2024 Technical Code Changes International Residential Code (IRC) Web Page Question/Comment Summary June 25 – July 24, 2024



Question/Comment:

As a native Austinite I am well aware that Austin is typically at the forefront of the energy efficiency frontier. From Energy Star to AEGB turning into LEED it is something I have always admired. Now, as an architect for Passive House in Austin with Forge Craft, an Earthen Builder and an advocate for healthy building materials, it only makes to me to adopt appendices: Appendix BJ - Strawbale Construction; Appendix BI - Light Straw-Clay Construction; Appendix BK - Cob Construction and Appendix BL - Hemp-Lime. I have explicitly worked with all of these materials through the Cal Earth Institute and Earthships and know that they can make a huge impact on the health of the individual living there. I also understand the fear behind adopting such "strange" materials, but ask yourself the question, what are we building with now and where did we come from?

Question/Comment:

As part of a team that constructed the monolithic adobe (cob) test walls for the ASTM E119 2 hour fire test and as a local natural construction business owner, I am now encouraging the city of Austin to adopt the following IRC appendices: Appendix BJ - Strawbale Construction [formerly Appendix AS] Appendix BI - Light Straw-Clay Construction [formerly Appendix AR] Appendix BK - Cob Construction (Monolithic Adobe) [formerly Appendix AU] Appendix BL - Hemp-Lime (Hempcrete) Construction [new appendix in the 2024 IRC] Each one describes and regulates an alternative wall system.

I and my code development team, feel strongly that these appendices should be made readily available to design professionals, builders, building officials, and the public, with mandatory adoption statewide. The appendices are well-developed, comprehensive, tied directly to other requirements of the well-established IRC/CRC, and well vetted through the code development process. In addition to our core team, they received input from experienced design and building professionals, industry representatives, and building officials, in California and other states.

Other compelling reasons for Austin adoption of these appendices and their building systems include:

• High resistance to fire, now a concern through much of the US due to seasonal wildfires. Cob walls earned a 2-hour fire-resistance rating with ASTM E119 tests. Light straw-clay and hemp-lime walls are

inherently fire resistant by virtue of their required plaster finishes.

• Climate beneficial, with low embodied carbon and/or high carbon sequestration of the constituent materials of straw, clay, earth, hemp and lime.

- Zero waste, with the construction industry contributing over 30% of waste to landfills (most of which being highly toxic), using natural materials in construction is the only way that Austin will achieve it's goals set forth to become a 90% zero waste city by 2030.
- Ensure safe and proper use of these (and other) building systems through plan check and inspections, especially for citizens who have been known to otherwise build without permits when faced with permitting obstacles.
- Use of low-cost, locally sourced, rapidly renewable, bio-degradable materials. Hemp-lime (hempcrete) is a burgeoning industry, gaining popularity and use since the cultivation of hemp was legalized in the U.S. in 2018.
- Removes impediments to greater use of these building systems.

We are happy to provide additional information, including Reason statements from the original ICC proposals, and to answer questions you may have. We strongly believe that current times demand ready access to these building systems and the myriad benefits they offer.

Question/Comment:

The changes proposed to require all homes and apartment buildings to install air conditioning in Austin is a harsh mandate from the standpoint of fiscal costs and responsibility. Sure, it is nice to have a cool home during the hot summer months however, the cost associated with running an AC can be quite prohibitive especially to low-income families. My proposal in order to ameliorate that potential problem and concern is for the City to help subsidize the costs associated in running air conditioning. That would be a tremendous help to thousands of poor, elderly and retired families who would be tempted to turn on their air conditioning but who would be without the means to pay for a high monthly electricity bill afterward. Thank you for your attention to this matter.

Question/Comment:

I do not want the City of Austin to require air conditioning for all new construction or present housing in the Austin. This will increase the price of housing for some people to the point they cannot afford to rent or buy a home in Austin. This will price people out of living within the city limits.

Question/Comment:

I do not think residential property owners should be required to keep rooms at least 15 degrees cooler than outdoor temperatures UNLESS the outdoor temperature is at least 90 degrees Fahrenheit. Otherwise, the rule would be absolutely ridiculous in the wintertime. Also, it removes autonomy from residents who like to keep their home at a warmer temperature (for example, if it is 80 degrees outside, not everyone wants their home automatically set at 65 degrees Fahrenheit). Additionally, I think this requirement does not address some of the core issues, which is that presidential property owners are not ensuring their properties are as well-insulated as possible and that their HVAC systems are in good shape. Similarly, onus should also start being put on the architects/developers to build buildings that are made of materials and designed to naturally stay cooler (there are buildings like this all around the world). Air conditioning is terrible for the environment, and we should be doing what we can to reduce, not increase, our reliance on it.

Question/Comment:

R325.9 Required Air Conditioning. BC) The required room temperatures shall be measured 3 feet (914 mm) above the floor near the center of the room and 2 feet (610 mm) inward from the center of each exterior wall.

- (A) An owner shall:
- (i) provide, and maintain, in operating condition, refrigerated air equipment capable of maintaining a room temperature of at least 15 degrees cooler than the outside temperature, but in no event higher than 85° F. in each habitable room;

So, are you telling me by code, when it's 50 degrees outside, the equipment MUST be capable of cooling a house to 35 degrees? Because the verbiage within the code is clearly not reviewed. Also, do you not require HEATING for winter cases? Due to the ineptitude of the authors, please omit these requirements before the state legislature gets involved.

Response:

The Ordinance intent is for an owner to provide, and maintain, in operating condition, refrigerated air equipment capable of maintaining a room temperature of no greater than 85 degrees in each habitable room.

Heating is required under the IPMC Sections 602.2 Residential occupancies, 602.3 Heat supply, and 602.4 Occupiable work spaces. The <u>IPMC proposed language</u> requires the temperature to be maintained at 68°F (20°C) in residential and commercial structures, and at 65°F (18°C) in occupiable work spaces.

Question/Comment:

These proposals would effectively have no change at all. We should just copy and paste what Seattle did

Question/Comment:

It seems unnecessary to require an 8' fence to require a permit. This is not helping anybody, only causing more city resources to be used to manage these efforts.

Question/Comment:

(AAA Suggests Striking the Following Language: 604.3 Electrical System hazards. If the code official finds that the electrical system in the structure constitutes a hazard to the occupants or the structure by reason of inadequate service, the owner of the property shall provide an action plan for repairs to the code official and provide approved accommodations for the occupants of the structure within two days of notice.)

Question/Comment:

Please adopt an amendment allowing the Residential Code to apply to one-, two-, three- and four-unit buildings, instead of just one- and two-unit buildings. The state of North Carolina adopted such an amendment. Doing so will have a dramatic positive impact on the feasibility and affordable of small-scale multifamily infill projects, like those enabled by the HOME initiative.