December 19, 2025

Gabriella Davis
Petitions Clerk
IAPMO Board of Directors
4755 East Philadelphia Street
Ontario, CA 91761
via e-mail: Gaby.Davis@iapmo.org

Dear IAPMO Board Members:

Petitioner: Western States Council of SMART

- Jeremy Zeedyk (WSC)
- David Vincent (Local 104)
- Christopher Ruch (Local 104)

Re: Petition of Decision Docket 03-27
Item #107, Public Comments 1, 6 and 7, Item #109 Public Comment 1

Action Being Sought: Reject Standards Council's Approval of Appeal 03-27.

In-Person Hearing Requested: Yes, an In-Person Hearing is Requested for This Petition.

SECTION I – Introduction

This petition is submitted pursuant to the Regulations Governing Petitions to the IAPMO Board of Directors. The Petitioner respectfully requests reversal of the Standards Council's decision in Docket 03-27. That decision reinstates superseded code language in a manner that creates unresolved internal conflicts within the Uniform Mechanical Code ("UMC"), disregards coordinated Technical Committee and membership consensus developed over multiple code cycles, violates IAPMO's governing procedural regulations and the ANSI Essential Requirements, and lacks the clear and substantial evidentiary basis required to overturn consensus action.

This petition does not ask the Board to revisit technical policy judgments or to substitute its own judgment for that of the Technical Committee. Rather, it asks the Board to enforce the jurisdictional and procedural limits that preserve the integrity of IAPMO's consensus-based standards-development process. Where an appellate body alters the operative effect of coordinated Technical Committee and membership action without identifying procedural errors or a record-based technical defect, it exceeds the scope of appellate authority delegated under IAPMO regulations and the ANSI Essential Requirements. Board intervention is therefore necessary to restore procedural regularity and protect the enforceability of the UMC as an American National Standard.

SECTION II – Identification of the Standards Council Action

In Docket 03-27, the Standards Council granted the appeal and reinstated the 2024 edition language of Sections 205.0, 206.0, 218.0, 602.1, 602.2, 602.4.2, 603.2, 608.1, and 608.4. In doing so, the Council expressly acknowledged that the reinstated language, when read in conjunction with other provisions of the UMC, "may lead to confusion." (See Decision 03-27, at page 2).

4040 Lennane Dr. Sacramento, CA 95834
P: (916) 692-5979

This confusion is the proximate result of the Council's action in the appeal.

> "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." (See Decision 03-27, at page 2).

The Council acknowledges confusion arising from the patchwork of language remaining in Section 608.0, yet fails to account for the additional confusion created by its decision to revert to the 2024 UMC language, including the following:

Under Item 107, Public Comment 1, Section 602 clarified that concealed spaces could not be used as ducts or plenums, but concealed spaces could contain ductwork.

Under Item 107, Public Comment 5, Section 603.2, Section 608.1 - language was added to clarify that under-floor space can be used as a plenum if an approved material was used.

- These additions by the UMC Code Change Review Task Group would have clarified that concealed spaces, by themselves, are not inherently ductwork. However, when constructed of approved materials and installed in accordance with a recognized construction standard, they may be used as ductwork.
    - The result of the Standards Council's action maintained ambiguity of whether a plenum is a duct and therefore allows some ducts, identified as concealed space plenums, to continue to allow potentially combustible materials to be installed within them.

Item 110, Public Comment 1, Section 602.4.2 - would have removed gypsum as an approved duct material. Gypsum could be reconsidered for inclusion later if it is tested and listed for use as ductwork (UL 181) and constructed in accordance with a recognized duct construction standard.

- The UMC Code Change Review Task Group resolved the conflict with Section 608.1, which had previously stated that gypsum is "permitted to be used as a supply plenum."
    - As a result of the Standards Council's action, materials such as gypsum forming an underfloor space are permitted to be used as a supply plenum under Section 608.1, while simultaneously being prohibited from use as a supply duct under Sections 602.4.2 and 602.1.
    - Additionally, the Standards Council removed language that would require ducts made from gypsum to be listed and labeled and constructed per an adopted duct construction standard, which is a requirement of every other type of non-metallic duct material. The Standard Council's action did not merely retain prior text; it reversed coordinated conflict-resolution work undertaken during the current code cycle by the Technical Committee and the UMC Code Change Review Task Group. That work was specifically intended to address and resolve known internal inconsistencies carried forward from earlier editions. By reinstating legacy language without remand or referral, the Council restored conflicts and created new conflicts that the consensus process had already identified and resolved.

