# City of Austin Proposed 2021 Technical Code Changes

## Engagement Period Statistics (February 1, 2021 - March 14, 2021)

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## Uniform Mechanical Code (UMC)

## Engagement Period Statistics (February 1, 2021-February 28, 2021)

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Dear City of Austin DSD,
On behalf of the International Association of Plumbing and Mechanical Officials (IAPMO), thank you for allowing the opportunity to comment on the adoption of the 2021 Uniform Mechanical Code. IAPMO fully supports this effort and offers their assistance in moving forward with the adoption. The Uniform Mechanical Code harmonizes with all building codes and is easier to enforce because there are fewer areas of field interpretation. This in turn helps eliminate conflict between contractors and inspectors that could lead to construction delays and cost overruns. IAPMO respectfully recommends the adoption of the 2021 Uniform Mechanical Code which has served citizens of Austin and the mechanical industry since 1970.

John Mata
Regional Manager-IAPMO

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.

Hello,
In case it gets missed, I just sent an email to DSDEngagementUnit@austintexas.gov regarding the proposed deletion of the of the ASHRAE 62.1 exception from the UMC section 401.1. Please review the email for my comment.
Thank you,
Reese Hatridge, P.E.

Thank you for your feedback. The ASHRAE 62.1 design standard was deleted as an exception to create more flexibility in design options. Sections 302.2 and 302.3 of the Uniform Mechanical Code (included below) provide flexibility for alternate design. Design options include but are not limited to, compliance with ASHRAE 62.1. Section 302.2 Alternate Materials and Methods of Construction Equivalency. Nothing in this code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this code. Technical documentation shall be submitted to the Authority Having Jurisdiction to demonstrate equivalency. The Authority Having Jurisdiction shall have the authority to approve or disapprove the system, method, or device for the intended purpose.

302.3 Alternative Engineered Design. An alternative engineered design shall comply with the intent of the provisions of this code and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability, and safety. Material, equipment, or components shall be designed and installed in accordance with the manufacturer's installation instructions.

Do not adopt this archaic code, please consider adoption of the International Mechanical Code and have just one family of codes for proper correlation.

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.
The Real Estate Council of Austin (RECA) is opposed to the proposed adoption of the 2021 Uniform Plumbing Code and 2021 Uniform Mechanical Code. We support the adoption of the 2021 International Codes for other disciplines and request that the City consider adoption of the International Plumbing Code and International Mechanical Code.

The City of Austin continues to be one of only a handful of cities in the state of Texas that still operates under the Uniform Plumbing and Mechanical Codes. In addition, the City of Austin utilizes the International Code Council’s family of codes for every other portion of the technical code, including the recently adopted Wildland Urban Interface Code.

The Uniform Plumbing Code and Uniform Mechanical Code are inefficient and incompatible with other International Codes used by the City of Austin. Each time the Uniform Plumbing and Mechanical Codes are adopted, city staff is forced to do hundreds of amendments to make them compatible with the other City adopted codes, and even then, the UPC and UMC are incompatible with some of the city’s initiatives like on-site reuse and solar ready zones. Lastly, compliance with the Uniform Plumbing Code is known to be more expensive than the International Plumbing Code. In addition to Austin's existing affordability challenges, the unprecedented severe weather we faced last week has caused major damage to building plumbing systems and will require thousands of plumbing repairs on homes and commercial structures across the area; The use of the UPC will unnecessarily increase the costs of these necessary repairs.

RECA is requesting that the City adopt the International Plumbing and Mechanical codes over the inefficient and costly Uniform Plumbing and Mechanical Codes.

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.

On behalf of the Associated General Contractors (AGC) – Austin Chapter, I am providing this letter in support of the City of Austin's adoption of the International Code Council (ICC) family of codes.

The Austin AGC has been the leading commercial construction association in Travis and surrounding counties for 75 years. A significant part of our mission has been and continues to be to work collaboratively with owners and other members of the A/E/C community to deliver the best structures in the timeliest of manner. It is our belief that the adoption of a single set of codes, codes that have been developed by experts in the various trades, is directly in line with this mission.

It is a privilege to be a part of an industry that has the opportunity to shape and construct the buildings in a region such as ours. However, along with these opportunities comes a duty: of the contractor to meet the specified safety and functional standards as directed and of the city to have a process that allows the structures to go online as soon as possible. The Austin AGC believes adopting the ICC codes would greatly help the contractor and the City of Austin meet those duties.

Please feel free to reach out to me if you have any questions or would like to discuss further.

