.5.4** (Log # 17 )

---

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**Document # 13**

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**13-138** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.6.5.4 and A.8.6.5.4** (Log # 61 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-139** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.6.6.1, 8.7.6, 8.8.6.1, and A.8.6.6** (Log # 243 )

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**13-140** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.6.6.1, 8.7.6, 8.8.6.1, and A.8.6.6** (Log # 362 )

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**13-141** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.7.3.4 and 8.7.4.1.3.1** (Log # 179 )

---

**13-142** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.7.5.4** (Log # 62 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-143** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.7.5.4, 8.7.5.4.1, and A.8.7.5.4** (Log # 18 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-144** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.7.5.4 and A.8.7.5.4** (Log # 233 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-145** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.7.5.4 and A.8.7.5.4 (New)** (Log # 173 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-146** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.8.3.4.2** (Log # 180 )

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**Document # 13**

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**13-147** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.1.2(4) and 8.8.5.1.2(c)** (Log # 63 )

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**Affirmative with Comment****McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-148** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.1.2(4) and Figure 8.8.5.1.2(c)** (Log # 167 )

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**13-149** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0**Figure 8.8.5.1.2(c)** (Log # 288 )

---

**Negative****Keeping, L.** I believe that this matter should have been given further consideration by the Committee. The proponent is correct, the "18 in. minimum" serves no purpose, because as illustrated the obstruction begins above the elevation of the sprinkler deflector.

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**Affirmative with Comment****McPhee, R.** I agree with the original comment and the ROC ballot comment by Keeping.

---

**13-150** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.4** (Log # 234 )

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**Affirmative with Comment****McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-151** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.4 and A.8.8.5.4** (Log # 19 )

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**Affirmative with Comment****McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-152** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.4 and A.8.8.5.4** (Log # 64 )

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**Affirmative with Comment****McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-153** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.8.5.4 and A.8.8.5.4 (New)** (Log # 174 )

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**Affirmative with Comment****McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-154** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.9.3.4** (Log # 181 )

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13-155 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.9.5.4 (Log # 235 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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13-156 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.9.5.4, 8.9.5.4.1, and A.8.9.5.4 (Log # 20 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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13-157 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.9.5.4 and A.8.9.5.4 (Log # 65 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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13-158 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.9.5.4 and A.8.9.5.4 (New) (Log # 175 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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13-159 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.10.3.3, 8.10.3.4, and 8.10.3.6 (Log # 182 )

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13-160 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.10.3.3, 8.10.3.4, and 8.10.3.6 (Log # 216 )

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13-161 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.10.6.1.2(4) and 8.10.6.1.2(c) (Log # 168 )

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13-162 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.10.6.4 and 8.10.6.5 (New) (Log # 236 )

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**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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13-163 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

8.10.6.4 and A.8.10.6.4 (Log # 21 )

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**Affirmative with Comment**

**Document # 13**

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**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-164** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.10.6.4 and A.8.10.6.4** (Log # 66 )

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-165** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.10.6.4 and A.8.10.6.4 (New)** (Log # 176 )

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-166** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.10.7.4, 8.10.7.4.1, and A.8.10.7.4** (Log # 22 )

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-167** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.10.7.4 and A.8.10.7.4** (Log # 67 )

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

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**13-168** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.10.7.4 and A.8.10.7.4 (New)** (Log # 177 )

**Affirmative with Comment**

**McPhee, R.** See my Comment on Affirmative on Comment 13-135 (Log #172).

---

**13-169** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0  
**8.11** (Log # 86 )

**Negative**

**Dornbos, D.** 13-169 (Log #86) should be rejected to allow information describing Protection Areas and Maximum Spacing criteria for K19.6 CMSA Sprinklers provided in Proposal 13-225 (Log #4 SSD) to be included in NFPA 13. Action was held over from the 2009 ROC awaiting fire test and obstruction data which has subsequently been provided. There has been more than adequate time to consider this issue since it has been active during the 2009 cycle as well as the current cycle. In accordance with accepted NFPA committee protocol, supporting test data has been provided to NFPA headquarters. There is no technical reason to exclude the K19.6 CMSA installation criteria from NFPA 13. As with any other products, based on equivalency inclusion of the data does not preclude further development of K19.6 technology as suggested by negative commenters.