The Standards Council eliminated Item 110, Public Comment 1, as submitted by the UMC Code Change Review Task Group, which would have clarified the applicability regarding the use of gypsum in use of under-floor space as a supply plenum for dwelling units. Had the appeal not been accepted, the language in Item 110, Public Comment 1, read in conjunction with the Technical Committee–approved public comments for Items 107 and 109, would have remained operative, and the resulting code text would have been clear on its face.

In the 2027 cycle, the UMC Code Change Review Task Group conducted an additional review of Items 107, 109, and 110 to ensure internal consistency and eliminate any potential contradictions within the Code. While the Technical Committee initially agreed with the intent of Item 109, it ultimately chose to support Item 110, by proposing Public Comment 1.

The UMC Code Change Review Task Group determined that Item 109 did not represent appropriate or enforceable code language. Item 109 proposed that gypsum could be used as a duct material *if* it were tested and *if* a corresponding construction standard were developed, steps that have not occurred. This created awkward and internally inconsistent code language by implying that a material could be conditionally allowed based on future actions, rather than meeting established requirements at the time of approval.

As a result, the Task Group did not support Item 109 and instead advanced Item 110, which removed gypsum from consideration as a duct material. This approach correctly recognized that gypsum does not meet the fundamental performance, listing, and construction standards required of nonmetallic duct materials and ensures the code remains clear, enforceable, and based on demonstrated compliance rather than hypothetical future testing.

The Standards Council's decision in Docket 03-27 lacks a clear and substantial evidentiary basis in the record. Although the appellant advanced several assertions in support of the appeal, it provided no supporting justification, including no explanation as to why gypsum should be permitted for use as a duct material while avoiding the fundamental health and safety requirements applicable to all other nonmetallic duct materials under the UMC. This issue was addressed by the UMC Code Change Review Task Group based on the evidentiary record, yet the Council dismissed that analysis without explanation or supporting justification and nonetheless granted the appeal. By disregarding both the absence of record evidence and the developed record before it, the Council failed to meet the clear and substantial basis required to overturn Technical Committee action.

SECTION III – Statement of Grounds for Petition

This petition is based on the following independent and sufficient grounds:

1. The Standards Council overturned the Technical Committee consensus without the clear and substantial evidentiary basis required by IAPMO regulations.
2. The decision violates ANSI Essential Requirements governing due process, record-based decision-making, and the limits of appellate review as well as IAPMO's governing procedural regulations.
3. The reinstated language creates internal conflicts within the Uniform Mechanical Code that are properly addressed only through the consensus process. By reverting selected portions of the Technical Committee's recommended language that had been developed over multiple cycles, and leaving related provisions unchanged, the Council both preserved existing conflicts and introduced new, unresolved conflicts in the 2027 UMC.
4. While the appellant asserted that conflicts may exist with other standards, and the Council stated that there "may be a conflict" in its decision, no evidence of any actual conflict was provided by either appellant or the Standards Council. Conversely, the decision on the appeal creates conflicts with standards that were explicitly resolved by the UMC Code Change Review Task Group through Items 107, 109, and 110.

Each ground independently warrants reversal.

SECTION IV – Conflicts Within the Uniform Mechanical Code Created by the Decision

The Standards Council's decision reinstates provisions that reintroduce internal contradictions the Technical Committee and membership acted to resolve during the current code cycle.

Section 602.1 states that concealed spaces "shall be permitted to be used as ducts or plenums." Section 218.0 defines a plenum as an air compartment or chamber that forms part of an HVAC system and is connected to one or more ducts. Concealed spaces, as defined in Section 205.0, are architectural building cavities that exist independently of HVAC system design. By permitting concealed spaces to function as plenums without requiring them to satisfy the definitional assumptions governing plenums elsewhere in the Code, the decision creates plenums that do not conform to the Code's own definitional framework.

Section 602.4.2 restricts gypsum exposure within ducts and plenums. Through Item 110, the Technical Committee adopted coordinated changes removing gypsum as a permissible duct material based on performance, listing, and enforceability considerations. Reinstating prior language reintroduces an internal inconsistency by permitting a material the Committee expressly excluded through consensus action.

Section 101.3 of the Uniform Mechanical Code states that the Code "is an ordinance providing minimum requirements and standards for the protection of the public health, safety, and welfare." Under this framework, materials and methods are permitted only when they meet established minimum performance and safety criteria. The code does not allow any material to be used until it is proven unsafe; rather, it requires compliance with minimum requirements, including testing for use as a duct and construction in accordance with an approved duct construction standard, as a condition of approval. The Standards Council's actions perpetuated a known flaw that allows one material to continue to be used without meeting these minimum requirements.

