

Building a Better and Safer Austin Together

UNIFORM MECHANICAL CODE (UMC)

Question/Comment:

The City of Austin received a letter in favor of adopting the Uniform Mechanical Code from Stan's Heating, Air & Plumbing. A copy of that letter has been attached for reference.

Question/Comment:

The City of Austin received letters in favor of adopting the International code over the Uniform code from the organizations listed below. These letters have been attached for reference.

- American Planning Association Texas Chapter (APATX)
- Building Officials Association of Texas (BOAT)
- Building Owners and Managers Association Austin (BOMA)
- Home Depot
- International Association of Electrical Inspectors (IAEI)
- International Code Council
- International Code Council Bluebonnet Chapter

- Pool and Hot Tub Alliance (PHTA) and Texas Pool and Spa Coalition (TPSC)
- Smart Vent Products, Inc. & Floodproofing.com
- South-central Partnership for Energy Efficiency as a Resource (SPEER)
- Target
- Texas Fire Protection Associations (TFPA)



February 20, 2021

Mayor and Councilmembers City of Austin P.O. Box 1088 Austin, Texas 78767-1088

Via Email

Re: Support for Continuation of Uniform Mechanical Code (UMC)

Dear Mayor & Council Members,

The Austin Chapter of the Texas Air Conditioning Contractors Association (TACCA Greater Austin) urges the Austin City Council to leave the Uniform Mechanical Code in place.

New construction work in Austin does conform to the International Construction Code (ICC) already. It is much easier to install brand new duct work in a new home that has no sheetrock, and seal it to pass a 4% duct leakage test, as required by the ICC, than it is in an existing home.

Retrofit – replacement of existing equipment in lived-in homes – is governed by the UMC in the City of Austin. In a lived-in home that is already sheet-rocked, it is not possible to get to the ductwork to seal it to down to the ICC-required 4% duct leakage. The cost to cut all the sheetrock between floors and chases would never be recouped from the potential savings that might occur under the ICC's 4% duct leakage rule.

With the consumer's cost-benefit ratio in mind, TACCA Greater Austin strongly requests the City Council to leave in place the City of Austin's adoption of the Uniform Mechanical Code for existing construction. TACCA Greater Austin says: "It ain't broke."

Thank you in advance for your consideration.

Sincerely

Roland Arrisola President Emeritus TACCA Greater Austin

cc: Austin Plumbing & Mechanical Board Austin Dept. of Development Services

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American Planning Association **Texas Chapter**

Creating Great Communities for All

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APA Texas Chapter texas.planning.org

February 19, 2021

City of Austin P.O. Box 1088 Austin, TX 78767-1088

Attn: Honorable Mayor and City Council of Austin; City of Austin Plumbing and Mechanical Board; and City of Austin Development Services Department

The Texas Chapter of the American Planning Association (APATX) strongly encourages the City of Austin to consolidate its plumbing and mechanical codes under the International Code Council (ICC) series of codes, with appropriate local amendments consistent with regional practices.

Texas has consolidated most other construction-related codes under the ICC series of codes, with the plumbing and mechanical codes remaining an anomaly. Local Government Code Section 214.212 requires cities to use the International Residential Code (IRC), which references the International Plumbing Code (IPC) and International Mechanical Code (IMC).

Numerous amendments are required for the Uniform Plumbing Code (UPC) and Uniform Mechanical Code (UMC) to correlate with the other building codes adopted and enforced in Texas, Austin, and the overall region. Austin's regulatory approach to construction does not exist in a vacuum—it functions within a regional regulatory ecosystem and arguably a statewide and national ecosystem, given Austin's growing profile. Austin remains the only city in the region and one of only seven statewide to continue using the UPC and UMC.

Within those seven cities, including Austin, contractors, developers, and manufacturers face confusing code challenges and restrictive design choices, particularly as the surrounding cities have converted to the IPC and IMC in many cases. This also carries over to the professionals charged with enforcing the code. They must become experts in both and convey differences to the code users in those cities to plumbers and registered design professionals from outside of the jurisdiction. This increases costs for design and construction as well as administration and enforcement. It also introduces a greater risk for errors and incompatibilities that can jeopardize the health and safety of buildings and their inhabitants. We encourage the City of Austin to review regional adoptions of the ICC with other cities, and compare the relative simplicity of those local amendments compared to the complex system of local amendments required for the UPC and UMC.

The ICC is the only series of model codes that has a process for discovering, reviewing, and correcting conflicting code provisions between the codes. Selecting codes that are correlated to ensure uniformity and establish a minimum threshold of life safety is paramount in protecting Austin residents. Likewise, the ICC has been quicker to adopt new and proven technologies that better preserve life safety while also reducing construction costs without creating a preferential treatment for proprietary methods. With innovation and disruptive technologies continuing at high rates, this attribute is critical to supporting new and better construction approaches.

Perhaps more relevant with the recent impacts of the winter storm, FEMA's "required minimum standards" for all FEMA-funded construction require the latest ICC model codes, specifically including the IPC and IMCⁱ. FEMA has indicated it will not fund the rebuilding of public facilities post-disaster if that construction deviates. UPC and UMC use is likely to impede or disgualify efficient disaster recovery and resiliency and delay receipt of FEMA

The Texas Chapter of the American Planning Association is a 501(c)3 organization (23-7431522) as determined by the Internal Revenue Service. Gifts are tax deductible as allowed by law. Please consult your tax advisor for more information.

February 19, 2021 Page 2

disaster funds. This extends further to post-disaster access to contractors. Most out-of-state contractors (and contractors from within the state that work in nearly all other cities) are primarily trained on and familiar with the ICC codes. Maintaining consistency increases the efficiency of post-disaster recovery construction.

In short, APATX believes the adoption of plumbing and mechanical codes within the ICC suite of codes is simply good governance, and best protects the life, health, and safety of its citizens. We likewise believe such an approach serves to address various strategic goals for Austin, including accessibility and affordability of housing and supporting improved living environments for historically underrepresented groups.

APATX is comprised of over 2,500 professional planners and planning officials spread across the State of Texas. We are a diverse membership that includes planners employed in local government, local appointed planning commissioners, planners that work for other government levels, planning consultants that assist governments, planning consultants that assist the land development industry, and employees who work directly in the land development industry. Our membership likewise includes individuals from other allied professions, most notably architects, engineers, and some building officials that also serve as zoning administrators.

We hope our position is met with your acceptance and encouragement, and we welcome the opportunity for further dialogue or feedback with the City of Austin.

