International Association of
Plumbing and Mechanical Officials

4755 East Philadelphia Street
Ontario, California – USA 91761-2816

Ph: 909.472.4100 | Fax: 909.472.4150
http://www.iapmo.org

December 2, 2025

To: Eli Howard (SMACNA)

CC: Gary Klein (Gary Klein and Associates, Inc.)
Alfonso Lopez (Sheet Metal Workers, Local 88)
Joseph Lstiburek (Building Science.com Corporation)
Geoff Parks (SMACNA)
Chris Ruch (Sheet Metal Workers, Local 104)
Alan Sandoval (SMART, Local 105)
Emily Toto (ASHRAE)
Phil Trafton (ASHRAE)
April Trafton (Coffman Engineers)
Chris Walker (CAL SMACNA)
Jeremy Zeedyk (Western States Council)

Erick Corona (Self)
Robert Diaz (Self)
Raymond Gress (Self)
Robert Kuks (Self)
Dean Lee (Self)
Cody MacDougall (Self)
Sean O'Keefe (Self)
Dawn Raia (Self)
David Vicent (Self)

Re: IAPMO Standards Council Decision Docket #02-27
Date of Decision: December 2, 2025
Uniform Mechanical Code – 205.0, 206.0, 218.0, 602.1, 602.2, 603.2, 608.1, 608.4
Item #107, Public Comments 1 through 7

Dear Mr. Howard,

At their meeting on November 13, 2025, the IAPMO Standards Council considered the appeal pertaining to Item #107 Public Comments 1 through 7 for the above referenced sections. 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 appeal relates to Item #107 and Public Comments 1 through 7, which sought to revise the above reference sections in the Uniform Mechanical Code (UMC).

At their first meeting in 2024, the Mechanical Technical Committee (TC) was in favor of accepting a proposal (Item #107) that revised Section 602.1 by adding the term "not", to prohibit the use of concealed building spaces or independent construction within buildings as ducts or plenums, removing the text "Gypsum board shall not be used for positive pressure ducts," and removing the exception "In healthcare facilities, concealed spaces shall not be permitted to be used as ducts or plenums." The proposal also revised 602.2 (Exception 1) by replacing the text "a single dwelling unit" with "single-family residential occupancies."

The TC was balloted on this motion, and the ballot achieved the necessary two-thirds affirmative vote of returned ballots.

International Association of
Plumbing and Mechanical Officials

4755 East Philadelphia Street
Ontario, California – USA 91761-2816

Ph: 909.472.4100 | Fax: 909.472.4150
http://www.iapmo.org

Public comments were then submitted on Item #107, including Public Comments 1, 6, and 7 from the Chair of the Code Change Review Task Group on behalf of the task group, and Public Comments 2, 3, 4 and 5 from members of the public.

Public Comment 1 sought to further revise Section 602.1 by adding the text “including plenums” and “Ductwork shall be permitted to be installed in concealed spaces” and by adding a definition for “ductwork.” This public comment was accepted by the Technical Committee.

Public Comment 6 sought to further revise Section 602.2 by removing exception (1) “Return air and outside air ducts, plenums, or concealed spaces that serve single-family residential occupancies.” Public Comment 6 also sought to revise Sections 603.2 and 608.1, and to delete Section 608.4. This public comment was accepted by the Technical Committee.

Public Comment 7 sought to revise the definition for “concealed spaces” by removing the text “Such spaces have sometimes been used as HVAC plenum chambers,” revise the definition for “duct” by replacing the term “shall” with “does” and by adding new item (4) “Occupiable spaces,” and revise the definition for “plenum” by adding the text “constructed of duct materials.” This public comment was accepted by the Technical Committee.

Public Comment 2, from multiple submitters, sought to accept the proposal as modified by removing the term “not”, effectively permitting concealed spaces or independent construction within buildings to be used as ducts or plenums. This public comment was rejected by the Technical Committee.

Public Comment 3 sought to remove the text “not” and add back the text “Gypsum board shall not be used for positive pressure ducts.” This public comment was rejected by the Technical Committee.

Public Comment 4 sought to remove the term “not,” add back the text “Gypsum board shall not be used for positive pressure ducts,” and add back the exception “In healthcare facilities, concealed spaces shall not be permitted to be used as ducts or plenums.” This public comment was rejected by the Technical Committee.

Public Comment 5, from by multiple submitters, sought to reject the original proposal as submitted. This public comment was also rejected by the Technical Committee.

Upon written ballot, the Technical Committee confirmed the actions taken on Public Comments 1 through 7.

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.