Phil Thoden
President and CEO
Austin AGC
philt@agcaustin.org

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.

I am writing on behalf of the International Code Council (the "Code Council") to provide comments on the City of Austin's proposed 2021 Mechanical Code. My name is Jim Cika. I am the Director of PMG Technical Resources with the International Code Council. I am a mechanical engineer, responsible for providing technical support to the Code Council membership across the state of Texas in matters related to the I-Codes®. In addition, I am available to the City of Austin, as a technical resource on the codes.

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.
The Code Council is a member-focused non-profit association dedicated to building safety and sustainability and we are proud to count Texas and many of its local jurisdictions, including Austin, as our Governmental Members. The Code Council develops the model building codes, the I-Codes, used in the design, construction, and compliance process to construct safe, sustainable, affordable and resilient structures. The suite of fifteen I-Codes, including the International Building Code® (IBC®), the International Residential Code® (IRC®), the International Mechanical Code® (IMC®), the International Fire Code® (IFC®), and others, are the most widely used and adopted set of building codes in the U.S. and around the world. Developed through a consensus-based process, the I-Codes incorporate the latest technology and provide the safest, most resilient structures for our families and communities.

In reference to the International Mechanical Code, there are multiple reasons why the City of Austin should adopt the 2021 IMC in lieu of the 2021 Uniform Mechanical Code which has been proposed. A few important reasons are as follows:

Consistency:

• The family of I-Codes are developed by one organization to have consistent language and requirements across all codes. The Uniform codes are developed by a different organization with a different process; requirements in these codes are not entirely consistent with the I-Codes.
• The International Mechanical Code is in use or adopted in 46 states, the District of Columbia, NYC, Guam, Puerto Rico and the U.S. Virgin Islands. Approximately 290 million people, or 87% of the U.S. population, live in areas that have adopted the IMC. Looking solely at the State of Texas, more than 500 cities have adopted the IMC; these cities account for over 80% of the population of Texas. With consistent adoption of the IMC by local jurisdictions, designers and builders may work across jurisdictional, county and state boundaries with conformity and ease. Uniform regulatory requirements minimize initial construction costs, promote efficiency, assist with time sensitive construction schedules, and promote the use of building materials consistent with providing safe, sustainable, resilient and healthy environments for the citizens of Austin.
• The IMC is fully correlated with the other 14 International Codes. The IMC has over 178 specific sections that reference and directly correlate with the other codes that comprise the I-Code Family of documents adopted and currently in use within Austin. In total there are over 387 IMC cross-references among the suite of 15 I-Codes. Adoption of non-correlated codes, like the UMC, forces cities to spend numerous hours of tedious review time and effort, drafting additional local amendments to each of their adopted codes.

Correlation:

Correlation of Codes is an extremely important aspect of providing enhanced public safety, improving fire prevention, reducing design problems, and reducing construction costs for the citizens of Austin. When it comes to safety, which is impacted by all of the construction trades, there are a significant number of cross-references in the I-Codes to ensure proper coordination among the trades during construction. There are a total of 327 cross-references between the International Mechanical Code and the other I-Codes adopted by the City of Austin (IBC, IECC, IFC, IRC, IPMC, and ISPSC). If the City of Austin approves the adoption of the Uniform Mechanical Code as proposed, all of these cross-references will be broken, and would need to be addressed through the amendment process.

As it stands, the current amendment package only addresses some of the cross-references between the IMC and other I-Codes. In some instances, the remedy is an amendment that provides a pointer to a section of the IMC. Examples of this are found in the proposed amendments to UMC sections 504.4, 519.7, 519.8, 519.9, and 520.9.2, which specifically defer to sections of the IMC; these amendments effectively force people to use the IMC to support the UMC. In other instances, requirements found in the IMC have been amended into the code to replace a section of the UMC, or to be added as a new section of the code. Examples of this are found in the proposed amendments to UMC sections 303.8.4, 504.4, 520.1, 520.2, 520.6.5, 520.7, 520.8, 520.8.1, and 922.1.

In general, the majority of the proposed amendments to the UMC are to:
• alleviate confusion caused by UMC language which differs from that used in the I-Codes,
• replace sections of the UMC with requirements from the IMC,
• add IMC requirements as new sections to the UMC, or to
• point to sections of the IMC not specifically addressed in the UMC.