Sections 603.2 and 608.1 establish distinct requirements for ducts and under-floor plenums. Section 602.1 collapses these categories by permitting concealed spaces to function as either without harmonization, creating uncertainty as to which installation, material, and safety requirements apply.

Section 608.4 imposes flammability limits on under-floor plenums. Section 602.1 creates additional plenums in concealed spaces without imposing equivalent limits, resulting in inconsistent treatment of plenums, which are by definition "ducts", performing the same functional role.

Taken together, these contradictions do not merely create interpretive difficulty; they alter the scope and meaning of multiple Code provisions and impose mutually exclusive compliance obligations within a single regulatory framework. Under IAPMO's procedures, only the Technical Committee and, where necessary, the Technical Correlating Committee are authorized to resolve such conflicts. By reinstating legacy language without deference to either body, notwithstanding its acknowledgment that additional regulatory provisions are needed, the Standards Council acted outside the scope of its appellate authority.

SECTION V – Due Process Violations and ANSI Non-Compliance

A. ANSI Due-Process Obligations Are Jurisdictional

As an ANSI-Accredited Standards Developer, IAPMO is required to develop and maintain the UMC in compliance with the ANSI Essential Requirements. Those requirements mandate openness, balance of interests, consensus-based decision-making, record-based reasoning, and fair consideration of views and objections (§§ 2.1, 2.2, 2.4, 2.5).

These safeguards are jurisdictional conditions for the maintenance of an American National Standard. ANSI further requires that appeals procedures be impartial and that decisions affecting consensus outcomes be supported by the documented record (§§ 2.5, 3.4).

B. Use of Improperly Scoped Input in Place of the Consensus Record

The Standards Council relied in part on public comments generated by a task group it characterized as "not solely focused on investigating" the use of concealed building spaces or gypsum in ducts or plenums (Decision 03-27 at page 2). That rationale is procedurally defective.

ANSI does not recognize dissatisfaction with the scope or focus of a duly constituted task group as a basis for disregarding consensus outcomes. Appeals bodies are required to give deference to Technical Committee and membership action and may not elevate speculative or undeveloped input over the documented consensus record (§§ 2.5, 3.4.1). The Council identified no technical error in the Committee's reasoning and cited no evidence of harm supported by the record.

C. Internal Contradiction Between Findings and Remedy

The Standards Council expressly found that "the 2027 UMC should contain provisions to address concealed building spaces or independent constructions (sic) to be used as ducts or plenums" (Decision 03-27 at page 3). That finding constitutes an acknowledgment that the regulatory issue requires further development through the consensus process.

Despite that acknowledgment, the Council reinstated 2024 code language that eliminated the very provisions adopted during the current code cycle to address those issues. Under both IAPMO procedures and ANSI § 3.4, a determination that regulatory provisions are incomplete or require refinement compels remand to the Technical Committee or Technical Correlating Committee; it does not authorize reinstatement of superseded language that the consensus bodies expressly acted to replace.

ANSI requires reasoned, record-based decision-making and logical continuity between findings and outcomes (§ 2.5). A decision that recognizes the need for regulatory safeguards while simultaneously removing those safeguards cannot satisfy that requirement. The internal contradiction between the Council's findings and its chosen remedy demonstrates that the decision was not grounded in reasoned analysis.

D. Failure to Engage Required Conflict-Resolution Procedures

Items 107, 109, and 110 were developed through a multi-cycle effort to resolve conflicts created in the prior code cycle. The UMC Code Change Review Task Group, acting pursuant to Board-directed objectives, evaluated those conflicts and advanced coordinated recommendations. Those recommendations were approved by the Technical Committee and confirmed through membership action.

IAPMO's Regulations require conflicts to be resolved through the Technical Committee and, where necessary, the Technical Correlating Committee. ANSI similarly requires a good-faith effort to resolve conflicts within a standard through consensus procedures (§§ 2.5, 3.1). Rather than refer perceived concerns back to those bodies, the Standards Council reinstated legacy language that reintroduced known inconsistencies.

E. Arbitrary Reversal in the Face of Acknowledged Uncertainty

The Standards Council acknowledged that the regulatory issue remains unresolved and requires further development yet simultaneously reversed coordinated Technical Committee and membership action. ANSI expressly prohibits appeals bodies from overturning consensus action absent a demonstrated procedural error or a record-based showing of technical defect (§ 3.4.1). An appellate body may not reverse a decision while conceding that the record does not support a definitive regulatory conclusion. By displacing consensus action while acknowledging unresolved issues, the Standards Council exceeded the permissible scope of appellate review.