**Affirmative with Comment**

**Document # 13**

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**Baker, Jr., W.** The guidelines for the K19.6 are technically correct, however I think the format in which it was presented is what led to Proposal 13-225 being rejected. Ideally the end user of NFPA 13 would like an installation guideline that applies to all CMSA sprinklers and then as needed provide exceptions, when they apply, to a sprinkler having a specific K-factor, orientation, RTI rated, sprinkler spacing and/or temperature rating. This will help simplify the guidelines for this section.

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**13-170** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**8.11** (Log # 273 )

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**Negative**

**Dornbos, D.** See reason for negative vote on Comment 13-169, (Log #86).

Also, substantiation related to objection to general trends as well as established NFPA policies, while perhaps understandable as a general comment related to the entire process, is not an appropriate basis for accepting this particular comment and reversing the action taken by the Committee during the proposal phase.

**Affirmative with Comment**

**Baker, Jr., W.** See my comments in 13-169.

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**13-171** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**Table 8.11.2.2.2** (Log # 183 )

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**Negative**

**Dornbos, D.** Based on negative votes on Comments 13-169 (Log #86) and 13-170 (Log #273), my vote on 13-171 (Log #183) is also negative. The table needs to match the section it applies to so it should be renumbered.

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**13-172** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.11.5.2.2** (Log # 237 )

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**13-173** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**8.12.2.2.3, 8.12.2.2.4, 8.12.3.1(3), and 8.12.3.1(4)** (Log # 184 )

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**Negative**

**Baker, Jr., W.** When a ceiling-level sprinkler is obstructed to the point it is ineffective, the end user should be able to determine what is the most appropriate means to correct the situation based on the known effective solutions that are available. To not provide acceptable solutions to an end user, even if it is not the most desirable option, is in my viewpoint unacceptable.

**Lake, J.** Because of the increased performance required (suppression) ESFR are easily impacted by any obstruction, not just structural members. The standard should therefore be flexible in this regard and should permit sprinklers to be moved to avoid any obstruction, not just structural members.

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**13-174** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.12.2.2.3(2) and 8.12.3.1.3(b)** (Log # 185 )

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**Document # 13**

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**13-175** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.12.5.2(6)** (Log # 23 )

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**Affirmative with Comment**

**Baker, Jr., W.** I agree with the rejection, but only because the size of the light fixture was not specified. I am confused by the wording provided in the Substantiation; is a bar joist the target of the sprinkler discharge, is a 1 in. diameter service pipe the target of the sprinkler discharge? Seems to me the answer would be "no" as would the question raised in the Substantiation, however I do not see the obstruction guidelines indicating that these are unacceptable obstructions. A light fixture over an aisle will not be a problem as long as it is not interfering with the umbrella pattern reaching the top of storage and the flue spaces of the storage are not blocked. As long as the light fixture does not prevent this scenario, it is not a problem. Perhaps for the next cycle the submitter can find better wording to meet this goal so that the intent indicated in the Comment can be accepted.

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**13-176** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.12.5.2(6)** (Log # 186 )

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**Affirmative with Comment**

**Baker, Jr., W.** I agree with the Committee's action to reject this Comment, but not because of the Substantiation given. The Substantiation references an obstruction in an aisle, yet this is not addressed in this specific Comment. The reason why this is unacceptable is because no flue spaces are allowed to be blocked. If the submitter had indicated that the single obstruction could not be located over both the longitudinal flue space as well as the transverse flue space, then I think he would have had a condition that the Committee could potentially consider as acceptable.

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**13-177** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2 and 8.6.4.1.4.5 (New)** (Log # 260 )

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**13-178** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.7** (Log # 187 )

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**13-179** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.7** (Log # 261 )

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**13-180** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.7** (Log # 285 )

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**13-181** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.7 and 8.15.1.2.17** (Log # 45 )

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**Document # 13**

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**13-182** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.10** (Log # 262 )

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**13-183** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.1.2.18 (New)** (Log # 221 )

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**13-184** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0**8.15.1.6** (Log # 87 )

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**Negative**

**Keeping, L.** I continue to believe that specially listed concealed space sprinklers are not necessary in spaces with bar joist construction. Such spaces have been successfully protected with standard spray sprinklers since that type of sprinkler was invented in the 1950's. Before that, old-style/conventional sprinklers were successfully used for the purpose. No negative results with this traditional method of protection have been brought forward and therefore there is no reason to negate that method now. The use of a specially listed sprinkler may certainly be permitted, but as a minimum standard, it is wrong for NFPA 13 to mandate them, without at least first providing a proper technical substantiation.