At the appeals hearing, the Standards Council heard testimony regarding both the need for provisions for concealed building spaces or independent construction used as ducts or plenums and the use of gypsum material in ducts or plenums, and testimony outlining objections to such use. The Council notes that conflicts may exist with existing American National Standards such as ASHRAE 90.1, ASHRAE 62.1 and the energy codes. The proposal and comments may go above the minimum requirements in accordance with Section 101.3 of the UMC which states that this code is ordinance providing minimum requirements and standards for the protection of the public health, safety, and welfare; and more evidence is required to prove that the public’s health is put at risk by the use of concealed building spaces or independent construction as ducts or plenums. The Council notes that language that remains in Section 608.0 may be applicable to under-floor spaces used as ducts or plenums, which may lead to confusion by the Authorities Having Jurisdiction if the appeal is not granted. Finally, the Council notes that Public Comments 1, 6, and 7 were generated by a task group that was not solely focused on investigating the use of concealed building spaces or independent construction as ducts or plenums, or the use of gypsum material in ducts or plenums.

International Association of
Plumbing and Mechanical Officials

4755 East Philadelphia Street
Ontario, California – USA 91761-2816

Ph: 909.472.4100 | Fax: 909.472.4150
http://www.iapmo.org

Therefore, the Standards Council agrees with the proponents that the 2027 UMC should contain provisions to allow concealed building spaces or independent construction to be used as ducts or plenums. However, mindful of the TC's consistent approval to the Proposal and Public Comments, the Standards Council will request that the Mechanical TC Chair establish a task group, seeking participation from industry experts and those familiar with concealed building spaces or independent constructions being used as ducts or plenums and the use of gypsum in ducts or plenums, to research specifically this topic and forward recommendations to the Mechanical TC for consideration in the 2030 code development cycle.

Final Decision

In consideration of the aforesaid, the Standards Council hereby grants the appeal. The effect of this decision is that in the 2027 edition of the Uniform Mechanical Code, 205.0, 206.0, 218.0, 601.2, 602.2 (exceptions 1 through 9)[1], 603.2, 608.1, and 608.4 will contain language as shown in the 2024 Uniform Mechanical Code, as illustrated in Exhibit B.

The Council further requires the establishment of a Concealed Building Space and Independent Construction Task Group.

Sincerely,

Secretary, Standards Council

cc: Gabriella Davis, Recording Secretary, Standards Council
Heather Koffman, Executive VP, General Counsel
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.

[1] Section 602.2 includes exception 10 due to the acceptance of other unrelated code changes.

**Exhibit A**

**Summary of Technical Committee Actions**
**Appeal Docket 02-27; Item #107, Public Comments 1 through 7**
*2027 Uniform Mechanical Code, Sections 205.0, 206.0, 218.0, 602.1, 602.2, 603.2, 608.1, 608.4*

The 2024 Report on Proposals (ROP) published the results of the first committee ballot on Item #107, a code change proposal requesting to revise Section 602.1 and Section 602.2.

At their first meeting, a majority of the committee members were in support of accepting the proposal. Upon written ballot of the Mechanical Technical Committee, the ballot achieved the necessary two-thirds affirmative vote of return ballots.

At their second meeting, the committee reviewed seven public comments. Public Comment 1 sought to accept the code change proposal as modified to further revise Section 602.1 and add a definition for “ductwork.” Public Comment 2 sought to accept the code change proposal as modified by deleting the term “not” which was added by the original proposal. Public Comment 3 sought to accept the code change proposal as modified by deleting the term “not” which was added by the original proposal, and by adding the text “Gypsum board shall not be used for positive pressure ducts” which was removed by the original proposal. Public Comment 4 sought to accept the code change proposal as modified by deleting the term “not” which was added by the original proposal, and by adding the text “Gypsum board shall not be used for positive pressure ducts” and the exception “In healthcare facilities, concealed spaces shall not be permitted to be used as ducts or plenums,” both of which were removed by the original proposal. Public Comment 5 sought to reject the code change proposal as submitted. Public Comment 6 sought to accept the code change proposal as modified by further revising Section 602.2 by removing exception (1) “Return-air and outside-air ducts, plenums, or concealed spaces that serve single-family residential occupancies,” revising Section 603.2 by removing the term “installed” and adding new item (3) “Ducts materials shall be in accordance with Section 602.2 through Section 602.4,” revising Section 608.1 by adding the text “where constructed of materials in accordance with Section 602.2 through Section 602.4,” and deleting Section 608.4. Public Comment 7 sought to accept the code change proposal as modified by revising the definitions for “concealed spaces,” “duct,” and “plenum.” At their meeting, a majority of the committee members were in support of accepting Public Comments 1, 6, and 7. A majority of the committee members were in support of rejecting Public Comments 2, 3, and 5.