While the number of proposed amendments and the potential for confusion brought on by the adoption of the UMC is of concern, of more concern may be the removal of amendments addressing energy conservation. The UMC makes no mention of the IECC and was not created to correlate with the IECC. Cross-references between the IMC and IECC have not been addressed in the amendments package. These cross-references include requirements for mechanical ventilation, demand control
ventilation, enclosed parking garage ventilation controls, automatic control of HVAC systems serving guestrooms, and others for residential and/or commercial construction. As proposed, all cross-references between the IMC and IECC have been broken, and not included.

In addition to these energy conservation concerns, proceeding with the adoption of the UMC, as proposed, many IMC cross-references with other I-Codes will be broken, putting the safety of the citizens of Austin at risk. These references impact life safety issues related to:
• fire and smoke protection features,
• fire protection and life safety systems, and
• means of egress.

The I-Codes, when adopted as a family of codes, correlating as they do, provide a consistent system of regulations that designers, builders, and regulators can rely on, across city, county or state lines. It is for this reason that FEMA's “Required Minimum Standards” for all FEMA funded construction require the latest I-Codes for post disaster recovery; FEMA requires construction not only meet the latest editions of the IBC, IRC, IECC, and IFC, but also the IPC, IMC, and IFGC.

If the City of Austin were to adopt the IMC, along with the IPC and IFGC, it would be providing its citizens with consistent, coordinated and correlated codes as required by FEMA to qualify for Public Assistance Funds following a natural disaster. Moving forward with the adoption of the UMC and UPC will put Austin citizens at risk of not receiving FEMA assistance in these instances.

To close, you see that there are multiple benefits to adopting the family of I-Codes. By adopting the IPC, IMC, and IFGC alongside the IBC, IECC, IFC, IRC, IPMC, and ISPSC the potential for public health and safety issues is significantly reduced, not only for building owners and tenants but for the system designer and the contractor. Moving forward with the adoption of the UMC and UPC will eliminate these benefits. Therefore, I formally request that the City of Austin consider adoption of the 2021 IMC, IPC, and IFGC in lieu of the UMC and UPC. Adoption of the I-Codes, as proposed here, will be a tremendous benefit to the City of Austin, its staff, and its citizens.

Thank you for the opportunity for the International Code Council to submit our public comments on this extremely important topic. The Code Council is happy to serve as a technical resource to the City of Austin and to follow-up with additional materials or data to aid in the adoption of the 2021 I-Codes. Please feel free to contact me with any questions or concerns.

Sincerely,

Jim Cika
Director, Plumbing, Mechanical, and Fuel Gas Technical Resources
International Code Council, Inc.
Phone: 888-ICC-SAFE (422-7233), x6241
Mobile: 774-328-6122
Email: jcika@iccsafe.org

Thank you for your feedback. The Development Services Department will share your comments with the Mechanical and Plumbing Board.

I would like to know if 310.8 exception C is written correctly. It appears to be the opposite of what is currently allowed by exception.

Section 310.8 exception (c) is written correctly. This exception exempts multi-family facilities where each dwelling unit has its own individual air-conditioning system. These unit types were not previously exempted.
ASHRAE is opposed to the changes proposed for Chapter 4 that would remove the explicit reference to ASHRAE 62.1 as an eligible compliance path for meeting the ventilation requirements.

The current text in Sections 401.1 and 401.2 serves an important purpose as an introduction to Chapter 4. It is unclear how the applicability of the ventilation requirements would be conveyed without it.

City of Austin has expressed a goal of producing a code that requires fewer amendments to the original UMC. The inclusion of ASHRAE 62.1 as alternative compliance path would help achieve that goal because a simple reference does not require any special customization. It's also an appropriate option to provide because ASHRAE 62.1 is developed in code-intended language by industry experts and has served as a major source of material for the UMC throughout many cycles. Retaining this reference would not impact the customized Chapter 4 requirements developed by the City of Austin; rather, it would provide a stretch option for designers to go beyond said requirements, which should be encouraged.

This amendment proposes deletion of Sections 401.1 and 401.2 from the local amendments which effectively restores the language from the published code. This section of published code begins with a description of applicability under 401.1.

The ASHRAE 62.1 design standard was deleted as an exception to create more flexibility in design options. Sections 302.2 and 302.3 of the Uniform Mechanical Code (included below) provide flexibility for alternate design. Design options include but are not limited to, compliance with ASHRAE 62.1.

Section 302.2 Alternate Materials and Methods of Construction Equivalency. Nothing in this code is intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety over those prescribed by this code. Technical documentation shall be submitted to the Authority Having Jurisdiction to demonstrate equivalency. The Authority Having Jurisdiction shall have the authority to approve or disapprove the system, method, or device for the intended purpose.

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