**McPhee, R.** I agree with Keeping. No technical data or fire loss information provided to indicate that such spaces with bar joist construction cannot be adequately protected by standard spray sprinklers.

**13-185** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.3.2.3.1** (Log # 24 )

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**13-186** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0**8.15.3.3** (Log # 284 )

---

**Negative**

**Gerdes, R.** There is no need for additional sprinklers to protect fire-rated opening protectives in a fire wall or fire barrier. The building codes address this by requiring fire-rated door assemblies. If we need this protection for stairs, what about other penetrations in the wall?

The committee likes to see fire test data to establish requirements. Where is the fire test data that establishes this need?

---

**13-187** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**8.15.3.3** (Log # CC6 )

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**Negative**

**Gerdes, R.** There is no need for additional sprinklers to protect fire-rated opening protectives in a fire wall or fire barrier. The building codes address this by requiring fire-rated door assemblies. If we need this protection for stairs, what about other penetrations in the wall?

Where is the fire test data that establishes this need?

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**13-188** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 25 )

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**13-189** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 118 )

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**13-190** Eligible To Vote:29 Affirmative: 26 Negative: 3 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 132 )

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**Negative**

**Document # 13**

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**Dornbos, D.** I agree with Mr. Victor's comments. Also, without compelling data to the contrary, the Sprinkler Standard should reflect the benefits that sprinkler protection provides and err on the side of requiring them in all occupancies leaving the decision and responsibility for exempting them to others on a case by case basis.

**Schwab, P.** The temptation to store in these spaces is too great to ignore. There will be very little control over whether or not the storage is non-combustible or combustible.

**Victor, T.** First the proponents of omitting sprinklers from these spaces claim there's no room for storage in them, and now they admit there is, but the only thing that will be stored there are elevator parts. Revising the text to allow the storage of any kind or type of combustible materials in an unsprinklered space goes against all of the other requirements of NFPA 13. NFPA 13 requires sprinklers under canopies and decks and stairs when combustibles and storage are present. Just because the combustible material is related to the elevator equipment, there could be a substantial fire load in the unsprinklered space if multiple boxes of materials are stored and/or large amounts of plastics are stored there. If any storage is anticipated at all, sprinklers must be installed in the spaces described.

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**13-191** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 188 )

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**Negative**

**Dornbos, D.** See my Explanation of Negative on Comment 13-190 (Log #132).

**Victor, T.** Obviously the claim of proponents of omitting sprinklers from these spaces "that there's no room for storage" is wrong since they now want to be allowed to store elevator equipment materials in them. If there's any kind of combustible storage in these spaces they should have sprinklers. The only way to ensure the spaces described are not used for storage is to not have any access into them. If access is provided through doors or panels, these spaces will be used for storage. Human nature and building space utilization will both dictate the use of any available space in a building for storage, and usually of cardboard boxes full of miscellaneous papers and parts, including plastic ones, which create a significant fire hazard. It will be easier to find a way to protect elevator equipment from the spray of sprinklers going off in a fire incident than to keep combustible materials out of these spaces.

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**13-192** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 217 )

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**Negative**

**Victor, T.** See my Explanation of Negative on Comment 13-191 (Log #188).

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**13-193** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 315 )

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**13-194** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.15.5.3** (Log # 332 )

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**13-195** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**8.15.5.3 (New)** (Log # 283 )

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**Document # 13**

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**13-196** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.5.6** (Log # 47 )

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**Affirmative with Comment****Laverick, G.** Editorially correct the designation for the UL standards to reflect ANSI accreditation as follows:  
ANSI/UL 62 and ANSI/UL 1581.**13-197** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.5.6** (Log # 134 )

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**13-198** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0**8.15.5.6** (Log # 244 )

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**Negative****Keeping, L.** I believe that this matter should have been accepted. The design of a sprinkler system is a complicated enough process without having to concern ourselves with detail such as whether an elevator cable/belt will or will not be coated with an rubber-like material. As the author of this comment said in his substantiation, this was put into the standard in the 2010 edition without any technical substantiation and to date no information has been presented to demonstrate that the use of such cables in an elevator shaft constitute any kind of a problem.**13-199** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.6** (Log # 207 )