F. Precedential Harm to the Standards-Development Process

If allowed to stand, the decision establishes a precedent under which multi-cycle consensus determinations may be displaced by appellate speculation or policy preference. Such a precedent is incompatible with ANSI's requirements that standards be developed through consensus, supported by the record, and protected by impartial procedural safeguards (§§ 2.1, 2.5, 3.4).

These defects constitute extraordinary circumstances affecting the integrity of the standards-development process.

SECTION VI – Standard of Review Applicable to Board Consideration

The Board of Directors' review in this petition is procedural, not technical. Deference is owed to Technical Committee and membership consensus developed through balanced participation, public review, and record-based deliberation (§§ 2.1, 2.4, 2.5).

The Board's role is to ensure that appellate bodies have acted within the scope of their authority and in compliance with IAPMO regulations and ANSI Essential Requirements governing appeals (§ 3.4). Where an appellate body reverses consensus action without a clear and substantial evidentiary basis, bypasses required conflict-resolution mechanisms or substitutes its judgment for that of the consensus body, reversal is required.

SECTION VII – Lack of a Clear and Substantial Basis

The Standards Council may overturn Technical Committee action only where the record demonstrates a clear and substantial basis for doing so. That standard was not met in Docket 03-27.

Items 107, 109, and 110 were developed through a coordinated, multi-cycle process supported by documented technical justification and approved by both the Technical Committee and the IAPMO membership. The appeal identified no technical error in the Committee's analysis and presented no evidence demonstrating that the adopted provisions were unsafe, unworkable, or inconsistent with public health objectives.

Where an appeal introduces no evidence sufficient to rebut the existing consensus record, that record remains controlling as a matter of due process. The Standards Council may not substitute generalized concern, speculative commentary, or undeveloped input for the documented conclusions of the consensus body. By reversing Technical Committee action while acknowledging that further regulatory development is required, the Council acted without the clear and substantial evidentiary basis required for appellate intervention.

SECTION VIII – Institutional Harm and Potential Legal Liability

If the Standards Council's action in Docket No. 03-27 is permitted to stand, it establishes a precedent under which Technical Committee consensus may be overturned without a clear and substantial evidentiary basis, coordinated task-group conflict resolution may be disregarded, and acknowledged internal conflicts may be created or reinstated without adherence to consensus-based procedures. Such a precedent alters the understood limits of appellate review within IAPMO's standards-development framework and weakens the procedural safeguards designed to preserve the integrity and predictability of the Code. It further signals that appellate decisions may be rendered without articulated justification grounded in the record, transforming appellate review from a procedural safeguard into an outcome-driven exercise.

The harm extends beyond the specific provisions at issue. Allowing appellate reversal in the absence of record evidence invites future challenges that bypass consensus outcomes based on speculative concerns, undermining confidence in the stability of the UMC and discouraging meaningful participation in the committee process. Stakeholders must be able to rely on the principle that duly adopted consensus decisions will not be displaced absent demonstrated procedural error or technical deficiency supported by the record.

The Council's action also carries significant institutional and reliance-based consequences. By upholding inconsistent requirements for what constitutes an approved duct material, the decision creates unequal treatment among nonmetallic duct materials and disrupts the regulatory expectations of manufacturers who have invested in product testing, third-party listings, and compliance with adopted duct construction standards. Those manufacturers have relied on the UMC's uniform application of minimum health and safety requirements applicable to all nonmetallic duct materials, yet the reinstated language preserves gypsum as an exception under Section 602.4.2 without record-based justification. This inconsistency exposes IAPMO to foreseeable legal and procedural challenges from affected manufacturers who are subject to stricter requirements without a rational or evidentiary distinction, further compounding the institutional risk created by the Council's action.

Within the same 2024 code cycle, the Standards Council applied inconsistent standards to nonmetallic duct materials. Items 109 and 110 were overturned in a manner that disregarded the minimum requirements for nonmetallic ducts, while Item 117 was rejected by the Technical Committee on the explicit basis that "an industry-recognized duct construction standard specific to negative pressure duct socks (Air Dispersion System) should be referenced." (2025 Report on Comments, pg.246) This disparate treatment reflects an unequal application of fundamental requirements and cannot be reconciled within a consensus-based code.

