



December 14, 2022

To: Interested Parties

CC: Julius Ballanco, JB Engineering and Code Consulting  
Dave Mann, Self  
Randy Young, Self  
Chris Ruch, NEMI

Re: IAPMO Standards Council Decision Docket #08-24  
Date of Decision: December 14, 2022  
Uniform Mechanical Code – Section: 504.3  
Item 110 Public Comment 2

To Whom It May Concern:

At their meeting on November 16, 2022, the IAPMO Standards Council considered the automatic appeal pertaining to Item 110 and the above referenced section. This decision reflects the complete deliberation of the Council with respect to this item.

#### Summary of Technical Committee Actions

For a summary of actions taken, please refer to Exhibit A attached hereto.

#### Analysis of Appeal

This automatic appeal relates to Public Comment 2 of Item 110. That Item sought to revise the requirements in Section 504.3 “Domestic Range Hoods” in the Uniform Mechanical Code (UMC) to address (i) the construction of kitchen exhaust ducts, (ii) a reference to UL 181, and (iii) the discharge for such domestic range hoods. Further, the proposed new language included a requirement that a physical verification of the air volume, operation, and design intent be performed by a certified Testing, Adjusting, and Balancing (TAB) technician. The Mechanical Technical Committee (TC) accepted this item in the Report on Proposals stage.

Upon review by the Technical Correlating Committee, a modification was made to the proposal to include the phrase “or other equivalent approved agencies” at the end of the proposed new sentence in section 504.3 “Domestic Range Hoods,” to read as follows:

“A physical verification of air volume, operation, and design intent shall be performed by a certified Testing, Adjusting, and Balancing (TAB) technician. The TAB technician shall be certified by the Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), the Testing, Adjusting and Balancing Bureau (TABB), or other equivalent approved agencies.”

Thereafter, Public Comment 2 sought to delete this paragraph, maintaining the other code changes proposed in Item 110. At their meeting, the Mechanical TC proposed rejection of this comment, stating that the paragraph is needed to provide guidance for qualified technicians as well as the agencies approved for certifying such technicians for testing and air balancing. Upon written ballot, however, the ballot on rejection failed as it did not achieve the necessary two-thirds support from the TC. In accordance with Section 4-4.6.4 of the Regulations Governing Committee Projects, the TC action was reported in the ROC as rejected.

At the Association Technical Meeting in Charlotte, the membership passed a motion to accept Public Comment 2, recommending removal of the TAB technician requirement. The TC did not accept this recommendation, resulting in a process-based recommendation to keep the TAB technician requirement, as amended by the TCC and as reflected above.

On an appeal, the Standards Council accords great respect and deference to the development process prescribed in the ANSI-accredited IAPMO Regulations Governing Committee Projects. In conducting its review, the Council will overturn the result recommended through that process where a clear and substantial basis for doing so is demonstrated. The Council has reviewed the entire record concerning this appeal and has considered all the arguments raised by it including what was shared during oral testimony.

In the course of the appeal, the Standards Council heard testimony from those in favor of the appeal (that is, those in opposition to inclusion of a requirement for a TAB technician's physical verification of domestic range hoods) as well as those opposed to the appeal (in favor of the TAB technician requirement).

Proponents of the appeal argued that the new requirement would be overly restrictive, in that it would require the presence of a specialized technician to examine domestic range hoods when that has not previously been required by Code. They noted that such a requirement would increase costs, and questioned whether it would ultimately result in any increases to occupants' safety. Finally, proponents drew the Council's attention to the support for acceptance of Public Comment 2 amongst IAPMO's membership sharing these same concerns.

Those speaking in opposition to the appeal discussed the potential dangers of unvented (or improperly vented) gas and electric burners in residences, arguing that properly tested and balanced hoods mitigate these dangers.