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**13-200** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.6** (Log # CC9 )

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**13-201** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.6.1** (Log # 208 )

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**13-202** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0**8.15.7 through 8.15.7.5** (Log # 245 )

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**13-203** Eligible To Vote:29 Affirmative: 24 Negative: 5 Abstain: 0 Not Returned: 0**8.15.8.1.1** (Log # 88 )

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**Negative****Keeping, L.** This comment should have been accepted. No valid technical substantiation has been provided to now start mandating sprinklers in small bathrooms in dwelling units, when they have been successfully omitted from such areas for the last 20 years. The Committee Statement that NFPA 13 is a property protection standard is not convincing, because no evidence of a serious problem regarding bathrooms has yet been offered and the standard still allows sprinkler omissions from other spaces.

**Document # 13**

**Marburger, A.** I agree with the substantiation provided by Mr.'s Keeping, Meehan and Slocum that adequate loss data, technical substantiation has not been provided to show cause to remove the exception provided in 8.15.8.1 Bathrooms.

**McPhee, R.** I agree with the comments from Keeping, Meehan and Slocum.

**Meehan, M.** Sprinkler heads in small bathrooms should not be required. This practice has been accepted for many years. A floor vote last year made abundantly clear the desire of the membership to maintain the omission of sprinklers in small bathrooms. Due to the absence of any additional loss data the committee should respect the vote of the general membership.

**Slocum, L.** I concur with Mr. Keeping's comments regarding this change. The ROP action to again require that sprinklers be provided in bathrooms in occupancies other than hotels and motels, is not supported by the historical fire loss data. Additionally, to modify the standard to require the installation of sprinklers on the grounds that an owner may use the bathroom for a purpose other than what it is intended should not be done. Owners have an obligation to ensure that the system provided in their buildings are adequate for the occupancy they are protecting and the standard should not assume this from them responsibility. Taken to an extreme this logic could be applied to say that all office space should be designed as Ordinary Hazard, because some offices get used for storage rather than employee work spaces.

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**13-204** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.15.8.4 and A.8.15.4 (Log # 305)**

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**13-205** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.15.9 and A.8.15.9 (Log # 246)**

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**13-206** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.15.19.4.4 (Log # 189)**

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**13-207** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.15.19.5.4 (Log # 190)**

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**13-208** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.15.23 and A.8.15.23 (New) (Log # 247)**

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**13-209** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.16.1.1.6 (Log # 89)**

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**13-211** Eligible To Vote:29 Affirmative: 27 Negative: 1 Abstain: 1 Not Returned: 0  
**8.16.1.5.3, 8.16.1.5.4, 8.16.1.5.5, and A.8.16.1.5.3 (Log # 218)**

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**Negative**

**Document # 13**

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**Baker, Jr., W.** I am providing a negative vote on this simply because of the way I read both the proposed language and the Substantiation as they appear to me to be in conflict with one another. The proposed Section 8.16.1.5.5\* outlines when floor control valves, check valves, etc. are not needed, yet the Substantiation talks about the need to limit the size of sprinkler systems, which is the opposite of what the guidance is indicating.

**Abstain**

**McPhee, R.** An appendix note does not appear to have been included with this comment, therefore the asterisk (\*) next to \*8.16.1.5.5 needs to be removed. Also, the reference to 'flow switch' should be changed to 'waterflow switch' to be consistent with the Figures in the Appendix, or possibly 'waterflow alarm device', which is defined in 3.5.13.

This is a significant change to the standard and it seems that a more thorough review of the document would identify cases where other changes are needed to be consistent with this change. One aspect in this regard is the concept of 'system riser', which, for instance, would now seem to apply to all horizontal supply mains on an individual floor. Yet, the document currently refers to mains at floor controls as 'feed mains'. (See Figure A.8.17.4.2.(b)). Similarly, it seems that such arrangements now result in the sprinkler network on each floor being considered a separate sprinkler system, yet this same figure does not show any 'check valve' on the system, which would now seem to be required. Further, it is unclear as to what, if anything different, is to be done where a multistory building is protected by a dry pipe system.

