



# BBS MEMO

Ohio Board of Building Standards

July 1, 2014

6606 Tussing Road, P.O. Box 4009, Reynoldsburg, Ohio 43068-9009

## RCO CHAPTER 11 AND DUCT TIGHTNESS TESTING

The Board of Building Standards has previously reminded all Residential Building Departments of the enforcement effective date applicable to projects where the applicant has elected to demonstrate residential energy code compliance using the Ohio Home Builder's Association (OHBA) Alternative Energy Code Option.

For plans first submitted for approval on or after January 1, 2014, *if using the OHBA option* for demonstrating compliance, the blower door testing will be mandatory (no longer optional). This change is high-lighted in the last sentence of RCO Section 1105.2.4.2.1: *"This requirement will take effect one year after the effective date of this rule."* January 1<sup>st</sup> of this year marked that one year and now these requirements are in effect.

Also, for plans first submitted for approval on or after January 1, 2014, if the documents show any ducts or air handling equipment are located outside of the conditioned space of the conditioned space, then the duct tightness test is required regardless of which method of demonstrating compliance is chosen. This change is high-lighted in the last sentence of RCO Section 1105.3.2.2: *"This requirement will take effect one year after the effective date of this rule."* January 1<sup>st</sup> of this year marked that one year and now these requirements are in effect.

Because these dates have now passed, building departments and builders have been asking for clarifications regarding the implementation of these provisions and how the duct tightness testing provisions should be applied. Because accuracy and effectiveness of testing is important, a correct application of the codes will benefit owners and builders in complying with the newly effective provisions.

Before reviewing these conditions, it must be understood that the intent of the OHBA Alternative Energy Code Option (RCO Section 1105) is that it can only be selected for new home construction and was not designed or developed to be able to handle additions or alterations. Section 1105.1.1, *Scope*, makes it clear that *"This section provides an alternative set of requirements for regulating the energy efficiency for the design and construction of new buildings regulated by this code."*

Several conditions can occur when an addition or alteration is being proposed that includes ductwork and air handling equipment each of which should be treated consistently in Ohio as described below.

**First**, and easiest to address, are ducts and equipment that are located entirely inside the building's conditioned space. For this condition no testing is required.

**Second**, a project with any or all of the ductwork or equipment located outside the building's conditioned space would require duct tightness testing.

**Next** are additions or alterations in which ductwork is being replaced, reconfigured, or extended into an addition from an existing HVAC system. Duct tightness testing is impractical since the results are questionable, existing ductwork would not be tested, and the sealing of a small portion of the ductwork would be ineffective and unproductive as far as tightness of the system is concerned. Therefore duct tightness testing would not be required even if some part of the system was outside the conditioned space.

**Lastly** are additions or alterations in which a stand-alone, independent system is installed to provide heating or cooling in an addition. These systems would be required to be installed and tested as required in IECC 2009 or the RCO Chapter 11, Sections 1101 through 1104.

If you have further questions regarding the application of these requirements, please call the Board's office at 614-644-2613 or E-mail to [dic.bbs@com.state.oh.us](mailto:dic.bbs@com.state.oh.us).