The Council took both arguments into account, and agrees that such a requirement for a specialized technician would be both overly restrictive and in conflict with new section 403.10 "Air Balance," Item 097, which added the following requirements:

**403.10 Air Balance.** All mechanical ventilation systems shall be tested, balanced, and operated to demonstrate that the installation and performance of the systems are in accordance with the design intent. All testing and balancing shall be performed by a technician certified by the Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), the Testing, Adjusting and Balancing Bureau (TABB), or other equivalent approved agencies.

**Exception:** For single family residential, compliance with Section 403.10 shall not be required.

The Exception in section 403.10 “Air Balance” would be in conflict with section 504.3 “Domestic Range Hoods” if the appeal were denied. This leads the Council to conclude that Public Comment 2 should be accepted, removing the TAB technician requirement.

Upon review of the entire record, the Council agrees with the membership that Public Comment 2 should be accepted.

#### Final Decision

In consideration of the aforesaid, the Standards Council hereby grants the appeal.

The effect of this decision is that the 2024 edition of the Uniform Mechanical Code will not require a TAB technician to perform a physical verification of air volume, operation, and design intent on domestic range hoods. Since the Technical Committee accepted changes to section 504.3 in another item, Item 113, Exhibit B reflects how the 2024 UMC will read at section 504.3 “Domestic Cooking Exhaust Equipment.”

Sincerely,



Gabriella Davis  
Secretary, Standards Council

cc: Heather Koffman, Executive VP, General Counsel  
Hugo Aguilar, Senior VP, Codes and Standards  
Taylor Duran, Staff Liaison  
Mechanical Technical Committee  
Standards Council

**\*NOTE:** Participants in IAPMO’s codes and standards making process are advised that limited review of this decision may be sought from the IAPMO Board of Directors. For the rules describing the available review and the method for petitioning the IAPMO Board of Directors for review, please consult Section 1-7 of the *IAPMO Regulations Governing Committee Projects* and the *IAPMO Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council*. **Notice of the intent to file such a petition must be submitted to the Petitions Clerk of the Board of Directors within 15 calendar days of the Date of Decision noted in the subject line of this letter.** As the *Uniform Mechanical Code* is designated as an American National Standard (ANS), any persons who have directly and materially affected interests by this decision have the right to appeal to ANSI in accordance with ANSI procedures.

## Exhibit A

### Summary of Technical Committee Actions Appeal Docket 08-24; Item #110 Public Comment 2 *2024 Uniform Mechanical Code, Section: 504.3*

The 2021 Report on Proposals (ROP) published the results of the first committee ballot on Item 110, a code change proposal requesting to revise the requirements for installation and construction materials of domestic range hoods, add new language for physical verification by certified TAB technicians, and add reference to UL 181 for duct mastic and metal tapes in section 504.3 “Domestic Range Hoods.”

At their first meeting, a majority of the committee members were in support of accepting the proposal as submitted. Upon written ballot of the Mechanical Technical Committee, they affirmed their decision to accept the proposal to the above section.

Upon review by the Technical Correlating Committee, a modification was made to the proposal to include the phrase “or other equivalent approved agencies” at the end of the new sentence in section 504.3 “Domestic Range Hoods”.

At their second meeting, the committee reviewed two public comments. Public Comment 1 included additional suggested revisions to section 504.3 “Domestic Range Hoods.” Public Comment 2 sought to delete the requirement for physical verification of air volume, operation, and design by a certified TAB technician, while maintaining the other code changes originally proposed in Item 110. A majority of the committee members were in favor of rejecting Public Comment 2. Upon written ballot, the ballot failed to achieve the necessary two-thirds affirmative vote of return ballots. In accordance with Section 4-4.6.4 of the Regulations Governing Committee Projects, the TC action was reported in the ROC as rejected.

The 2022 Report on Comments (ROC) published the results of the second committee ballot for Public Comment 2, showing the committee’s last successful action to not remove the requirement for physical verification of air volume, operation, and design by a certified TAB technician requirement from section 504.3 “Domestic Range Hoods.”