Sincerely,

Chance Sparks, AICP, CNU-A President, APATX

ⁱ FEMA Policy 204-078-2; FEMA Recovery Interim Policy FP-104-009-11 Version 2.1



PRESIDENT Jeffrey Widmer, C.B.O. Chief Building Official City of Rockwall 972-772-6453 jwidmer@rockwall.com

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SECOND PAST PRESIDENT AND TML BOARD REPRESENTITIVE Selso Mata Chief Building Official City of Plano 972-941-7212 selsom@plano.gov February 9, 2021

City of Austin P.O. Box 1088 Austin, Texas 78767-1088

Attn: Austin City Council; Austin Plumbing and Mechanical Board, Austin Development Services Department

The Building Officials Association of Texas (BOAT) would like to encourage the City of Austin to adopt the International Plumbing and Mechanical Codes.

BOAT is dedicated to enhancing the professionalism of its members, advancing the standards of the building industry, and leading in the resolution of public policy issues. We seek to establish higher standards of uniformity and efficiency in administering and enforcing model building codes and related ordinances. Promoting adoption of the ICC codes is consistent with our mission and pursuit of practical use of code knowledge for modern building materials and technology. It's no surprise that across the nation at most jurisdictional and state levels and at the General Services Administration (GSA) of the United States government, that all of the International Codes are adopted and utilized. The majority of Texas Cities choose the International Codes. BOAT supports and commends these actions. Only the IPC and IMC correlate with other building codes currently adopted by Texas. Contractors and developers value predictability. Our experience has revealed that standardized adoption of the I-Codes helps eliminate confusion in building design and creates consistent code enforcement among all jurisdictions.

BOAT encourages the City of Austin to pursue full adoption of all ICC codes as they represent the most up to date building science to construct safe, sustainable, affordable and resilient structures.

Sincerely,

Jeffrey Widmer President, Building Officials Association of Texas



2021 LEADERSHIP

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Jasmine Porter Newmark Vice President

Tricia Motz CBRE, Inc. Secretary/Treasurer

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Allison Petersen Blue Ocean Energy Management

Amy Oclon Board Member February 19th, 2021

City of Austin P.O. Box 1088 Austin, Texas 78767-1088

Dear, Austin City Council; Austin Plumbing and Mechanical Board, Austin Development Services Department:

The BOMA Austin Board of Directors is in support of the City of Austin's adoption of the International Code Council (ICC) family of codes (I-Codes). Specifically, the addition of the International Mechanical Code, the International Plumbing Code and Fuel Gas Codes (IFGC) in lieu of the currently adopted Uniform Plumbing Code (UPC) & Uniform Mechanical Code (UMC).

The International Code Council is a global membership body of 64,000 members dedicated to coordinated building and fire safety. ICC codes are carefully developed and regularly updated by a consortium of certified code experts along with design and industry representatives. Additionally, the IPC and IMC are designed to protect public health and safety through provisions that do not unnecessarily increase construction costs or restrict the use of new materials, products or methods of construction. No preferential treatment is specified to types of classes or materials, products, or methods of construction. In comparison, the UPC and the UMC limits or restricts the use of building products and plumbing methodologies. Adopting the IPC and the IMC would be a natural fit toward coordinating construction codes in Austin.

The general membership of BOMA Austin is well versed in the requirements of the I-Codes and considers them an essential component of protecting the health, safety, and welfare of the public. Many of our members also do business at a regional, national, and global level, and have found that the widespread adoption of the I-Codes yields advantages in cross-discipline design coordination, construction documentation efficiency, and an imbued confidence in the quality of the constructed product without regional limitation.

We hope our position is met with your acceptance and encouragement, and we welcome the opportunity for further dialogue with the City of Austin regarding this matter.

Sincerely,

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Marc A. Krohn, RPA, CPM BOMA Austin 2021 President



2455 Paces Ferry Rd., Atlanta, GA 30339

February 18, 2021

City of Austin P.O. Box 1088 Austin, Texas 78767-1088 Attn: Austin City Council, Austin Plumbing & Mechanical Board, Austin Dept. of Development Services

Re: Support of I-Code adoption in Austin, Texas.

Dear Mayor & Council Members,

I am writing to express support, on behalf of myself and The Home Depot, for adopting the International Plumbing, Mechanical, and Fuel Gas Codes for use in the city of Austin.

The reason is simple. The International Code requires no corelating committee changes, or interpretation, in order to mesh the adopted plumbing, mechanical, and fuel gas codes with the International Building Code, International Residential Code, and the International Energy Conservation Code as currently adopted by your city. There is no need to seek interpretation from local inspectors to resolve differences between the building code and the plumbing or mechanical codes during construction. Local Inspectors don't have the available time, especially when rebuilding after natural disasters, like the one we are currently experiencing.

While 2006 or later versions of the IBC, IRC, and IECC are required to be adopted by SECO & TDI (including Texas revisions for windstorms) every city in Texas is free to adopt either of the available Mechanical & Plumbing codes. As a licensed mechanical contractor in three states and a licensed master plumber in twelve, Texas is the only state for which I am held responsible to comply with two separate sets of codes for the same trade

Even the state of Minnesota with their recent conversion, from an "in-house" code to adoption of UPC as the state code, is suffering in correlating UPC to their adopted building code based upon the I-codes. This even filters down to required continuing education, requiring special explanations, to explain the differences between Minnesota and UPC. In Texas the chance of U-Codes being included in state required CE is zero unless the cities that adopt Uniform Codes choose to become CE providers themselves. Instead, your inspectors end up providing training by "red tag" on the differences between the I-Codes and the Uniform Plumbing and Mechanical Code.

In our state, only seven cities continue to adopt the Uniform codes. I personally grew up in the plumbing business using the Uniform code and understand the loyalty for this code. After the consolidation of BOCA, ICBO, and SBCCI into the ICC it seemed to us like something new. The Uniform Codes seemed more familiar, and formerly included installation standards (IS) referenced in the code. These standards were adopted as part of the code, in the past, along with the referenced standards. The Uniform code also had a special place, Chapter 14 in the UPC and Chapter 17 in the UMC where all referenced standards were listed and included in adoption with the code. This separation of the Standard from their applicable chapters created confusion among trades persons.

LICENSES:

As IAPMO began marketing their code in Asia and the Pacific, establishing seven overseas offices including China & India, they transitioned the Uniform codes to include the referenced standards within the section to which they applied, like NFPA and ICC. They also began removing many of the Installation Standards (IS) from the appendix. In essence removing the one defining difference that we loved about the Uniform Code.

As a Home Rule State any municipality, utility district, or public water system may amend their adopted codes to conform to local concerns that do not substantially vary from the TDLR's rules, or other Statutes and Rules of other agencies in Texas. Governmental entities amend the ICC all the time. Even the new state law prohibiting the exclusion of any approved materials from the code, has no effect since both ICC & IAPMO approve the same materials to the same standards. For these reasons, it makes good administrative sense for the International Plumbing Code, International Mechanical Code, and International Fuel Gas Code to serve as the sole trades codes in Texas Cities. I request that the council support this decision of your local development board.

Respectfully,

Richard W. Moore, Jr.

