



Date: August 8, 2023
To: City of Houston HPW-HPC
From: Jensen Hughes
Subject: Uniform Mechanical Code (UMC) vs. International Mechanical Code (IMC) Recommendation

ABOUT

This technical memo is to provide an overview on the decision between choosing the Uniform Mechanical Code (UMC) vs. the International Mechanical Code (IMC). The Construction Code Modernization (CCM) and the Customer Assistance and Code Development (CACD) staff, alongside Jensen Hughes, reviewed and compared the two codes for consideration to adopt the IMC during this code modernization. Below is information to support the recommendation of the CCM project team to remain with the UMC as a part of the 2021 Construction Code adoption.

TIMELINE

At the CCMC meeting #6 held on Friday, May 19, Houston's Building Official Byron King announced the city's recommendation to proceed with the UMC and UPC as a part of the 2021 Construction Code.

The CACD/CCM team was asked to maintain a parallel track to move forward with the analysis of both until the administration had time to review all the documents prepared by staff. As a part of this request, the CACD/CCM team asked Jensen Hughes to prepare the 2015 vs 2021 code analysis. The CACD/CCM team began to review the analysis and prepare them for submission to the City's Legal department.

On Monday, July 17, the team presented Building Official Byron King with the report below. Based on the report below the consultant and staff are recommending that the City move forward with UMC and UPC.

memo.

Uniform Mechanical Code (UMC) vs. International Mechanical Code (IMC) Recommendation**COMPARING INTERNATIONAL MECHANICAL CODE (IMC) AND UNIFORM MECHANICAL CODE (UMC)**

Staff will present to City Council the following codes for adoption.

- **International Building Code (IBC)**
- **International Existing Building Code (IEBC)**
- **International Fire Code (IFC)**
- **International Residential Code (IRC)**
- **International Energy Conservation Code (IECC)**
- **International Swimming Pool and Spa Code (ISPSC)**
- **Uniform Mechanical Code (UMC)**
- **Uniform Plumbing Code (UPC)**

For the most part, both codes are similar and are considered to meet Houston's minimum fire and life-safety requirements. Both sets of codes may cause the requirement of Houston amendments to corollate the codes.

As an example, the UMC contains provision for combustion air, whereas the IMC refers you to the Fuel Gas Code. Based on this section amendments would be required for the provisions for combustion air.

RECOMMENDATION

The timeline set to adopt the 2021 Construction Code will not be met should we receive the directive to shift from the UMC to the IMC. We are currently set to present the codes at a TTI Committee Special Called meeting on August 24 and to City Council late September or early October.

In the Public Participation Plan released in November of 2022, the timeline set forth the necessity to complete and prepare all proposed amendments by May 1, 2023, with the understanding there will be a few amendments that will need to be inserted either during or after final review and approval by Legal. We are on schedule to achieve the strict timeline of only one year to complete the codes for TTI review and Council adoption of the 2021 Construction Code before the change in the current administration.

Adding a new code at this time to the current timeline will not allow for TTI or Council to tag any amendments for further discussion and will hinder our ability to achieve adoption of the 2021 Construction Code by October of 2023. Moving to another code will require an in-depth analysis beyond the few differences mentioned above. In addition, Houston Public Works requires that permit techs, plan review, and inspectors are familiar with the requirements of the UMC and UPC. The UMC and UPC have historically been the codes utilized by the Houston Construction Industry. Any decision to change codes will require a greater level of trainings.

Lastly, if the codes are not passed in October 2023, this will have a residual affect including an increase in flood insurance costs. It is critical that we pass the 2021 Construction Code by October, or our Building Code Effectiveness Grading Classification (BCEGS) rating will be classified to a 9 (1 being the best rating and 10 being the worst). BCEGS rating is included as a part of the points added FEMA's Community Rating System (CRS).



The rating we receive affects Houstonian's flooding policy and they will not receive the current discount should the City not adopt the 2021 Construction Code by October.

For these reasons, Jensen Hughes in concurrence with CACD/CCM Team in recommending maintaining the historical adoption of the Uniform Mechanical Code and Uniform Plumbing Code and proceed with that recommendation to City Council. To meet the objective to adopt the 2021 Construction Codes by October 2023, the Construction Code Modernization (CCM) and the Customer Assistance and Code Development (CACD) staff agree with the recommendations of the consultant.

FUTURE CONSIDERATIONS

Upon adoption of the 2021 Construction Codes, CACD staff will begin discussions on the 2024 codes.

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