At the Association Technical Meeting Convention, a motion was made to accept Public Comment 2 which sought to remove the TAB technician requirement from section 504.3 “Domestic Range Hoods.” The motion passed resulting in a membership recommendation to the Technical Committee to accept Public Comment 2. The effect of the membership recommendation was to remove the following language:

“A physical verification of air volume, operation, and design intent shall be performed by a certified Testing, Adjusting, and Balancing (TAB) technician. The TAB technician shall be certified by the Associated Air Balance Council (AABC), the National Environmental Balancing Bureau (NEBB), the Testing, Adjusting and Balancing Bureau (TABB), or other equivalent approved agencies.”

Following the Association Technical Meeting Convention, the Technical Committee was issued a ballot on whether they agreed with the membership’s recommendation. On this, their final ballot, the committee did not achieve the necessary two-thirds majority affirmative vote. The final ballot tally reported a vote of 10 agree and 18 disagree.

The Regulations Governing Committee Projects at Section 4-6.1 states:

#### **4-6.1 Recommended Amendments.**

(c) If the Association recommended amendment is not approved by the TC...such action of the Committee shall be deemed to be a recommendation that the portion of the Report modified by the Association recommended amendment be returned to the TC; the

remainder of the Report stands as recommended by the Association; and any existing text to which the returned portion pertains shall stand. The TC...shall be balloted on whether the resulting Document is suitable; and if it is determined that it is not suitable, the issue shall be automatically docketed as an appeal to the Standards Council who shall determine whether and in what form the document shall be issued...

The issue was docketed as an appeal for the Standards Council.

**Exhibit B**  
**Result for #08-24**

The 2024 Uniform Mechanical Code will include revisions to section 504.3 “Domestic Cooking Exhaust Equipment<sup>1</sup>” without the TAB requirement as follows:

**504.3 Domestic Cooking Exhaust Equipment.** Domestic cooking exhaust equipment shall comply with the following requirements, as applicable:

- (1) The fan for overhead range hoods and downdraft exhaust equipment not integral with the cooking appliance shall comply with UL 507.
- (2) Overhead range hoods and downdraft exhaust equipment with integral fans shall comply with UL 507.
- (3) Domestic cooking appliances with integral downdraft exhaust equipment shall comply with UL 858 or CSA/ANSI Z21.1/CSA 1.1.
- (4) Microwave ovens with integral exhaust for installation over the cooking surface shall comply with UL 923.
- (5) All domestic kitchen exhaust ducts used in conjunction with domestic range or cooktop hoods shall be constructed of metal and shall have smooth interior surfaces, fastened and sealed with duct mastic or metal tapes that meet the requirements of UL 181A.

**Exception:** Ducts for domestic kitchen downdraft grill-range ventilation installed under a concrete slab floor shall be permitted to be of approved Schedule 40 PVC provided the following conditions are met:

- (1) The under-floor trench in which the duct is installed shall be completely backfilled with sand or gravel.
- (2) Not more than 1 inch (25.4 mm) of 6 inch diameter (150 mm) PVC coupling shall be permitted to protrude above the concrete floor surface.
- (3) PVC pipe joints shall be solvent cemented to provide an air and greasetight duct.
- (4) The duct shall terminate above grade outside the building and shall be equipped with a backdraft damper.
- (6) Range hoods shall discharge to the outdoors through a single wall duct and shall not terminate in an attic or crawl space.

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<sup>1</sup> Section 504.3 was further revised due to the acceptance of Item 113 Public Comment 1.

## IAPMO Regulations Governing Committee Projects Section 1-7

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### 1-7 Petitions to the Board of Directors.

**1-7.1 General.** The Standards Council has been delegated the responsibility for the administration of the codes and standards development process and the issuance of Documents. However, where extraordinary circumstances requiring the intervention of the Board of Directors exist, the Board of Directors may take any action necessary to fulfill its obligations to preserve the integrity of the standards development process. Anyone seeking such intervention of the Board of Directors may petition the Board of Directors concerning Standards Council action on any matters. Such petitions shall be filed and processed in accordance with the Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council.