FIELD COMPLIANCE MANAGER - TEXAS P.O. Box 270099. Flower Mound. TX 75027 817-350-3653

rick moore@homedepot.com

LICENSES:



INTERNATIONAL ASSOCIATION ELECTRICAL INSPECTORS

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February 19, 2021

Rudolph Garza President/CEO

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City of Austin Austin, Texas 78767-1088

Attn: Austin City Council; Austin Plumbing and Mechanical Board, Austin Development Services Department

The International Association of Electrical Inspector (IAEI) would like to encourage the City of Austin to adopt the International Plumbing and Mechanical Codes.

Since 1928 IAEI has been the leader in International Electrical Safety. Our 10,000 members consist of Electrical Inspectors, Electricians, Electrical Engineers, Building Inspectors, and other professionals dedicated to the field of Electrical Safety. We are active Partners with the International Code Council (ICC) and support uniformity in the adoption of codes. No other codes can compete with the science and diligence involved in developing the Electrical and Mechanical Codes.

The International Plumbing and Mechanical Codes offer uniformity across state, and even International, borders assuring safety for everyone in the community. We highly recommend that the City of Austin adopt these codes as the governing codes in Austin, Texas.

Sincerely,

Rudolph Garza President and CEO



International Code Council 500 New Jersey Avenue, NW Sixth Floor Washington, DC 20001 t: 888.ICC.SAFE (422.7233) t: 202.370.1800 f: 202.783.2348 www.iccsafe.org

Austin, TX public comments on the adoption of the International Plumbing Code[®] (IPC[®]) and International Fuel Gas Code[®] (IFGC[®])

February 20th, 2021

I am writing on behalf of the International Code Council (the "Code Council") to provide comments on the City of Austin's proposed 2021 Plumbing Code. My name is Shawn Strausbaugh and I am the Senior Director of PMG Technical Resources with the International Code Council. I am responsible for providing technical support to the Code Council membership in matters related to the I-Codes[®]. In addition, I am available to the City of Austin, as a technical resource on the codes.

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, build 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.

The International Plumbing Code (IPC) is the preeminent International model plumbing_code currently adopted in 37 states across the US. Approx. 250 million people, or half the total US population, live in a state that has adopted the IPC. Furthermore, in the State of Texas at least 500 cities use the IPC, which represents over 80% of the population of Texas. The IPC is also used in Saudi Arabia, the United Arab Emirates, several Caribbean Islands, Columbia (Central America) along with Mexico, which uses the International Residential Code (IRC) and its plumbing provisions.

In reference to the IPC and International Fuel Gas Code (IFGC) there are multiple reasons why the City of Austin should adopt the 2021 IPC and 2021 IFGC in lieu of the 2021 Uniform Plumbing Code which has been proposed. A few important reasons are as follows:

Correlation:

• The I-Codes are all correlated to work together without conflicts to eliminate confusion in building design, plan review and inspections, and provide clarity for contractors constructing buildings including the tradesperson installing the systems within the structure. Current and correlated codes eliminate conflicting or duplicative requirements. This would be of upmost benefit for adoption of the IPC which correlate together to the existing and proposed adoption of

the IBC and IRC here in Austin, TX. There are 38 IPC correlated sections in the IBC; 26 in the IMC; 9 in the IFGC; 7 in the IECC and 8 in the IFC; all of which avoids conflict and over lapping requirements. Correlated cross-references impact life safety issues related to:

- Accessibility (for persons with disabilities) of buildings, per IBC and the International Code Council A117.1 standard including accessible plumbing fixtures requirements contained which are contained within the 2021 IPC.
- o allowable use of combustible materials
- o design and installation of roof drainage systems
- o minimum number of required plumbing fixtures
- o fire protection and life safety systems
- o means of egress
- Currently numerous amendments are created in Austin, TX to correlate the current and proposed adoption of the UPC which would not be necessary if the IPC was adopted.
 - o Plumbing fixtures
 - When adopting the IPC, the plumbing fixture calculations will correlate with the IBC plumbing fixture requirements as the IBC plumbing fixture requirements are directly scoped from the IPC, thus not requiring additional extensive amendments. Further the minimum number of plumbing fixtures required under the IPC allows overall fewer plumbing fixtures for numerous occupancy classifications. We will note that assembly occupancy classifications for outdoor stadiums and arenas require a greater number of water closets overall due to loading points during breaks and intermissions were many users are seeking toilet facilities. Further the minimum number of women's water closet is greater under the IPC in some instances to accommodate the difference between male and female use of toilet facilities.
 - Accessibility (usability for persons with disabilities) provisions IPC 404 and 410
 - The IBC and the IPC are correlated pertaining to when plumbing fixtures are required to be accessible.
 - More specifically when drinking fountains, are required, they are to be accessible for both a standing person and a potential wheelchair user. This requirement is clearly provided within the IPC.
 - The 2021 IPC includes the plumbing related accessibility requirements directly from the ICC A117.1-2017 which provides the user of the IPC direct reference applicable requirements.
 - Fire resistance rated construction IPC 307.3
 - Protection of penetrations for fire resistance rated assemblies is acknowledged in the IPC and references the IBC for specific information on the proper installation of plumbing systems within these areas. Thus, protecting and ensuring the fire related safety provisions of the IBC and IPC are correlated and not overlooked.
 - o Flood design- IPC 309
 - Specific plumbing system components are listed in the IPC for structures located in flood hazard areas and correlate with relevant IBC section for further guidance.
 - Hot water supply systems and insulation of piping 607.5

 Insulation of hot water supply systems are given a specific reference to the IECC for all types of buildings.

Flexibility and Options:

- The 2021 IPC now allows design options for providing the minimum number of plumbing fixtures. These design options would allow one or more single user toilet facilities or multiple user toilet facilities to be used by all persons regardless of gender.
- The IPC allows waterless urinals with no restrictions. The UPC allows waterless urinals but requires a water supply piping rough-in to each waterless urinal, which increases construction costs. The waterless urinal is not only is a proven effective water conservation tool, but may also be considered more sanitary, since it is a non-touch plumbing fixture. (424)
- Further along the required plumbing fixture topic, the IPC does not require drinking fountains in restaurants that provide customers with drinking water in a container free of charge. The UPC only allows water stations to be substituted for drinking fountains where food is served indoors however the term "water stations" is undefined in the UPC which may lead to confusion regarding the intent. The IPC requirement provides a clear code path with significant construction cost saving well-beyond_the unclear UPC requirements. (410.4)
- System designers or plumbers have a multitude of piping material choices for both drainage waste and vent systems along with water supply systems under the IPC including materials such as Polyolefin Pipe for sanitary systems which is not permitted in the UPC. Ultimately the use specific piping materials within structures is limited by both the building code and the mechanical code such as for use within plenums. Again, these requirements would all be correlated with the adoption of the IPC and IMC and the existing IBC adoption here in Austin. (702)
- The International Plumbing Code allows trenchless technology through pipe bursting for all drainage materials that gives both the code official and plumbers the necessary options for the rehabilitation of an aging building sewer and building drain infrastructure while still being environmentally friendly," *GREEN* " by reducing negative impact to property and other infrastructure. The UPC has no pipe bursting coverage. (716)
- The International Plumbing Code provides a myriad of venting method options for the system designer or plumber to use. These venting methods are not arbitrarily written or restricted as they are under the UPC, rather numerous cost saving venting methods are available options within the IPC. Illustrated below are a few examples:
 - The IPC includes the option, not mandatory use of air admittance valves (AAV's) as a venting methodology for plumbing systems. These AAV's provide a proven and cost-effective venting method which still requires at least one stack vent or vent stack that extends to the outdoors. Further these AAV's must comply with the respective ASSE standard for the intended use. The use of AAV's in the Detroit Lions Football Stadium resulted in construction cost savings of more than \$263,000.
 - The IPC does not limit the use of a combination waste and vent system in areas of the building where structural conditions preclude the installation of conventional systems as required in the UPC, in section 910. Logically, a venting system either works or it doesn't work, structural provisions of the building itself have no impact on this concept. This is another unjustified burden placed on the designer or plumber which would lead to