Upon written ballot of the Mechanical Technical Committee, the ballot achieved the necessary two-thirds affirmative vote of return ballots.

The 2025 Report on Comments (ROC) published the results of the second committee ballot for Public Comments 1-7, showing the committee’s last successful action.

At the Association Technical Meeting Convention, a motion was made to accept Public Comment 2 as submitted which sought to remove the text “not.” The motion failed.

**Exhibit B**
**Result for #02-27**

Sections 205.0, 206.0, 218.0, 602.1, 602.2, 603.2, 608.1, 608.4 in the 2027 Uniform Mechanical Code will read as follows:

**205.0 - C -**
**Concealed Spaces.** That portion(s) of a building behind walls, over suspended ceilings, in pipe chases, attics, and elsewhere whose size might normally range from 1¾ inch (44 mm) stud spaces to 8 foot (2438 mm) interstitial truss spaces and that might contain combustible materials such as building structural members, thermal, electrical insulation, or both, and ducting. Such spaces have sometimes been used as HVAC plenum chambers.

**206.0 - D -**
**Duct.** A tube or conduit for transmission of air, fumes, vapors, or dust. This definition shall not include:
(1) A vent, vent connector, or chimney connector.
(2) A tube or conduit wherein the pressure of the air exceeds 1 psi (7 kPa).
(3) The air passages of listed self-contained systems.

**218.0 - P -**
**Plenum.** An air compartment or chamber, including uninhabited crawl space areas above a ceiling or below a floor, including air spaces below raised floors of computer/data processing centers or attic spaces, to one or more ducts are connected and that forms part of either the supply-air, return-air, or exhaust-air system, other than the occupiable space being conditioned.

**602.0 Material.**
**602.1 General.** Materials used for duct systems shall comply with Section 602.2 through Section 602.6 as applicable.

Concealed building spaces or independent construction within buildings shall be permitted to be used as ducts or plenums. Gypsum board shall not be used for positive pressure ducts.
**Exception:** In healthcare facilities, concealed spaces shall not be permitted to be used as ducts or plenums.

**602.2 Combustibles Within Ducts or Plenums.** Materials exposed within ducts or plenums shall be noncombustible or shall have a flame spread index not to exceed 25 and a smoke-developed index not to exceed 50, where tested as a composite product in accordance with ASTM E84 or UL 723. Plastic piping installed in plenums shall be tested in accordance with all requirements of ASTM E84 or UL 723. Mounting methods, supports and sample sizes of materials for testing that are not specified in ASTM E84 or UL 723 shall be prohibited.
**Exceptions:**
(1) Return-air and outside-air ducts, plenums, or concealed spaces that serve a dwelling unit.
(2) Air filters in accordance with the requirements of Section 311.2.
(3) Water evaporation media in an evaporative cooler.
(4) Charcoal filters where protected with an approved fire suppression system.
(5) Products listed and labeled for installation within plenums in accordance with Section 602.2.1 through Section 602.2.4.
(6) Smoke detectors in accordance with the requirements of Section 609.0.
(7) Duct insulation, coverings, and linings and other supplementary materials installed in accordance with Section 605.0.
(8) Materials in a hazardous fabrication area including the areas above and below the fabrication area sharing a common air recirculation path with the fabrication area.
(9) Plastic water distribution piping listed and labeled for use in plenums in accordance with UL 2846 as having a peak optical density not greater than 0.50, an average optical density not greater than 0.15, and a flame spread distance not greater than 5 feet (1524 mm), and installed in accordance with its listing, shall be permitted.

(10) Interior finishes of plenums in accordance with Section 602.2.5.

**603.0 Installation of Ducts.**

**603.2 Under-Floor or Crawl Space.** Air ducts installed under a floor in a crawl space shall be installed in accordance with the following:
(1) Shall not prevent access to an area of the crawl space.
(2) Where it is required to move under ducts for access to areas of the crawl space, a vertical clearance of not less than 18 inches (457 mm) shall be provided.

**608.0 Use of Under-Floor Space as Supply Plenum for Dwelling Units.**
**608.1 General.** An under-floor space shall be permitted to be used as a supply plenum.

**608.4 Flammable Materials.** The enclosing material of the under-floor space, including the sidewall insulation, shall be not more flammable than 1 inch (25.4 mm) (nominal) wood boards (flame-spread index of 200). Installation of foam plastics is regulated by the building code.

**IAPMO Regulations Governing Committee Projects**
**Section 1-7**

**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).

***

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

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.