**1-7.2 Notice of Intent to File the Petition.** Anyone wishing to petition the Board of Directors concerning a Standards Council action related to the issuance of a document, shall file a Notice of Intent to File a Petition within 15 days following the Standards Council action. A Standards Council action related to the issuance of a document includes any action of the Council that issues or returns a Document or that affects the text of a Document. Petitions concerning other Standards Council actions shall be filed within a reasonable period of time.

**1-7.3 Effect of Filing.** The filing of a Petition will not serve to stay the effective date of a Document or a Tentative Interim Amendment unless the Chief Executive Officer of the Association or the Board of Directors acts, pursuant to 4-7.2 or 5-6, to delay the effective date. Any Petition pending at the time a Document or Tentative Interim Amendment becomes effective will be treated as a Petition to withdraw the Document or Tentative Interim Amendment.

**1-8 Use of Visual Aids and Demonstrations Before the Standards Council or Board of Directors.** The policy for the use of visual aids and physical demonstrations to the Standards Council and Board of Directors shall be the same as that required for TCCs, TCs, and Task Groups, in accordance with 3-3.3.3(e) and 3-3.3.3(f).

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## IAPMO Regulations Governing Petitions to the Board of Directors from Decisions of the Standards Council

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ADOPTED BY THE IAPMO BOARD OF DIRECTORS SEPTEMBER 4, 2000. Amended in January 2007.

### **Section 1 Scope of and Authority for these Regulations.**

- (a) These regulations have been issued by the Board of Directors pursuant to its authority under Article 5, 6 and 8 of the IAPMO Bylaws.
- (b) These regulations set forth the procedures to be used for the filing and processing of all petitions to the Board of Directors filed pursuant to 1-7 of the Regulations Governing Committee Projects.
- (c) The Board of Directors can amend these regulations from time to time and waive or supplement, in whole or in part, at any time or times at its discretion.
- (d) For the purposes of these regulations, the Standards Council Secretary, or such other person as the Chair of the Board of Directors may appoint, shall act as a petitions clerk.

**Section 2 Subcommittees of the Board of Directors.** Unless the Board of Directors otherwise orders, the authority to consider and make recommendations on the disposition of a petition by the Board of Directors shall be delegated to a subcommittee of the Board of Directors, which shall be appointed, in

accordance with 2.1 of these regulations. Subcommittees shall be appointed by the Chair of the Board of Directors.

**2-1 Composition of Subcommittees.** Subcommittees shall consist of three or more members of the Board of Directors. The criteria for selection and appointment of subcommittee members shall be as follows:

(a) A subcommittee member shall be a person who can decide the petition on the merits in an impartial manner.

(b) A subcommittee member shall not have any conflict of interest. (A conflict of interest is defined as any situation in which a decision on a petition could substantially and materially affect the member's financial or business interest.)

(c) Each subcommittee member shall, to the extent practicable, represent diverse interests within the association.

In making a decision of whether or not to serve on a subcommittee, the member may consult with the IAPMO general counsel.

**Section 3 The Scope of Review.** The petitioner shall generally confine the argument in the petition to matters that were presented below and shall not raise any new matters that could have but were not presented within the standards development process. A petition to the Board of Directors shall not be regarded as simply another opportunity to reargue a position that was rejected by the Standards Council. In considering a petition, the subcommittee shall give due deference to the judgment of the Standards Council and shall not intervene unless it can be demonstrated that extraordinary circumstances exist requiring the Board of Director's intervention to protect the integrity of the standards development process.

**Section 4 The Record.** In its consideration of the petition, the subcommittee shall have before it the entire record that was before the Standards Council, as well as all proceedings and decisions of the Standards Council on the issue. In addition, the subcommittee may consult any other records of the association that it deems pertinent to the issue, and the subcommittee may seek technical assistance from staff, the technical committee, or any other source or persons that it deems appropriate.

