



AIR-CONDITIONING, HEATING,
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January 12, 2023

Gabriella Davis

Petitions Clerk

IAPMO Board of Directors

The IAPMO Group – West Building

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Dear IAPMO Board Members:

RE: Petition to the IAPMO Board of Directors regarding UMC Docket #18-24

- 1. **Petitioner:** Mary Koban, Sr. Director Regulatory Affairs
Marie Carpizo, General Counsel
Air-Conditioning, Heating, and Refrigeration Institute (AHRI)
2311 Wilson Blvd, Suite 400
Arlington, VA 22201

- Hearing Representative:** Rusty Tharp, Vice President of Regulatory Affairs & Environmental Research
Daikin Comfort Technologies North America
19001 Kermier Road
Waller, TX 77484

- 2. **Action Petitioned:** Decision Docket #18-24, Uniform Mechanical Code (UMC) Item 101, Public Comment #1

- 3. **Grounds for Petition:** Extraordinary circumstances exist as the Standards Council violated IAPMO and ANSI procedures which immediately and negatively impacts all users of the UMC.

- 4a. **Action Being Sought:** Approve Item #101, PC#1 to the 2024 edition of the Uniform Mechanical Code with modifications to remove references to UL 8802, but keep Section 406 with the UL standards-- UL 1995: 2015; UL 60335-2-40: 2019 or later versions.

- 4.b. **Supporting Information**

This appeal petition is being filed for the following reasons:

- 1. The IAPMO Standards Council failed to address and correct procedural issues committed by the IAPMO Technical Committee.
- 2. The IAPMO Standards Council also committed procedural issues which negatively impact the IAPMO Standards Development Process.

3. The IAPMO Standards Council did not demonstrate efforts to harmonize the Uniform Mechanical Code with other ANSI documents in violation of ANSI Essential Requirements.

The IAPMO Standards Council failed to address and correct procedural issues committed by the IAPMO Technical Committee

The Technical Committee (TC) violated Section 4-3.5.1 of the *IAPMO Regulations Governing Committee Projects*. The TC did not provide a technical statement and did not sufficiently detail their rationale for voting against Item #101, Public Comment #1 (PC#1) in the 2024 edition of the Uniform Mechanical Code. Section 4-3.5.1(c) states the IAPMO Technical Committee (TC) “shall include a statement, preferably technical in nature, on the reason for the TC action” and “[s]uch statement shall be sufficiently detailed so as to convey the TC’s rationale for its action so that rebuttal may, if desired, be submitted during the Comment Period.”

In the Report on Proposals (ROC), the TC did provide comments regarding the rejection of item #101, PC#1. However, AHRI argues that the technical reasons were incorrect. The main reasons provided by the TC for rejecting PC#1 were the following:

1. UL 1995 does not mention air cleaning capabilities.
2. There must be additional research conducted regarding which methods and standards are the most effective at promoting health and safety and
3. Concern that the standards listed in the proposed section 406 are not the only UV sterilization devices to be used in ducts

Regarding the first point, the TC failed to address how they viewed Supplements SA 17 and SA 18 of UL 1995 which specifically address UV germicidal product applications. The TC did not recognize that Annex 101 DVJ of UL 60335-2-40 also addresses these applications. Normative Annex 101.DVJ UL 60335-2-40 is titled “Non-integral UV-C germicidal lamp systems.” The annex addresses UV photo-biological and material hazard-related hazards presented by the combination of UV-C germicidal lamp with HVAC equipment. Therefore, these were incorrect technical arguments put forth by the TC which the IAPMO Standards Council did not address during the IAPMO Standards Council hearing.

Regarding the second point, the TC failed to recognize that UL 8802 was specifically developed to address germicidal products. Research and work were completed to provide three standards (UL 8802, UL 1995 SA 17 & SA 18, and UL 60335-2-40 Annex 101 DVJ) which can be used to list and install products containing UV germicidal components. Therefore, the TC provided an incorrect technical review of the standards.

Finally, addressing the third point, the TC noted concerns with standards listed in Section 406 as the TC suggested that the listed standards are not the only standards addressing this topic. However, TC members did not provide alternative standards or note where to find these alternative standards.

In addition to these points, the TC did not propose to remove the germicidal concept in the new section R406. The TC only had concerns regarding the standards that were noted and if these standards were the correct standards for this application. Rather than address the specific standards, the IAPMO Standards Council decided to eliminate the entire section. Therefore, the IAPMO Standards Council did not address the TC concerns about the UL 8802 standard.