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**13-212** Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0  
**8.16.1.5.3, 8.16.1.5.4, and A.8.16.1.5.3** (Log # 26 )

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**Abstain**

**Baker, Jr., W.** On one hand the Committee is willing to live with sprinkler systems for multi-story buildings, which are very likely to require sprinkler impairments due to renovations, that could potentially be much larger than what is indicated in Section 8.2.1 (up to as large as 364,000 sq. ft.) yet are unwilling to accept increased sprinkler system sizes above those currently listed in 8.2.1 for sprinkler system sizes that would be much smaller than those currently allowed for multi-story buildings as outlined in Section 8.16.1.5. This does appear to be somewhat of an inconsistent approach that the Committee has taken.

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**13-213** Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0  
**8.16.1.5.3, 8.16.1.5.4, and A.8.16.1.5.3** (Log # 303 )

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**Abstain**

**Baker, Jr., W.** See comments in 13-211 and 13-212.

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**13-214** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.16.1.6.3** (Log # 191 )

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**13-215** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.16.1.6.3** (Log # 219 )

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**13-216** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.16.2.4.3.1** (Log # 69 )

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**13-217** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
**8.16.2.5.3.8 and A.8.16.2.5.3.8** (Log # 275 )

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13-218 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.16.4.1.1 (Log # 282 )

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13-219 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.16.4.1.3 (Log # 320 )

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13-220 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.16.4.1.6 (New) (Log # 10 )

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13-221 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.16.4.2.5 (Log # 300 )

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13-222 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.17.1.1.1 (Log # 209 )

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13-223 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.17.1.6(1) (Log # 193 )

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13-224 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.17.2.5.1 (Log # 210 )

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**Affirmative with Comment**

**Keeping, L.** While I agree with the Committee Action, I respectfully disagree with the Committee Statement that the check valve in a fire department connection is required for ITM purposes. While it should of course be made accessible for ITM, it is in fact actually required for an important technical reason, to control the direction of flow.

13-225 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.17.2.5.1 (New) (Log # 90 )

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13-226 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
8.17.4.3.1.1 (New) (Log # 27 )

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13-227 Eligible To Vote:29 Affirmative: 28 Negative: 0 Abstain: 1 Not Returned: 0  
8.17.5.1.3 (Log # 194 )

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**Abstain**

**Baker, Jr., W.** See comments in 13-211 and 13-212.

13-228 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 8.17.5.1.3(6) (New) (Log # 195 )

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13-321 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.1 (Log # 313 )

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13-322 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.1 (Log # 314 )

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13-323 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.1 (Log # 346 )

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13-324 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 Figure 24.1 (Log # 196 )

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13-325 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 Figure 24.1 (Log # 347 )

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13-326 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.2.1.11 (Log # 117 )

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13-327 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.2.1.11 (Log # 197 )

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13-328 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.2.1.11 (Log # 220 )

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13-329 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
 24.5.2(3) (New) (Log # 72 )

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13-330 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0  
 A.3.3.18 (Log # 11 )

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**Negative**

**McPhee, R.** Based on the proposed wording in this comment, and the subsequent almost identical wording developed under 13-334 (Log #CC4), the final action should not be reject but should have been shown as 'accept in principle'.

See also my comment on 13-334 (Log #CC4).

13-331 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

A.3.3.18 (Log # 28)

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**Affirmative with Comment**

**McPhee, R.** See also my comment on 13-334 (Log #CC4).

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13-332 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

A.3.3.18 (Log # 97)

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**Affirmative with Comment**

**McPhee, R.** See also my comment on 13-334 (Log #CC4).

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13-333 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

A.3.3.18 (Log # 199)

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**Affirmative with Comment**

**McPhee, R.** See also my comment on 13-334 (Log #CC4).

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13-334 Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

A.3.3.18 (Log # CC4)

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**Negative**

**McPhee, R.** It is unclear as to how the wording proposed under this CC4 comment (on Proposal 13-31) is to be aligned with the current text as well as the other new text approved under other changes for this Appendix section.

The current wording in A.3.3.18 reads:

**'A.3.3.18 Sprinkler System.** A sprinkler system is considered to have a single system riser control valve. The design and installation of water supply facilities such as gravity tanks, fire pumps, reservoirs, or pressure tanks are covered by NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, and NFPA 22, Standard for Water Tanks for Private Fire Protection.'

It doesn't appear that the proposed text under 13-334 (Log #CC4) or any of the other proposals or comments have modified this existing text.