**Section 5 Notice of Intent to File the Petition.** Anyone wishing to petition the Board of Directors concerning a Standards Council action related to the issuance of a document, shall file a Notice of Intent to File a Petition within 15 days following the Standards Council action. A Standards Council action related to the issuance of a document includes any action of the Council that issues or returns a document or that affects the text of a document. Petitions concerning other Standards Council actions shall be filed within a reasonable period of time.

**Section 6 Filing and Contents of the Petition.**

(a) Within 15 days following the receipt of the notice of intent to file, or within such other time as the petitions clerk may allow, the petitioner shall file the petition together with 20 copies. The petition shall be no more than 10 pages in length and shall contain, in separately denominated sections, the following:

(1) Name, affiliation, and address of the petitioner;

(2) Statement identifying the particular Standards Council action to which the petition relates;

(3) Argument setting forth the grounds for the petition and, in particular, addressing why there exist extraordinary circumstances requiring the intervention of the Board of Directors (see the preceding Section 3 and 1-7 of the Regulations Governing Committee Projects); and

(4) Statement of the precise relief requested.

(b) Any part of the record related to the standards development process that is referenced or discussed in the petition should be clearly cited in the petition using available markings such as the title, author, date, and page of the record. Since the full record will be available to the subcommittee during its

review, attachments and appendices shall not accompany the petition, unless express permission has been obtained from the petitions clerk.

### **Section 7 Consideration of the Petition.**

**7-1 Initial Review.** The petitions clerk may, at his or her discretion, arrange for initial review of the petition by meeting, correspondence, or telephone conference. If upon such initial review of the petition and any relevant portions of the record, the subcommittee determines that the petition has no merit, it may dismiss the petition.

**7-2 Full Review.** If initial review is not conducted, or, if upon such review, the subcommittee determines that further review is warranted, it shall afford the opportunity for responses to be filed by interested parties. Responses, together with 20 copies, shall be filed within 15 days or within such other time as the petitions clerk may allow.

(a) Responses shall be no more than 10 pages in length and shall contain, in separately denominated sections, the following:

(1) Name, affiliation, and address of the respondent;

(2) Statement identifying the petition to which the response relates and stating whether the respondent supports or opposes the petition; and

(3) Argument setting forth the grounds for opposing or supporting the petition and, in particular, addressing why there does or does not exist extraordinary circumstances requiring the intervention of the Board of Directors (see the preceding Section 3 and 1-7 of the Regulations Governing Committee Projects).

(b) Any part of the record related to the standards development process that is referenced or discussed in a response should be clearly cited in the response using available markings such as the title, author, date, and page of the record. Since the full record will be available to the subcommittee during its review, attachments and appendices shall not accompany the response, unless express permission has been obtained from the petitions clerk.

(c) So as to avoid unnecessary repetition and duplication of effort, parties are encouraged to file joint responses where possible and appropriate.

(d) Unless a hearing has been requested and granted by the subcommittee (see Section 8), the subcommittee shall, either by meeting or telephone conference, review and render a decision on the petition based on the written submissions of the parties and the record before it.

**Section 8 Requests for Hearings.** If the petitioner requests a hearing on the petition and that hearing is granted, the petitioner shall be assessed a filing fee of \$2,500 to be posted following the granting of the request. This fee may be reduced or waived by the Chief Executive Officer upon application of the petitioner if good cause for reducing or waiving the fee is presented. If a hearing is granted, the Procedures for Hearings shall be followed.

**Section 9 Waiver of Regulations.** Any of the deadlines or requirements set forth in these regulations may be waived by the subcommittee upon application of the petitioner or any other party for good cause shown, or in the discretion of the subcommittee.

**Section 10 Subcommittee Report to the Board of Directors.** The subcommittee shall file with the Board of Directors a written report concerning each petition that it has determined.