Therefore, AHRI argues that IAPMO Standards Council committed procedural violations because they did not address the comments by the IAPMO TC. In summary, AHRI argues that UMC item #101, PC#1 should be accepted.

The IAPMO Standards Council also committed procedural issues which negatively impact the IAPMO Standards Development Process.

During the IAPMO Standards Council Hearing, all participants supported Section 406. An opponent on the TC, noted that he did not have a problem with the first part of the PC#1, but specifically with UL 8802.¹ Another opponent was supportive of the Section 406; and in support of both UL 1995 and UL 60335-2-40 referencing these types of components on HVAC equipment.² The only concern was with UL 8802.

In light of the opponents' testimony at the hearing, the IAPMO Standards Council committed procedural errors by rejecting the entire Section 406. The Standards Council did not address or comment on the support for the section and the other noted UL standards, UL 1995 and UL 60335-2-40. The IAPMO Standards Council only noted that UL 8802 was for commercial installations and that was their rationale for not supporting the appeal, as also noted in the IAPMO Standards Council Decision Letter.³ Therefore, UMC Item #101, PC#1 should be accepted.

The IAPMO Standards Council did not demonstrate efforts to harmonize the Uniform Mechanical Code with other ANSI documents in violation of ANSI Essential Requirements.

As it was noted during the IAPMO Standards Council Hearing, the current IAPMO language does not meet section 1-4 of *ANSI Essential Requirements*, which states that "*good faith efforts shall be made to resolve potential conflicts between and among existing American National Standards and candidate American National Standards.*"⁴

By deleting Section 406, it will be difficult for Authorities Having Jurisdiction (AHJs), users and installers to know when UV germicidal products have been properly installed. States like Texas, which may use the UMC or the IMC, depending upon jurisdiction, will be confused on how to install germicidal components to HVAC products. Those jurisdictions falling under the IMC will find language that will guide installers and AHJs how to safely and correctly install germicidal components because they will be following UL 60335-2-40: 2022. Also, the 2019 edition included information regarding germicidal components for HVAC. On the other hand, jurisdictions following the UMC will be following UL 60335-2-40: 2017 edition and will not have any guidance on how to install these components. Furthermore, UL 1995 will be sunsetting in less than 12 months (January 1, 2024) and will no longer be an option to provide UV germicidal components in HVAC products.

Therefore, installers, consumers, and AHJs who use the UMC will have no options for this type of product by January 1, 2024. Consumers living in different jurisdictions of Texas will be disadvantaged. The situation will be unmanageable and demonstrates that a lack of a good faith effort was made to resolve potential conflicts between the UMC and the IMC.

¹ IAPMO Standards Council Hearing Transcripts, November 17, 2022; page. 205

² *Id.*, page 207.

³ IAPMO Standards Council Decision Letter for Docket #18-24, December 14, 2022.

⁴ ANSI Essential Requirements: Due Process Requirements for American National Standards, January 2022 Edition, March 2, 2022 Editorial Update.

The need for requirements for air sterilization or purification systems to follow before, during, and after a pandemic has become increasingly apparent. The proposed code change provides requirements for UV light air sterilization or purification systems that can be applied to a building's mechanical system to minimize transmission of diseases and viruses from airborne particles during a pandemic. Not addressing these types of systems, but deleting the Section 406, the IAPMO Standards Council is not making a good faith effort to align with other standards. In the post-pandemic world, these standards are more important than ever.

Due to the failure to meet the intent of section 1-4 of ANSI Essential requirements and extraordinary circumstances that will exist for HVAC installations as a result of removing Section 406 entirely. AHRI recommends a simple modification be made to the UMC proposed Section 406 to provide options for these types of products. It is within the IAPMO Standards Council's authority to modify a public comment and accept a portion of that comment. The IAPMO Standards Council had the opportunity to accept Section 406 with modifications to remove reference to UL 8802 which would have resolved technical issues for all parties. However, they didn't exercise their authority, which has been done by the IAPMO Standards Council in other decisions.

In conclusion, AHRI strongly recommends the IAPMO Board of Directors approve Item #101, PC#1 to the 2024 edition of the Uniform Mechanical Code with modifications to remove references to UL 8802, but keep Section 406 with the UL standards-- UL 1995: 2015; UL 60335-2-40: 2019 or later versions.

If you have any questions, please do not hesitate to contact me at mkoban@ahrinet.org.

Cordially yours,

Mary E. Koban

Mary Koban
Sr. Director Regulatory Affairs, AHRI