Proposal 13-521, which was accepted, and received only one comment (Huggins 13-330 - Rejected), resulted in the addition of the following text to A.3.3.18:

'Using this definition of a sprinkler system, each floor of a high-rise building is considered a separate system and every riser in a storage occupancy constitutes a separate sprinkler system.'

Although Comment 13-334 (Log #CC4) indicates it refers to proposal 13-31, it would seem that it should have been targeting Proposal 13-521.

Comment 13-331 (Log #28) addressed proposal 13-520, which was originally accepted in principle, and had suggested the addition of a new second paragraph to A.3.3.18. Comment 13-331, which suggested changes to the proposed new second paragraph, was accepted in principle and resulted in the following new second paragraph being accepted for inclusion to A.3.3.18:

'Where the installation of a control valve within the sprinkler system (downstream of the sprinkler system riser) is intended for specific area isolation purposes, the sprinkler(s) controlled by this valve should not be considered a separate sprinkler system.'

With all of that, one might deduce that the following is the wording to be included in A.3.3.18.

**A.3.3.18 Sprinkler System.** A sprinkler system is considered to have a single system riser control valve. The design and installation of water supply facilities such as gravity tanks, fire pumps, reservoirs, or pressure tanks are covered by NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection, and NFPA 22, Standard for Water Tanks for Private Fire Protection. **(Existing unmodified text)**

As applied to the definition of a sprinkler system, each system riser serving a portion of a single floor of a facility or where individual floor control valves are used in a multi-story building, should be considered a separate sprinkler system. Multiple sprinkler systems may be supplied by a common supply main. **(Final text from Proposal 13-521 further modified based on Comment 13-334 (Log #CC4))**

Where the installation of a control valve within the sprinkler system (downstream of the sprinkler system riser) is intended for specific area isolation purposes, the sprinkler(s) controlled by this valve should not be considered a separate sprinkler system. **(Text from Proposal 13-520 further modified based on Comment 13-331)**

And with that, it seems that the only 'problem' arises from the very first sentence from the existing first paragraph. It should've been deleted. If the 13-334 (Log #CC4) was intended to replace this first sentence/paragraph, it is unclear as to whether it was intended to retain the different standard references to 'water supply sources'.

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13-335 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.3.7.1(6) (Log # 266 )

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13-336 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.3.7.1(6) (Log # 29 )

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13-337 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.3.7.1(6) (Log # 50 )

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13-338 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.3.7.2(1), A.3.7.2(5), A.3.7.1(9), and A.3.7.1(10) (New) (Log # 267 )

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13-339 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.3.7.2(3)(a) and A.3.7.2(6) (New) (Log # 46 )

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13-340 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
Figure A.3.9.4.9(d) (Log # 142 )

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13-341 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.6.2.7.1 (Log # 348 )

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13-342 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.6.2.7.1 (New) (Log # 248 )

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13-343 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.6.5.3.1 (Log # 8 )

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13-344 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.7.6.2 (Log # 321 )

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13-345 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.7.6.2.1 (Log # 318 )

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13-346 Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0  
A.8.1.1(3) (Log # CC2 )

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Affirmative with Comment

Document # 13

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**McPhee, R.** The wording is unclear and might benefit from a partial rewording; the following is suggested:

A.8.1.1.(3) Notwithstanding the obstruction rules provided in Chapter 8, it is not intended or expected that water will fall on the entire floor space of the occupancy. When obstructions or architectural features, such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations, interfere with the sprinkler's spray pattern such as columns, angled walls, wing walls, slightly indented walls, and various soffit configurations they can disrupt the water spray discharging from a sprinkler and shadowed areas can occur. Where small shadowed areas are formed on the floor adjacent to their referenced architectural features, these shadowed areas are purely on paper and do not take into account the dynamic variables of sprinkler discharge.

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**13-347** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**A.8.4.5.1** (Log # 200 )

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**13-348** Eligible To Vote:29 Affirmative: 26 Negative: 3 Abstain: 0 Not Returned: 0

**A.8.6.5.1.2** (Log # CC5 )

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**Negative**

**Keeping, L.** I do not believe that this matter should have been accepted. A soffit along the wall more than 18" below the sprinkler deflector is just an obstruction such as any other, like a duct or a deck or a stair and landing. As per the general rule in 8.5.5.3.1, sprinklers are only required under such obstructions that are over 4 ft wide and there is no corresponding requirement that they be located out between two rows of sprinklers, so they may be situated up against a wall. Therefore, there is no reason why similar obstructions such as a soffit should be limited to a width of only 2 ft. Indeed, if Figure A.8.6.5.1.2 is changed from 4 ft to 2 ft, then a conflict with 8.5.5.3.1 will be introduced into the standard which would lead to much confusion. Further, the 2 ft dimension would be unenforceable, because it would be in the Annex, whereas the 4 ft remains in the body of the Standard.