judgment calls of the code official as to assess whether a "structural condition" existed. (915)

- Horizontal wet venting for bathroom groups is limited to one-bathroom group, as noted in section 908.2 of the UPC where the IPC allow two-bathroom groups to be served by a horizontal wet vent system. This restriction of the UPC simply limits the design options and increases the cost of construction. (912)
- Single-stack venting in the UPC is not provided in the body of the code, but rather is listed in Appendix C. It is required to be designed by a registered professional engineer as an engineered design, increasing the cost of construction. The IPC only requires that the single-stack vent system be installed as per the sizing and installation requirements clearly provided within the IPC. (917)
- In addition to the toolbox of venting methods just outlined, vent terminations are permitted to be extended through the side wall of buildings in addition to roofs, under the IPC. This_allows greater design and installation choices especially when additions or alterations are made to a plumbing system in an existing building or structure. The UPC only allows vents to terminate through the roof of the structure. (903.6)
- The IPC recognizes several different types of trap seal protection devices including reclaimed or gray water trap seal primer valves and barrier type trap seal protection devices. These additional two types of trap seal protection devices are not recognized in the UPC. (1002.4)
- The IPC has complete sizing requirements for oil interceptors. The UPC states that the AHJ shall determine the size of the interceptor where more than 10 vehicles are service or stored. Further, the IPC does not require the installation of an oil interceptor where vehicle storage is proposed as required in the UPC, but only requires an interceptor where automobiles are serviced, greased, repaired or washed or where gasoline is dispensed. (1003.4.2)
- Siphonic roof drain systems under the UPC must by designed by a registered design professional and additionally comply with the alternative engineered design requirements which creates a significant burden on both the designer and the code official for design review and approval. The IPC allows siphonic roof drain systems that are designed in accordance with ASPE 45 without additional alternative engineered design requirements. (1107)

Cost comparison:

- The International Code Council commissioned a comprehensive independent analysis of plumbing codes to understand the costs and savings associated with building under the IPC in comparison to the UPC.
 - Henderson Engineers found the average new home would save up to \$4,000 in construction costs using the IPC. The savings result in greater home affordability and reduced resources in the construction of the home without sacrificing safety.
 - Over the past 12 years, counties that adopted and applied the IPC rather than the UPC have saved \$38 billion in construction costs, emitted one million fewer ton of carbon dioxide, realized 166,000 additional jobs, and saved 880 million feet of pipe.
 - Overall, from 2007 to 2018, IPC states and counties realized an estimated 166,000 additional jobs, while UPC states and counties realized 85,000 fewer jobs.

- From 2007 and 2018, counties that did not adopt or use the IPC emitted an additional 500,000 tons of CO2. That is equivalent to taking 100,000 passenger vehicles off the road for one year.
- For complete information visit https://www.iccsafe.org/advocacy/ipc-tool/

2021 International Fuel Gas Code

The International Fuel Gas Code (IFGC) is the preeminent International model code currently adopted in 42 states across the US. Approximately 273 million people, or 82% of the total US population, live in areas that have adopted the IFGC. Furthermore, in the State of Texas at least 500 cities use the IFGC, which represents over 80% of the population of Texas.

Correlation:

- There are 33 IFGC correlated sections in the IBC; 9 in the IPC; 24 in the IMC; 5 in the IECC and 57 in the IFC; all of which avoids conflict and over lapping requirements. Correlated cross-references impact life safety issues related to:
 - o allowable quantities of hazardous materials
 - o detailed ventilation and exhaust requirements based on occupancy and use
 - o fire and smoke protection features
 - o fire protection and life safety systems
 - o means of egress
- The IFGC provides coverage on the installation of gaseous hydrogen systems, while also correlates with Chapters 53 and 58 of the International Fire Code. The UPC contains no coverage of hydrogen systems.
- The IFGC provides guidance for compressed natural gas motor vehicle fuel dispensing facilities while correlating with the IFC. Code correlation is not just about proper numeration of sections. Consideration must be given to the inter-relationship between technical safety provisions.
- The ICC Code Correlation Committees analyze the entire family of codes. The UPC does not go through any such strict scrutiny nor is there a committee that analyzes and compares the safety provisions of other codes in accordance to the International Codes.
- Structural safety is referred to a generic "Building Code" term in the UPC. The structural safety requirements in the IBC are also included in the IFGC which is a huge advantage to the code user.
- Codes that correlate, provide better public safety, better fire prevention, reduce design problems and reduce construction cost.

Flexibility and Options:

- The IFGC allows the installation of gas fired clothes dryers in a residential bathroom or toilet room having a permanent opening of not less than 100 square inches that communicates with a space outside of the sleeping room, bathroom, toilet room, or storage closet. This is an extra safety requirement that the UPC does not provide.
- The IFGC mandates compliance of its heating, ventilating and air-conditioning systems in all structures being designed for efficient utilization of energy in accordance with the IECC as adopted in Austin, TX.

• The IFGC does not allow fuel gas piping to penetrate the foundation walls when the piping is installed below grade. There have been a number of incidents within the United States where fires or explosions have occurred as the result of a fuel gas leak that originates underground and made its way into the building, below grade. The UPC allow underground gas piping penetrations of a foundation wall.

Cost Savings:

- The IFGC allows Schedule 10 steel pipe to be used for fuel gas piping when joints are made using press-connect fittings, flanges, brazing or welding. Other model codes do not allow the use of pipe less than Schedule 40. This results in a significant potential cost savings.
- Severing the IFGC, or any other code from the family of I-Codes, could cause potential conflicts and technical safety provision lapses that would lead to losses in money, property and most importantly public safety.
- A code that is not correlated wastes not only staff resources but could cause major conflicts and serious safety concerns upon completion of a project that can lead to substantial cost increase.

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, IFGC, and IMC.

