2024 IMC Proposed Amendments
The amendments listed here are for discussion and don't include all of the amendments listed by the City and County.

This amendment was in the Phoenix amendments and it makes sense, just not sure if this is needed or if any AHJ has had any issues with this section. If not, then this likely isn't needed.

Section 309.1 Space-heating systems. Replace this section as follows:

Heating and cooling systems. Interior spaces intended for human occupancy shall be provided with active or passive heating and cooling systems capable of maintaining an indoor temperature between 68F (20C) and 90F (32C) at a point 3 feet (914 mm) above the floor. The installation of portable heaters or coolers shall not be used to achieve compliance with this section.

Exceptions:

1. Space heating and cooling systems are not required for interior spaces where the primary purpose is not associated with human comfort.
2. Group F, H, S, and U occupancies.

Change notice

Animal facilities were added to Table 403.3.1.1 and will now require 100% outside air systems for all kennels and veterinary building. Although this has been in ASHRAE 62.1 for some time, it is now in the IMC.

These occupancies were removed from ASHRAE 62.1 and are in ASHRAE 170.

Table 403.3.1.1 Minimum Ventilation Rates. Outpatient healthcare facilities. These spaces are addressed in ASHRAE 170, similar to Section 407 – Ambulatory Care Facilities and Group I-2 Occupancies. This can be addressed by stating that all healthcare facilities, including medical, doctor, dental, physical therapy, psychiatric, speech therapy, occupational therapy, and other medical related

Add this section. CoT requires an odor mitigation plan.

Section 408 Marijuana Related Occupancies. Exhaust discharge from all areas containing marijuana products, including cultivation, production, and dispensaries, shall pass through a pre-filter and carbon filter sized and installed per manufacturer's requirements.

Remove this previous amendment

Section 606.2.1 Return air system. This amendment is now included in 2024 IMC Section 606.2.1.

Section 607.6.1 Through penetration, Exception 1.

This issue is primarily related to apartments and was addressed by CoT, but needs to be addressed since so many apartment buildings utilize this exception. In summary, 4"

metal ducts (typically from bathroom exhaust) are allowed to penetrate a maximum of 3 floors without a fire damper or fire rated shaft if they are located within a wall cavity. The issue is that most walls in apartments do not penetrate the ceiling assembly. Therefore, the 4" exhaust ducts are outside the wall cavity. See the attached sketches for this discussion. Options to resolve this are as follows:

1. *Only allow ducts to rise up in wall cavities that penetrate the ceiling assembly. Although some walls penetrate the ceiling assembly, the drywall may not be carried through the ceiling.*
2. *Provide fire rated assembly for the ductwork where it is located within the floor/ceiling assembly. This seems excessive since the wall cavities are not a rated assembly.*
3. *Provide fire dampers or fire rated shafts for ductwork penetrating the floor ceiling assembly. This also seems excessive since the wall cavities are not a rated assembly.*
4. *Minimize the exposed duct by only allowing it to travel vertically with no offsets. This was the decision by CoT.*
5. *Allow the ductwork to travel horizontally within the floor/ceiling assembly. This would be similar to allowing the ductwork to offset within the wall cavity.*

Section 607.6.2.1 Ceiling radiation dampers testing and installation
Section 607.6.2.1.1 Dynamic systems
Section 607.6.2.1.2 Static systems, Exceptions:

This issue is also primarily related to apartments and was addressed by CoT, but needs to be addressed since so many apartment buildings utilize this exception. In summary, there are no dynamic ceiling radiation dampers manufactured. Dynamic dampers can close even with the fan operating. Static dampers require no airflow to operate properly. Based on these exceptions, static dampers are required to have one of the following methods to shut-off the airflow:

1. *A smoke detector needs to be installed within 5 ft of each damper and automatically shut-off the fan. For a typical 1-bedroom apartment, this may require 4-5 duct smoke detectors.*
2. *A room smoke detector located in each room having a ceiling radiation damper shall shut-off the fan. Similar to above, a typical 1-bedroom apartment will require 3-4 room smoke detectors.*
3. *A room occupant sensor within each room with a ceiling radiation damper shall shut-off the fan. This will require 3-4 room occupancy sensors to shut down the AC system.*
4. ***The CoT allowed a smoke detector in the return duct to shut-off the fan if the smoke detector is activated. This is a much simplified approach.***

CHAPTER 11 - REFRIGERATION

Evaluate and explain all of the significant changes coming and their impact.

1. *New refrigerants will be more toxic and flammable, most classified as A2L. These will be offered starting around April and will be mandatory on 1/1/25.*
2. *New refrigerants will create a refrigeration machinery room even for a house or apartment with a long piping length. You can have 26 lbs/1000 cu.ft. of R410A. You can only have 3-4 lbs/1000 cu.ft. of an A2L refrigerant.*
3. *Section 1109.2.5 Refrigerant pipe shafts. This section requires fire rated shafts for the refrigerant piping penetrating 2 or more floors. How does this happen in an existing 3-story apartment building?*
4. *Section 1109.2.5 Shaft Ventilation. This section requires the pipe shafts to be ventilated. The requirements in this section are complex.*