



## MEMORANDUM

TO: NFPA Technical Committee on Smoke Management Systems (SMO-AAA)  
FROM: Tracy Golinveaux, Staff Liaison  
DATE: April 23, 2010  
SUBJECT: NFPA 92B A2010 ROP Letter Ballot Final Results

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There were no negative votes on any ballot item. Therefore, the Final Results of the NFPA 92B ROP Letter Ballot are as follows:

23 Members Eligible to Vote  
1 Ballot Not Returned (P. Simony)

Diane Copeland voted for Michael Dillon.

Votes from alternate members are not included unless the ballot from the principal member was not received.

All votes were affirmative on all ballot items with the exception of those noted in the attached report.

According to the final ballot results, all ballot items received the necessary 2/3 required affirmative votes to pass ballot.

ATTACHMENT

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92B-1 Log #CP7  
(Entire Document)

Final Action: Accept

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**Submitter:** Technical Committee on Smoke Management Systems,

**Recommendation:** Withdraw NFPA 92B, Standard for Smoke Management Systems in Malls, Atria, and Large Spaces, based on the acceptance of the new combined document NFPA 92. The action on the public proposals on NFPA 92B will be incorporated into NFPA 92.

**Substantiation:** All of the material within NFPA 92B has been incorporated within NFPA 92.

**Committee Meeting Action:** Accept

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.

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92B-2 Log #4  
(2.3.1)

Final Action: Reject

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**Submitter:** Bob Eugene, Underwriters Laboratories Inc.

**Recommendation:** *Revise text to read as follows:*

2.3.1 UL Publications.

Underwriters Laboratories Inc., 333 Pfingsten Road, Northbrook, IL 60062-2096.

ANSI/UL 555, Standard for Fire Dampers, 2006, Revised 2009.

ANSI/UL 555S, Standard for Smoke Dampers, ~~2006~~ 1999, Revised 2009.

ANSI/UL 864, Standard for Control Units and Accessories for Fire Alarm Systems, ~~2006-2003~~, Revised 2009.

**Substantiation:** Update referenced standards to most recent revisions. The revisions to UL 555 include the addition of test procedure for fire dampers installed outside the fire wall plane, the addition of multiple section rapid close dynamic damper testing and a revision of the Cycling Test. The revisions to UL 555S include a revision to address internal actuator testing being worst case, the addition of a procedure for testing multiple section damper assemblies, the addition of a Long Term Holding Test and a revision of the Cycling Test. The revisions to UL 864 include the following new and revised requirements: 1. Regulated and Special Applications Notification Appliance Circuits; 2. Distinguishing Internet Based Public Cellular Telephone Service from Dial-up Public Cellular Telephone Service; 3. Other Transmission Technologies; and 4. Component Temperatures for Solid State Devices.

**Committee Meeting Action:** Reject

**Committee Statement:** NFPA 92B is being withdrawn and will be superceded by new document 92. The referenced standards in Chapter 2 of NFPA 92 will be updated to reflect the current editions.

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.

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92B-3 Log #CP1  
(3.3.5 Draft Curtain)

Final Action: Reject

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**Submitter:** Technical Committee on Smoke Management Systems,

**Recommendation:** Adopt the preferred definition from the NFPA Glossary of Terms as follows:

**3.3.5 Draft Curtain.** A solid material, beam, girder, or similar material or construction that is attached to the underside of the ceiling and that protrudes a limited distance downward and creates a reservoir for collecting smoke. (204, 2007)

**Substantiation:** This definition is the preferred definition from the Glossary of Terms. Changing the secondary definition to the preferred definition complies with the Glossary of Terms Project.

**Committee Meeting Action:** Reject

**Committee Statement:** The committee prefers to keep the current definition of Draft Curtain. In NFPA 92B Draft Curtains are used to create a channel and not a reservoir.

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.

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92B-4 Log #CP2  
(3.3.12 Plume)

Final Action: Reject

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**Submitter:** Technical Committee on Smoke Management Systems,

**Recommendation:** Adopt the preferred definition from the NFPA Glossary of Terms as follows:

**3.3.12 Plume.** The column of hot gases, flames, and smoke rising above a fire; also called convection column, thermal updraft, or thermal column. [921, 2008]

**Substantiation:** This definition is the preferred definition from the Glossary of Terms. Changing the secondary definition to the preferred definition complies with the Glossary of Terms Project.

**Committee Meeting Action:** Reject

**Committee Statement:** The definition in NFPA 92B provides more detailed information as to the type of plumes appropriate for use in the document. The basic definition of plume (3.3.12) is intended to be general in nature with the specific types of plumes following immediately after.

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.