If the City of Austin were to adopt the IPC, along with the IMC 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, IFGC, and IMGC alongside the IBC, IECC, IFC, IRC, IPMC, and ISPSC the potential for public health and safety issues is significantly increased, 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 countless benefits. Therefore, we formally request the City of Austin consider the adoption of the 2021 IPC, IFGC, and IMC 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, TX 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 including IPC and IFGC. Please feel free to contact me with any questions or concerns.

Sincerely,

Shawn Strausbaugh

Shawn Strausbaugh International Code Council, Inc. Senior Director of PMG Technical Resources Plumbing, Mechanical, Fuel Gas & Swimming Pools (PMG) sstrausbaugh@iccsafe.org (888).ICC.SAFE, x6242



February 21, 2021

City of Austin Attn: Austin City Council, Mechanical and Plumbing Board, Development Services Department P.O. Box 1562 Austin, TX 77251

Via email: <u>steve.adler@austintexas.gov;</u> <u>natasha.madison@austintexas.gov;</u> <u>vanessa.fuentes@austintexas.gov;</u> <u>sabino.renteria@austintexas.gov;</u> <u>gregorio.casar@austintexas.gov;</u> <u>ann.kitchen@austintexas.gov;</u> <u>mackenzie.kelly@austintexas.gov;</u> <u>leslie.pool@austintexas.gov;</u> <u>paige.ellis@austintexas.gov;</u> <u>kathie.tovo@austintexas.gov;</u> <u>Alison.Alter@austintexas.gov;</u> <u>spencer.cronk@austintexas.gov;</u> <u>rick.arzola@austintexas.gov;</u> <u>DSDEngagementUnit@austintexas.gov;</u> Denise.Lucas@austintexas.gov; Beth.Culver@austintexas.gov

Dear City of Austin,

On behalf of the International Code Council (Code Council), thank you for the opportunity to comment on Austin Development Services Department's (DSD) plans to update the Uniform Plumbing Code (UPC) and Uniform Mechanical Code (UMC). DSD states its primary goal in updating the UPC and UMC is to reduce amendments.¹ In addition, DSD's plumbing and mechanical code updates are proposed to work in concert with potential updates to the City's adopted International Codes, or I-Codes, which include the *International Residential Code* (IRC), *International Building Code* (IBC), *International Fire Code* (IFC), *International Existing Building Code* (IEBC), *International Property Maintenance Code* (IPMC), and *International Energy Conservation Code* (IECC), as well as in coordination with the recently adopted *International Wildland Urban Interface Code* (IWUIC) and state mandated *International Swimming Pool and Spa Code* (ISPSC).

Austin's adoption of the UPC and UMC is neither logical nor efficient when: (1) the Uniform Codes do not easily correlate with or reference the mandated I-Codes in Texas whereby technical amendments will always be required; (2) non-correlated codes create a costly administrative and unneeded complex technical burden for Austin staff and the building and construction industry; (3) the IPC, IMC and IFGC along with the correlated I-Codes are the predominant codes adopted in Texas and the U.S. whereby adoption will keep Austin competitive in the global market; and (4) the Uniform Codes do not correlate with the building codes required for FEMA Assistance.

To this end, the Code Council, along with a broad range of reputable stakeholders, respectfully recommend that the safest, most logical and efficient way to reduce amendments is for Austin to adopt the nationally recognized *International Plumbing Code* (IPC), *International Mechanical Code* (IMC) and *International Fuel Gas Code* (IFGC), which seamlessly correlate with the City's adopted Family of I-Codes, in lieu of the UPC and UMC.

As a member-focused association dedicated to building safety and the developer of the I-Codes, the Code Council is proud to count Austin as a Governmental Member and we commend the City for its proactive steps to adopt currently recognized national standards as well as support an update to reflect the most recent code editions available.

¹ City of Austin Proposed 2021 Technical Code Changes - PublicInput.com; PowerPoint Presentation (publicinput.com)

However, we believe that City leadership should make informed decisions in the best interest of Austin citizens and the development community as a whole. Therefore, the Code Council, strongly recommends adoption of the IPC, IMC and IFGC with the correlated Family of I-Codes in lieu of the UPC and UMC in Austin.

CORRELATED CODES ARE KEY TO ENSURING BUILDING SAFETY, IMPLEMENTING ADMINISTRATIVE EFFICIENCY, DECREASING INDUSTRY COMPLEXITY AND REDUCING TECHNICAL AMENDMENTS IN AUSTIN

Developed through a nationally recognized and federally accepted consensus-based process by the Code Council,² the I-Codes are the most widely used and adopted set of building codes in the U.S. and around the world. An important feature of the I-Codes is that they are correlated to work together and reference each other, without conflicts. Thus, ensuring the utmost safety, eliminating complexity, and enabling ease of use and reduced costs for all stakeholders.

In Texas, municipalities are statutorily mandated to adopt the IBC, IRC, ISPSC, and IECC. For plumbing and mechanical safety, current statute maintains either the Uniform or International Codes may be adopted.³ However, Texas Attorney General Opinion No. JC-0453 (2002) clarified that the International Residential Code is the residential building code for municipalities in Texas and its plumbing provisions are the plumbing code for residential construction.

To this end, it is very important to understand, that only the IPC, IMC and IFGC are developed through the same consensus-based process and work seamlessly with Texas' mandated I-Codes. As an example, within the IBC, there are 14 direct references to the IPC, 59 direct references to the IMC and 8 direct references to the IFGC.

In contrast, the UPC and UMC are codes developed through an entirely different process by an entirely different organization. Material technical differences between the Uniform Codes and the IPC, IMC, IFGC exist.

Using correlated codes that are designed to work together, ensures seamless application and coordination across all areas of design and construction. Numerous complex amendments will always be required to correlate the Uniform Codes with the I-Codes. If there is a mistake in the technical correlation process, the safety of all Austin codes, structures and citizens is potentially compromised.

Non-correlated codes also create a costly administrative burden for Austin. The required amendment process to harmonize uncorrelated codes demands extensive city resources and countless hours of technical staff time. In fact, in the 2015 Final Zucker Report, commissioned by the city, Recommendation 68 states, "The Building Official should adopt the International Code Council set of national codes in order to achieve a more harmonized set of codes." Additionally, Recommendation 69 suggests, "The Building Official should work to eliminate existing local code amendments whenever possible."⁴ Thus, to safeguard the public and streamline regulations, it is prudent for the City to adopt plumbing and mechanical codes that correlate with the other mandated building codes in Texas.

THE INTERNATIONAL CODES ARE THE PREDOMINANT CODES ADOPTED IN TEXAS AND THE U.S.