**McPhee, R.** I agree with the comments from Keeping and Slocum. Also, the proposal number should have read 13-541 not 13-521.

**Slocum, L.** This revision results in a figure that is in conflict with the associated annex text and the text of the standard. The text for Section A8.6.5.1.2 states:

"The intent of 8.6.5.1.2(3) is to apply to soffits that are located within the 18 in. plane from the sprinkler deflector. A soffit or other obstruction (i.e. shelf) located against a wall that is located entirely below the 18 in. plane from the the sprinkler deflector shall be in accordance with 8.6.5.3.3. (See Figure A.8.6.5.1.2.)"

Section 8.6.5.3.3 is the 4 foot obstruction rule. If we make the proposed change to the figure, the result will be an annex Section that says that refers the user to a Section of the standard that says a 4 foot obstruction against that wall is acceptable while at the same time referencing an annex figure that limits the obstruction to 2 feet.

I feel that the figure should be left as is and permit a 4 foot obstruction. However, if the committee wishes to allow only a two foot obstruction in this arrangement, then the body of the standard needs to be modified.

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**13-349** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**A.8.6.5.3.3** (Log # 170 )

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**Negative**

Document # 13

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**Keeping, L.** I do not believe that this matter should have been accepted. I continue to believe that it is not necessary to clutter up the standard with such trivial matters as a explanation of what is meant by the width or the length of an obstruction. These terms are almost universally understood and anyone who would really need a clarification would only have to consult a dictionary to determine the difference. Further, the author of this comment did not provide a valid reason why this text should be added to the standard, instead he only commented on the typographical error in the Committee Statement for the original proposal.

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**13-350** Eligible To Vote:29 Affirmative: 27 Negative: 2 Abstain: 0 Not Returned: 0

**A.8.8.5.1.2** (Log # 201 )

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**Negative**

**Keeping, L.** I do not believe that this matter should have been accepted. A soffit along the wall more than 18" below the sprinkler deflector is just an obstruction such as any other, like a duct or a deck or a stair and landing. As per 8.8.5.3.2 sprinklers are only required under such obstructions that are over 4 ft wide and there is no corresponding requirement that they be located out between two rows of sprinklers, so they may be situated up against a wall. Therefore, there is no reason why similar obstructions such as a soffit should be limited to a width of only 2 ft. Indeed, if Figure A.8.8.5.1.2 is changed from 4 ft to 2 ft a conflict with 8.8.5.3.2 will be introduced into the standard which would lead to much confusion. Further, the 2 ft dimension would be unenforceable, because it would be in the Annex, whereas the 4 ft remains in the body of the Standard.

**McPhee, R.** I agree with the comments from Keeping.

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**13-351** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**A.8.15.1.2.18** (Log # 202 )

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**13-352** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**A.8.15.5.1** (Log # 249 )

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**13-353** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**Figure A.8.16.1.1** (Log # 203 )

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**13-354** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**Figure A.8.16.1.1** (Log # 295 )

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**13-355** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**A.8.16.4.1.1 (New)** (Log # 192 )

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**13-356** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**A.8.16.4.3** (Log # 51 )

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**Document # 13**

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**13-357** Eligible To Vote:29 Affirmative: 28 Negative: 1 Abstain: 0 Not Returned: 0

**A.8.16.4.3** (Log # 290 )

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**Negative**

**Keeping, L.** I believe that this Comment should have been accepted as it was originally drafted by the proponent. By deleting the word "or" between "corrosive materials" and "heat-producing appliances" the sentence structure was destroyed. Editorially, the word "or" or the word "and" needs to be put into the text to provide the proper context.

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**13-378** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**Figure A.24.6** (Log # 96 )

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**13-379** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**Figure A.24.6** (Log # 198 )

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**13-380** Eligible To Vote:29 Affirmative: 29 Negative: 0 Abstain: 0 Not Returned: 0

**D.2** (Log # 238 )

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