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92B-5 Log #CP3  
(3.3.15 Smoke Barrier)

Final Action: Reject

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**Submitter:** Technical Committee on Smoke Management Systems,

**Recommendation:** Adopt the preferred definition from the NFPA Glossary of Terms as follows:

**3.3.15 Smoke Barrier.** A continuous membrane, or a membrane with discontinuities created by protected openings, where such membrane is designed and constructed to restrict the movement of smoke. [5000, 2009]

**Substantiation:** This definition is the preferred definition from the Glossary of Terms. Changing the secondary definition to the preferred definition complies with the Glossary of Terms Project.

**Committee Meeting Action:** Reject

**Committee Statement:** The committee prefers to keep the current definition of Smoke Barrier which is more specific to the needs of this standard. Not all smoke barriers used in conjunction with a smoke management/control system will necessarily have protected openings.

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.

92B-6 Log #3  
(6.2.2.6(a), Equation)

Final Action: Reject

Submitter: John H. Klote, Leesburg, VA

Recommendation: Revise text to read as follows:

$$m = 0.31 + 0.32 Q_c^{1/3} W^{1/5} (z_b + 0.098 W^{7/15} H + 19.5 W^{7/15} - 15.49.2)$$

Substantiation: Equation (6.2.2.6a) results in errors of about 40 percent to 300 percent depending on the values of  $z_b$ ,  $W$  and  $H$ . The revised coefficients of this proposal correct this. These coefficients were developed in the 2009 paper, *Unit Conversions and Engineering Equations*, by Klote.

Note: Supporting material is available for review at NFPA Headquarters.

Committee Meeting Action: Reject

Committee Statement: NFPA 92B is being withdrawn and will be superceded by new document 92. However, the Technical Committee has incorporated the change into Equation of proposed document NFPA 92. See Proposal 92-1.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 22

Ballot Not Returned: 1 Simony, P.

Comment on Affirmative:

DAVIS, R.: The change has not been made to the draft of 92.

TURNBULL, P.: I agree with including the revised equation in the new consolidated document, but this revision does not appear to be included in the draft of the consolidated document.

92B-7 Log #2  
(6.2.2.7(a), Equation)

Final Action: Reject

Submitter: John H. Klote, Leesburg, VA

Recommendation: Revise text to read as follows:

$$m = 0.067 + 0.062 (Q_c W)^{1/3} (z_b + 0.51 H + 15.75.52)$$

Substantiation: Equation (6.2.2.7a) results in errors of about 13 percent to 30 percent depending on the values of  $z_b$ ,  $W$  and  $H$ . The revised coefficients of this proposal correct this. These coefficients are developed in the 2009 paper, *Unit Conversions and Engineering Equations*, by Klote.

Note: Supporting material is available for review at NFPA Headquarters.

Committee Meeting Action: Reject

Committee Statement: NFPA 92B is being withdrawn and will be superceded by new document 92. However, the Technical Committee has incorporated the change into Equation of proposed document NFPA 92. See Proposal 92-1.

Number Eligible to Vote: 23

Ballot Results: Affirmative: 22

Ballot Not Returned: 1 Simony, P.

Comment on Affirmative:

DAVIS, R.: The change has not been made to the draft of 92.

TURNBULL, P.: I agree with including the revised equation in the new consolidated document, but this revision does not appear to be included in the draft of the consolidated document.

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92B-8 Log #1  
(9.4.3)

**Final Action: Reject**

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**Submitter:** James Everitt, Western Regional Fire Code Development Committee

**Recommendation:** Add a new section to read:

**9.4.3 Documentation Required.**

**9.4.3.1** A complete report of acceptance testing shall be prepared by the design professional. The report shall provide documentation to include identification of all devices by manufacturer, nameplate data, design values, measured values and identification tag.

**9.4.3.2 Identification and Documentation.** Charts, drawings and other documents identifying and locating each component of the smoke control system, and describing its proper function and maintenance requirements, shall be maintained on file at the building as an attachment to the report.

**9.4.3.2.1** Devices shall have an approved identifying tag or mark on them consistent with the other required documentation and shall be dated indicating the last time they were successfully tested and by whom.

**9.4.4** The report shall be reviewed by the design professional and, when satisfied that the design intent has been achieved, the design professional shall seal, sign, and date the report.

**9.4.5** Report filing. A copy of the final report shall be filed with the AHJ and an identical copy shall be maintained in an approved location at the building.

**Substantiation:** No guidance is given in the standard as to the documentation to be provided to the AHJ to demonstrate that the system has been installed as design or that all equipment operates and functions properly.

**Committee Meeting Action:** Reject

**Committee Statement:** The proposed provisions are more appropriately addressed in the applicable building or fire code. Chapter 8 of the new standard, NFPA 92 contains basic system acceptance criteria. See proposal 92-1.

**Number Eligible to Vote:** 23

**Ballot Results:** Affirmative: 22

**Ballot Not Returned:** 1 Simony, P.