The trend of plumbing and mechanical code adoptions in the surrounding Austin area, Texas and the U.S., has overwhelmingly moved towards the IPC, IMC and IFGC.⁵ Hundreds of Texas jurisdictions, including large cities such as, San Antonio, Dallas, Fort Worth, El Paso, Arlington, and Corpus Christi, as well as neighboring Austin cities such as Georgetown, Leander, Round Rock, Cedar Park, San Marcos, Kyle, Manor, New Braunfels,

² https://www.iccsafe.org/products-and-services/i-codes/code-development/code-development-procedures/

³ See https://www.sll.texas.gov/law-legislation/texas/building-codes/

⁴ See Zucker Final Report | AustinTexas.gov

⁵ 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. The International Plumbing Code is in use or adopted in 37 states, the District of Columbia, NYC, Puerto Rico, and Guam. The International Fuel Gas Code is in use or adopted in 42 states, the District of Columbia, NYC, Guam, and Puerto Rico.

Pflugerville, Taylor, Bastrop, Seguin, Schertz and Manor adopt the IPC, IMC and IFGC over the Uniform Codes. These cities represent over 80% of the population in Texas. In contrast, only seven Texas cities adopt the UPC and UMC: Austin, Alpine, Cibolo, Galena Park, Houston, Junction, and Pasadena.

Since most Texas cities adopt the IPC and IMC, the costs can be significant for those that do not. Contractors, developers, manufacturers, installers and inspectors value predictability over inconsistency and are accustomed to working with the I-Codes. Those working in jurisdictions enforcing the Uniform Codes face confusing code challenges, restrictive design choices, and are often forced to recalibrate their overall project design and development with non-correlated codes. These issues impose undue hardship with delayed project timelines, re-estimating of labor and material costs, and overall logistical disruptions when entering the jurisdictional boundary of Austin.

Adopting the IPC, IMC and IFGC, will make it easier for contractors, developers, manufacturers, installers and inspectors to expand their reach and increase their business across not only visible geographical boundaries, but invisible business borders. For example, nationally recognized corporations such as Home Depot and Target, prefer code consistency rather than having to comply with different codes and different requirements within the same state. Plumbing, mechanical and fuel gas codes, correlated with other building codes required in Texas, allows them to design uniform buildings and systems, that are replicable. The ability to easily replicate saves time, valuable resources and attracts business development.

The 2015 Zucker Final Report also found that contractors working in multiple jurisdictions in the region are placed under an additional burden to know and apply Austin's differing Uniform Code regulations.⁶

Moreover, establishing homogeneity in the plumbing and mechanical industry allows building and materials manufacturers to do business on a larger scale resulting in cost savings. Consistent codes also help protect real estate investments by providing a level of quality and safety, which can result in lower insurance costs. In addition, correlated codes provide for a more development friendly business environment. Adopting the IPC, IMC, and IFGC will decrease costs and increase efficiencies for the City's regulatory program as well as promote prudent resource management for Austin and industry stakeholders who are responsible for safe building and construction.

THE UNIFORM CODES DO NOT CORRELATE WITH THE BUILDING CODES REQUIRED FOR FEMA ASSISTANCE

Unfortunate events like floods, tornadoes, hurricanes, wildfires and the most recent severe winter storms have shown the need for Austin to become better prepared and take mitigating steps to build stronger for the future. A fast recovery after a catastrophic event can be difficult; therefore, a streamlined and efficient regulatory process is important to getting people safely and quickly back into their homes and their jobs.

FEMA's "Required Minimum Standards" for all FEMA funded construction require the latest I-Codes.⁷ For post-disaster recovery, FEMA requires construction meet the latest editions of the International Building Code, International Residential Code, International Energy Conservation Code, International Fire Code, International Existing Building Code; International Wildland-Urban Interface Code; International Plumbing Code; International Mechanical Code; International Fuel Gas Code; ICC 500-14, ICC/NSSA Standard on the Design and Construction of Storm Shelters; ICC 600-14, Standard for Residential Construction in High-wind Regions.⁸ Use of the UPC and UMC could impede an efficient recovery, cause marketplace confusion, and possibly delay receipt of FEMA disaster funds.

Another unintended consequence in recognizing the UPC and UMC can occur during post disaster rebuilding. Since most out-of-state contractors helping Texas recover after a disaster event will largely be trained and familiar with the I-Codes, adopting the Uniform Codes causes confusion and could delay disaster recovery

⁶ See Zucker Final Report | AustinTexas.gov

⁷ FEMA Policy 204-078-2.

efforts. Adoption of the I-Codes, including the IPC, IMC, and IFGC, clarifies rebuilding requirements and complies with FEMA disaster recovery requirements.

SUMMARY

Keeping development costs low, reducing unnecessary burdens, and applying clear, consistent, and commonsense standards to Austin regulations makes sense. Adopting the IPC, IMC and IFGC in correlation with the City's currently adopted Family of I-Codes will best serve the public as well as the building and construction industry in Austin and the surrounding region by promoting consistency, eliminating code confusion, reducing complex amendments and increasing administrative efficiency, while still ensuring the utmost safety.

For the reasons above, we respectfully recommend Austin consider and adopt the IPC, IMC and IFGC. The Code Council, through our 4,200 Texas members and 18 active Texas Chapters, hopes our position is met with your acceptance and encouragement. We welcome the opportunity for further dialogue and are happy to follow-up with additional information to aid in the City's work.

Sincerely,

Kelly D. Sadler

Kelly D. Sadler, J.D. International Code Council Government Relations Senior Regional Manager, TX



February 22, 2021 City of Austin PO Box 1088 Austin, Texas 78767

Attn: Austin City Council; Austin Plumbing Board, Austin Development Services Department

Bluebonnet Chapter is dedicated to enhancing the professionalism of its members, advancing the standards of the building industry, and leading in the resolution of public policy issues. We seek to establish higher standards of uniformity and efficiency in administering and enforcing model building codes and related ordinances. Promoting adoption of the ICC codes is consistent with our mission and pursuit of practical use of code knowledge for modern building materials and technology. It is no surprise that across the nation at most jurisdictional and state levels and at the General Services Administration (GSA) of the United States government, that all the International Codes are adopted and utilized. The majority of Texas Cities choose the International Codes. Bluebonnet Chapter supports and commends these actions. Only the IPC and IMC correlate with other building codes currently adopted by Texas. Contractors and developers value predictability. Our experience has revealed that standardized adoption of the I-Codes helps eliminate confusion in building design and creates consistent code enforcement among all jurisdictions. Bluebonnet encourages the City of Austin to pursue full adoption of all ICC codes as they represent the most up to date building science to construct safe, sustainable, affordable, and resilient structures.

Bluebonnet Chapter encourages the City of Austin to pursue full adoption of all ICC codes as they represent the most up to date building science to construct safe, sustainable, affordable, and resilient structures.

Sincerely,

William Woods

President Bluebonnet Chapter

Bluebonnet Chapter ICC PO Box 1329 Killeen Tx 76540 254-616-3131





February 21, 2021

The Honorable Steve Adler 301 W. 2nd St. House District 5 Austin, Texas 78701

Re: Support for International Plumbing and Mechanical Codes.