This precedent is incompatible with ANSI's core requirements that standards be developed through consensus, supported by the documented record, and protected by impartial procedural safeguards (ANSI Essential Requirements §§ 2.1, 2.5, 3.4). Allowing the decision in Docket No. 03-27 to stand would erode confidence in the UMC's consensus foundation and place IAPMO's compliance with its obligations as an ANSI-Accredited Standards Developer at risk.

CONCLUSION AND REQUESTED RELIEF

The Standards Council's decision in Docket 03-27 exceeded the scope of permissible appellate authority by reinstating superseded code language without identifying procedural error or record-based technical defects, reintroducing known internal conflicts, and adopting a remedy that contradicts its own stated findings. These actions disregard coordinated Technical Committee and membership consensus, bypass required conflict-resolution mechanisms and violate IAPMO's governing regulations and the ANSI Essential Requirements.

If allowed to stand, the decision establishes a precedent under which unresolved uncertainty may be used to displace settled consensus outcomes, undermining the stability, legitimacy, and enforceability of the UMC as an American National Standard.

For these reasons, the Petitioner respectfully requests that the Board of Directors:

1. Reinstate the Technical Committee and membership actions adopted during the current code cycle by reversing the Standards Council's decision in Docket 03-27.

    a. Alternatively, to correct the disparate treatment articulated above (Section VIII), the Standards Council's action on Items 109 and 110 should be reversed, leaving Item 110 in effect as adopted. Gypsum, or any other material, may be reconsidered for use as ductwork only if it is tested and listed for that purpose and constructed in accordance with a recognized duct construction standard, consistent with the requirements applied to all other nonmetallic duct materials.

    In addition, direct that any remaining concerns regarding concealed building spaces be addressed through the Technical Committee and, where appropriate, the Technical Correlating Committee, in accordance with IAPMO procedures and the ANSI Essential Requirements governing conflict resolution, scope harmonization, and appeals.

EXHIBIT A

Section Change	2027 Code Cycle Technical Committee Membership Upheld Language	Standards Council 2024 Reverted Language
1.	**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.~~	**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.
2.	**206.0 - D -** **Duct.** A tube or conduit for transmission of air, fumes, vapors, or dust. This definition ~~shall~~ does 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. (4) Occupiable spaces.	**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.
3.	**218.0 - P -** **Plenum.** An air compartment or chamber, constructed of duct materials, 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.	**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.
4.	**602.0 Material.** **602.1 General.** Materials used for duct systems, including plenums, shall comply with Section 602.2 through Section 602.6 as applicable. Concealed ~~building~~ spaces ~~or independent construction~~ within buildings shall not be permitted to be used as ducts or plenums. Ductwork shall be permitted to be installed in concealed spaces.	**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.
5.	**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	**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 single-family residential occupancies. (~~2~~1) Air filters in accordance with the requirements of Section 311.2. (~~3~~2) Water evaporation media in an evaporative cooler. (~~4~~3) Charcoal filters where protected with an approved fire suppression system. (~~5~~4) Products listed and labeled for installation within plenums in accordance with Section 602.2.1 through Section 602.2.4. (~~6~~5) Smoke detectors in accordance with the requirements of Section 609.0. (~~7~~6) Duct insulation, coverings, and linings and other supple- mentary materials installed in accordance with Section 605.0. (~~8~~7) 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~~8) 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~~9) Interior finishes of plenums in accordance with Section 602.2.5.	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.
6.	**602.4 Nonmetallic Ducts.** **602.4.2 Gypsum.** ~~Where gypsum products are exposed in ducts or plenums, the air temperature shall be restricted to a range from 50°F (10°C) to 125°F (52°C), and moisture content shall be controlled so that the material is not adversely affected. All gypsum products shall have a mold or mildew resistant surface. For the purpose of this section, gypsum products shall not be exposed in supply ducts. Gypsum products used as a duct, plenum, or fitting shall be listed and labeled. Gypsum products shall be constructed per an adopted duct construction standard.~~ Gypsum materials shall not be exposed within ducts or plenums.	**602.4 Nonmetallic Ducts.** **602.4.2 Gypsum.** Where gypsum products are exposed in ducts or plenums, the air temperature shall be restricted to a range from 50°F (10°C) to 125°F (52°C), and moisture content shall be controlled so that the material is not adversely affected. All gypsum products shall have a mold or mildew resistant surface. For the purpose of this section, gypsum products shall not be exposed in supply ducts.

7.	**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. (3) Ducts materials shall be in accordance with Section 602.2 through Section 602.4.	**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.
8.	**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 where constructed of materials in accordance with Section 602.2 through Section 602.4.	**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.~~	**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.