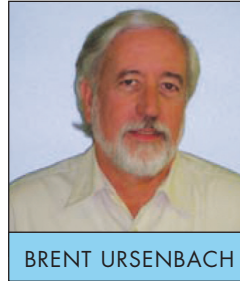


MECHANICAL CODE DISCUSSION

Amendments to the Energy Code — Impact on Mechanical Systems



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Effective January 1, 2019

With the adoption of the 2015 I-Codes, July 1, 2016, several significant amendments were added to the Residential IECC by the State Legislature. Unique to this set of amendments are several incremental energy efficiency improvements, automatically phasing in January 1, each odd year through 2021. Several of these efficiency improvements will become effective January 1, 2019.



Duct Testing

The current code requires duct pressure testing, commonly called duct blaster testing, in any home where an HVAC system has the air handler or 35% of the duct, measured by length, is located outside the thermal envelope.

Effective

January 1, testing is triggered with only 25% of the duct outside the thermal envelope. If you're installing systems in attics, duct testing is mandatory.

Blower Door Testing

You might ask, "what does a blower door test have to do with a mechanical system?" A blower door test pressurizes the entire home. Air leaks at mechanical penetrations often result in a test failure. Leaks occur at registers and grills in a floor over a crawlspace or ceiling under an attic, when boots are not caulked or

floor sheathing or ceiling drywall. Failures also regularly occur where the burner compartment on direct vent is not sealed. **The blower door test rate changes, from 5 ACH @ 50 pa down to 3.5 ACH @ 50 pa, when the blower door test option is selected.** This is very significant in homes and extremely difficult to meet in townhouses and multi-family projects.

Building Inspectors and Plans Examiners are aware of these changes and will begin enforcing the new requirements January 1. These changes were identified in the state amendment almost three years ago. Don't expect a grace period.

If you have questions or would like additional information on the Energy Code, including mechanical implications, please visit the new state energy code website:

www.utahenergycode.com

This website includes videos and materials from previous residential and commercial IECC trainings, state amendments, guides, a list of RMP approved HERS raters/testers, other energy resources.



*If you have any questions or suggestions for this website, please let me know. @bursenbach@gmail.com. Thanks,—
Brent ■*



REScheck

The current Utah IECC amendments provide five options in showing compliance, including two REScheck options. The first is using the 2015 REScheck, which does not allow credit for high efficiency HVAC equipment. The second is using the 2012 Utah REScheck, currently required to pass by 3% better than code. This option allows an equipment trade-off, i.e., credit is given for higher efficiency furnace and Air conditioner. **The required pass rate for the 2012 Utah REScheck will increase to 4% January 1, 2019.**