Dear Mayor Adler:

The Pool and Hot Tub Alliance (PHTA) writes in support of the City of Austin to adopt the International Plumbing and Mechanical Codes.

The ICC codes are carefully developed and regularly updated by a consortium of certified code experts along with design and industry representatives. The level of confidence that the codes inspire have resulted in the adoption of ICC codes across the nation at most jurisdictional and state levels, as well as many other global markets. Additionally, the majority of Texas Cities choose the International Codes. Standardized adoption of ICC codes helps eliminate confusion in building design and creates consistent code enforcement among all jurisdictions.

In 2019, Texas adopted the International Swimming Pool and Spa Code (ISPSC) as the municipal swimming pool and spa code in the state. The ISPSC is part of the family of I-codes and works in conjunction with the International Plumbing and Mechanical Codes. Since the passage of HB 2858, over 100 jurisdictions, including Austin, have adopted the ISPSC.

PHTA represents more than 3,500 business members that work within the swimming pool and hot tub industry, including manufacturers, builders, retailers, and servicers. This includes 60 members in the city of Austin and 362 members in Texas state-wide. The general membership of PHTA Texas is well versed in the requirements of the International Plumbing and Mechanical Codes thanks to the adoption of the ISPSC. Moreover, adoption of the International Plumbing and Mechanical Plumbing and Mechanical Codes will ease the burden on industry members by providing them a reasonable, comprehensive code which they can utilize in their work.

PHTA supports the city of Austin's adoption of the International Plumbing and Mechanical Codes, and stand ready to assist you and the City Council with the adoption

> Texas Pool & Spa Coalition of the Pool & Hot Tub Alliance 703-838-0083 | www.txpsc.org





process. Should you have questions or require assistance, please feel free to contact us directly.

Sincerely,

ason Davidson

Jason Davidson PHTA, Director of Government Relations jdavidson@phta.org

Rick Hagan

Rick Hagan TPSC, Chairman Rick.hagan@poolcorp.com

Addam Bassow

Addam Barrow PHTA, Austin Chapter President TPSC, Board Member <u>abarrow@bluesquaremfg.com</u>

About PHTA

The Pool & Hot Tub Alliance was formed in 2019, combining the Association of Pool & Spa Professionals (APSP) and the National Swimming Pool Foundation (NSPF). With the mission to "Celebrate the Water," PHTA facilitates the expansion of swimming, water safety and related research and outreach activities aimed at introducing more people to swimming, making swimming environments safer and keeping pools open to serve communities.

APSP, now the PHTA, is the world's oldest and largest association representing swimming pool, hot tub, and spa manufacturers, distributors, manufacturers' agents, designers, builders, installers, suppliers, retailers, and service professionals. Dedicated to the growth and development of its members' businesses and to promoting the

> Texas Pool & Spa Coalition of the Pool & Hot Tub Alliance 703-838-0083 | www.txpsc.org





enjoyment and safety of pools and spas, PHTA offers a range of services, from professional development to advancing key legislation and regulation at the federal and local levels, to consumer outreach and public safety. PHTA is the only industry organization recognized by the American National Standards Institute to develop and promote national standards for pools, hot tubs, and spas. For more information, visit PHTA.org.

About TPSC

The Texas Pool and Spa Coalition protects the interests of the Texas pool and spa industry and the consumer through education and advocacy, while promoting superior standards of safety and efficiency. By uniting lawmakers and industry, we work to bring about effective and sustainable change.

The Coalition works to:

- Represent Texas pool and spa professionals and consumers at the state and local level
- Examine and track bills to keep members up to date on critical industry issues
- Testify before local and state legislative, regulatory, bodies on behalf of members and the industry
- Maintain a constant presence at Texas legislature and state regulatory agency meetings

The TPSC was formerly known as the Aquatics Professional Education Council (APEC), which was formed in November 2004 by a small group of pool professionals with the objective to safeguard, improve and enhance the swimming pool and spa business climate in Texas. APEC was successful throughout the years in protecting the industry and pushing forward good public policy. In January, 2019, APEC changed their name to TPSC to assist in identification with elected officials, all the while continuing their goal to advance government relation efforts in Texas.



City of Austin PO Box 1088 Austin, TX 78767

February 17, 2021

Attn: Austin City Council; Austin Plumbing and Mechanical Board, Austin Development Services Department

On behalf of Smart Vent Products, Inc & Floodproofing.com, I write this letter encouraging the City of Austin's adoption of the International Code Council (ICC) family of construction codes (the I-Codes). The addition of the International Mechanical Code, International Plumbing Code, and International Fuel Gas Code will strengthen and compliment the currently adopted and enforced International Residential Code, Building Code, Fire Code, and Energy Conservation Code.

Smart Vent Products and Floodproofing.com provides flood protection products and systems to protect structures in flood zones. Our line of engineered flood vent products are all evaluated through the International Code Council Evaluation Service (ICC-ES). The ICC-ES is a subsidiary of the ICC and puts products through rigorous performance testing and quality checks before providing an Evaluation Report which is their stamp of approval for the industry to reference. This process is just another example of how the ICC conducts careful development of their I-Codes. New versions of the I-Codes are released every three years, a result of certified code experts from across the country analyzing best practices and approaches to ensure the Health, Safety, and Welfare of the public.

Our company provides floodplain construction training courses to the architect and design community. Our courses are approved through the American Institute of Architects (AIA) and the I-Codes are at the base of our education sessions. FEMA has recognized and references the I-Codes in their studies and guidelines. They strongly encourage the use and continuous adoption of newest versions of the I-Codes being published. Overall from a floodplain perspective, our company has seen that when the I-Codes are adopted and enforced, structures meet and exceed all FEMA and NFIP requirements resulting in lower flood insurance premiums for the property owner.

Smart Vent Products, Inc & Floodproofing.com strongly encourages the City of Austin to adopt the International Mechanical Code, International Plumbing Code, and International Fuel Gas Code along with all versions of the I-Code family.

Thank you,

Tom Little, CFM, CGP Executive Vice President | Smart Vent Products Inc & Floodproofing.com

SMART VENT PRODUCTS, INC.





February 18, 2021

City of Austin Development Services Department 505 Barton Springs Road Austin, Texas 78704

To Whom It May Concern:

The South-central Partnership for Energy Efficiency as a Resource (SPEER) is providing this letter in support of the City of Austin Development Services Department's adoption of the I-Code (International Code Council) family of building codes, including the International Plumbing Code and the International Mechanical Code. These codes will build upon and add consistency of code development, adoption and interpretation.

