

# MECHANICAL CODE DISCUSSION

## Proposals for 2015 Codes



BRENT URSEBACH

### BRENT URSEBACH

SALT LAKE COUNTY PLANNING  
AND DEVELOPMENT

bursenbach@slco.org

385-468-6694

THIS PAST WEEK I RETURNED from ten days in Atlantic City, where I participated in the International Code Council (ICC) Final Action Hearings for the 2015 International Codes. During these hearings, code officials from across the country listened to and participated in the debate and voting for changes in the 2015 International Residential Code (IRC) and the International Energy Conservation Code (IECC). The other codes, including Mechanical, Fuel Gas, and Building for commercial buildings were debated and voted on in 2012.

While we won't see the 2015 Codes until 2016, I'll report on those proposals I successfully moved through the approval process. The first is a combustion air issue that has bothered me for years. The IECC has progressively added requirements to seal the thermal envelope of a building, yet we continue to cut holes in this sealed envelope for combustion air. Ideally, every new furnace or boiler would be direct vent; however that is not the reality. After a long three year battle, we've fixed this problem. In the commercial IECC, the code change is as follows. The text in the residential IECC is similar.

#### **C 402.4.1.2 Combustion air openings.**

*In climate zones 3 through 8, where open combustion air ducts provide combustion air to open combustion*

*space conditioning fuel burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table C402.1.2 or C402.2, where the walls shall meet a minimum of the below-grade wall R-value requirement. The door into the room shall be fully gasketed and any waterlines and ducts in the room insulated in accordance with Section C403. The combustion air duct shall be insulated where it passes through conditioned space to a minimum of R-8.*

#### **Exceptions:**

1. *Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.*
2. *Fireplaces and stoves complying with Sections 901, 902, 903, 904, and 905 of the International Mechanical Code, and Section 2111.13 of the International Building Code.*

The other change is the definition of **conditioned space**. The 2009 and 2012 IMC, IRC and IECC each had slight differences in this definition. This led to confusion, with code officials requiring supply air outlets and return air inlets in a room if it was to be considered conditioned. An example is

an unfinished basement, with insulation blankets on the exterior walls. I considered this basement sufficiently conditioned for minimum code compliance without actual basement heating, simply because it is located inside the insulated envelope, as it will receive some heat from the duct and the un-insulated floor joists above. Another example is a storage room in an office space, surrounded by conditioned space. I consider this space indirectly conditioned. This new definition is similar to the definition in ASHRAE. The new definition reads:

#### **CONDITIONED SPACE:**

*An area, room or space that is enclosed within the building thermal envelope and that is directly heated or cooled or that is indirectly heated or cooled. Spaces are indirectly heated or cooled where they communicate thru openings with conditioned spaces, where they are separated from conditioned spaces by un-insulated walls, floors or ceilings, or where they contain un-insulated ducts, piping or other sources of heating or cooling. ■*

Please remember I'm happy to answer your code questions, and appreciate your suggestions for a future change. And please don't forget: your suggestions for future mechanical code discussions are always welcome! Thanks —Brent