The International Code Council is largest code development body in the U.S. with more than 65,000 members including Building Officials, Inspectors, Plan Reviewers as well as representatives of trade organizations representing home builders, contactors, materials manufacturers and suppliers. The I-Codes are developed and updated through an in-depth process of proposals, comments, hearings and final voting by the officials responsible for ensuring compliance with the codes. This results in codes that are effective, promote health, safety and efficiency in building practices, and are enforceable by the code officials charged with ensuring such compliance. Most importantly, the I-Codes are a family of codes that are developed to maintain consistency among and between the various code families. This consistency is the foundation of effective design, construction and compliance and should be maintained across a jurisdiction's adopted codes.

SPEER is the U.S. Department of Energy recognized Regional Energy Efficiency Organization supporting energy and building code education, adoption and compliance throughout Texas and Oklahoma. SPEER has provided more than 12,000 hours of ICC certified continuing education training to code officials, builders and contractors and in conjunction with our network of 35 volunteer Energy Code Ambassadors, acts as a resource for jurisdictions and individuals seeking information about energy code compliance in the region.

Thank you for the opportunity to support the City of Austin in this process. Feel free to contact SPEER at any time regarding this or any other issue.

All the best,

Kelly A. Herbert Acting Executive Director SPEER



February 10, 2021

City of Austin P.O. Box 1088 Austin, Texas 78767 - 1088

Dear Austin City Council, Austin Plumbing and Mechanical Board, Austin Development Services Department:

Speaking as the Principal – Building Regulatory Strategy on behalf of the Target Corporation, I am pleased that Austin is considering the renewed adoption of a national model plumbing code, however; I am also very concerned this historic code adoption process remains incomplete without a full, objective analysis and comparison of the International Plumbing Code (IPC) and the International Mechanical Code (IMC) versus the Uniform Plumbing Code (UPC) and the Uniformed Mechanical Code (UMC) by all the stake holders that this code applies to.

Like many national owners and developers of commercial real estate, Target uses a facility prototype business model to develop its properties. This prototype relies upon uniformity of regulatory requirements to minimize initial construction costs, promote efficient and time sensitive construction schedules and use building materials consistent with providing safe, sustainable, resilient and healthy environments for our guests and team members. For this reason, Target and many other national commercial real estate developers and owners have supported the International Code Council's family of construction and safety codes.

There are significant advantages to using the International Mechanical Code and the International Plumbing Code, starting with its ease of use by everyone in the built environment, from the building designer to the construction contractor to the building inspectors and to the building owner and manager. Only the IMC and IPC correlate with the other International Codes, including many that are currently adopted in Austin, specifically the International Building Code. The IPC and IMC, compared to UPC and UMC, are performance-based codes which allows for greater flexibility and innovation in building designs and lower costs for fixtures, materials and labor. With the IPC and IMC, designers and builders may work across jurisdictional, county and state boundaries with conformity and ease. Non-correlated codes force cities to spend numerous hours of tedious review time and effort, drafting additional local amendments to each of their adopted codes in order to reference a non-correlated code like the UPC and UMC.



Additionally, the IPC and IMC are designed to protect public health and safety through provisions that do not unnecessarily increase construction costs or restrict the use of new materials, products or methods of construction. No preferential treatment is specified to particular types of classes or materials, products, or methods of construction. In comparison, the UPC and the UMC limits or restricts the use of building products and plumbing methodologies. Adopting the IPC and the IMC would be a natural fit toward coordinating construction codes in Austin.

For these reasons, it makes good economic, regulatory and administrative sense for the International Plumbing Code and the International Mechanical Code to serve as the sole plumbing and mechanical code in Austin Texas. Target strongly encourages the Austin Plumbing and Mechanical Board, Austin City Council and Austin Development Services Department to adopt only the International Plumbing Code and the International Mechanical Code.

I would be pleased to answer any questions you may have regarding Target's commitment to building safe, sustainable, resilient and healthy communities.

Respectfully submitted,

Thomas A Phillips

Thomas Phillips | Principal - Building Regulatory Strategy | ⊙ Target Properties | 50 South Tenth Street, Suite 400, MS TP3 – 1195, Minneapolis MN 55403 | 612.761.5570 (ph) | 612.761.3323 (f)



Texas Fire Protection Association

Austin, Texas ♦ (512) 795-2900 ♦ www.TXFPA.org

City of Austin Attn: Austin City Council; Austin Plumbing and Mechanical Board, Austin Development Services Department P.O. Box 1088 Austin, Texas 78767-1088

Members of the Council, Board and City of Austin Staff:

On behalf of the Texas Fire Protection Association (TFPA), I am submitting this letter to express our support for adoption of the International Plumbing Code and International Mechanical Code by the City of Austin, in lieu of the Uniform plumbing and mechanical codes.

Our members include code officials, architects, engineers, contractors, and others engaged in building safety and code enforcement, and our members regularly use plumbing and mechanical codes, as these codes are integral to package of codes that ensure construction of safe and sustainable buildings. In selecting model codes for adoption, it is important for jurisdictions to recognize the importance of consistency, compatibility, process integrity, updated content, and support services provided by the publishing organization. With these criteria in mind, it makes sense for the City of Austin to adopt the complete family of International codes, including the International plumbing and mechanical codes.

- **Consistency:** The family of International codes are developed by one organization to have consistent requirements. Because the Uniform codes are developed by a different organization with a different process, requirements in these codes are not entirely consistent with the other International codes adopted in the City of Austin. While some may argue that Austin has worked around these inconsistencies in the past, having previously adopted the Uniform codes, there is no benefit or advantage to requiring such work arounds versus simply adopting codes that are inherently consistent.
- **Compatibility:** Not only are some aspects of the Uniform codes inconsistent with other City of Austin codes, but they are also outright incompatible. For example, definitions of defined terms are different, and perhaps nowhere is incompatibility more evident than 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 International Mechanical Code. If you are forcing people to use the International Mechanical Code to support the Uniform Mechanical Code, what is the sense of adopting the Uniform code?
- **Process Integrity:** The International codes are developed using a government consensus process that defers final voting to government officials who do not have direct proprietary interest in the outcome. In contrast, the IAPMO process used to develop the Uniform codes allows voting by individuals who may be motivated by a financial stake in the outcome.
- Updated Content: The Uniform code process used to update reference standards for product safety, system installation and other important aspects of safe and sustainable building construction forces updated standards to sit on the sidelines waiting for the next code edition vs. being kept up to date. For example, updates to reference standards for the 2024 Uniform codes must already be substantially complete in early 2021. The International codes, in contrast, allow reference standards for their 2024 codes to be updated until December 2023, resulting in adoption of standards that are nearly 3 years more current.
- **Support Services:** The International codes are backed by a full suite of training, certification and CEU tracking programs that the City of Austin takes advantage of to maintain inspector qualifications and certifications. Having mechanical and plumbing inspectors tied to a different system is cumbersome to administer and unnecessary.

In summary, TFPA sees no advantage to the City of Austin's continued use of the Uniform mechanical and plumbing codes, and we strongly encourage adoption of the full suite of International codes.

Sincerely,

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Jeffrey M. Shapiro, P.E., FSFPE Executive Director